

THE JOSIP JURAJ STROSSMAYER UNIVERSITY OF OSIJEK,
FACULTY OF ECONOMICS IN OSIJEK - CROATIA
HOCHSCHULE PFORZHEIM UNIVERSITY

INTERDISCIPLINARY MANAGEMENT RESEARCH VIII
INTERDISZIPLINÄRE MANAGEMENTFORSCHUNG VIII

Opatija 2012.

Published by:

Josip Juraj Strossmayer University in Osijek, Faculty of Economics in Osijek, Croatia Postgraduate Studies "Management"
Hochschule Pforzheim University

For the Publisher:

Ulrich Jautz, Ph.D., Dean, Germany
Željko Turkalj, Ph.D., Dean, Croatia

Editors:

Urban Bacher, Ph.D., Pforzheim University, Business School, Germany
Dražen Barković, Ph.D., Faculty of Economics in Osijek, Croatia
Karl – Heinz Dernoscheg, Ph.D., International Business School Styria, Austria
Maja Lamza - Maronić, Ph.D., Faculty of Economics in Osijek, Croatia
Branko Matić, Ph.D., Faculty of Economics in Osijek, Croatia
Norbert Pap, Ph.D., University of Pecs, Hungary
Bodo Runzheimer, Ph.D., Pforzheim University, Business School, Germany

Review Committee:

Luka Crnković, Ph.D., Faculty of Economics in Osijek, Croatia
Ivan Ferenčak, Ph.D., Faculty of Economics in Osijek, Croatia
Nino Grau, Ph.D. University of Applied Sciences, Fachhochschule Giesen-Friedberg, Germany
Slavo Kukić, Ph.D., University of Mostar, Faculty of Economics in Mostar, Bosnia and Hercegovina
Hartmut Loffler, Ph.D., Pforzheim University, Business School, Germany
Brano Markić, Ph.D., University of Mostar, Faculty of Economics in Mostar, Bosnia and Hercegovina
Renata Perić, Ph.D., Faculty of Law in Osijek, Croatia
Bela Orosdy, Ph.D., University of Pécs, Faculty of Business and Economics, Hungary
Ivan Pavlović, Ph.D., University of Mostar, Faculty of Economics in Mostar, Bosnia and Hercegovina
Slavica Singer, Ph.D., Faculty of Economics in Osijek, Croatia
Vladimir Srb, Ph.D., Faculty of Economics in Osijek, Croatia
Jusuf Šehanović, Ph.D., Juraj Dobrila University of Pula, Croatia
Dirk Wentzel, Ph.D., Hochschule Pforzheim University, Germany

Technical editors:

Jerko Glavaš, Ph.D. candidate, Faculty of Economics in Osijek, Croatia
Hrvoje Serdarušić, Ph.D. candidate, Faculty of Economics in Osijek, Croatia

Language Editing and Proofreading:

Ljerkica Radoš, Faculty of Economics in Osijek, Croatia

CIP zapis dostupan u računalnom katalogu Gradske i sveučilišne knjižnice Osijek pod brojem 130421087

ISSN 1847-0408

ISBN 978-953-253-105-3

Indexed in: EBSCOhost, RePEc, EconPapers, Socionet

Program committee:

Mate Babić, Ph.D., University of Zagreb, Faculty of Economics in Zagreb, Croatia

Heinrich Badura, Ph.D., President, The European Academy for Life Research, Integration and Civil Society, Austria

Firouz Gahvari, Ph.D., University of Illinois at Urbana-Campaign, Department of Economics, USA

Gunther Gottlieb, Ph.D., University of Augsburg, Germany

Rupert Huth, Ph.D., Pforzheim University, Business School, Germany

Zoran Jašić, Ph.D., Ambassador of the Republic of Croatia to the Republic of Austria

Zlatko Kramarić, Ph.D., Ambassador of the Republic of Croatia to the Republic of Kosovo

Ulrich Jautz, Ph.D., Pforzheim University, Business School, Germany

Željko Turkalj, Ph.D., Faculty of Economics in Osijek, Croatia

Mladen Vedriš, Ph.D., University of Zagreb, Faculty of Law, Croatia

CONTENTS

VORWORT	11
FOREWORD	12
Management	
Ana Udovičić MANAGEMENT FUNCTIONS IN SMALL ENTERPRISES	17
Katarina Arnold Bratić THE INFLUENCE OF KNOWLEDGE ECONOMY ON HUMAN RESOURCE MANAGEMENT IN CROATIAN ORGANISATIONS	27
Maja Arslanagić, Almir Peštek, Mirjana Matic MANAGING MASS MEDIA INFLUENCE ON CONSUMER BUYING BEHAVIOR	41
Martina Briš Alić, Alen Alić, Nino Bošnjak SELECTING THE BEST LOCATION OF A GEOTHERMAL WELL THROUGH THE APPLICATION OF THE MULTICRITERIA DECISION MAKING METHOD – TOPSIS.....	51
Bruno Grbac, Željko Bulat STRATEGIC MANAGEMENT BASED ON TOURISM DEVELOPMENT GUIDELINES FOR NATIONAL PARKS	63
Bruno Dernaj IMPACT ANALYSIS OF PUBLIC DEBT MANAGEMENT ON THE CREDIT RATING OF A COUNTRY	81
Miha Marič AUTHENTIC LEADERSHIP AND POWER: DISCUSSING THE RELATION	93
Martin Fiedler, Timo Keppler, Ali Öztüren CONTACTLESS PAYMENT, A RFID DOMAIN AND ITS ACCEPTANCE BY CARD HOLDERS.....	103
Ivana Fosić VALORIZATION OF ORGANIZATIONAL POWER AND POLITICS ROLE IN EASTERN CROATIAN ECONOMIC ENTITIES.....	113
Marijana Jakopič HUMAN RESOURCE MANAGEMENT IN PORT OF RIJEKA.....	123
Zlatica Kavić MANAGEMENT OF FRANCHISE-RELATED COMPANY EXAMPLE VEHICLES TRADE - OPEL CROATIA.....	137
Dražen Kostelac PROGRAM MANGEMENT PROCESSES IN PHARMACEUTICAL INDUSTRY-CASE STUDY	147

Jozo Krajina THE IMPORTANCE AND ROLE OF MANAGEMENT IN HIGHER EDUCATION.....	155
Valentina Ladić DESTINATION MANAGEMENT AND DESTINATION MANAGING PROBLEMS - EXAMPLE VINICA COUNTY	167
Maja Lamza-Maronić, Jerko Glavaš, Igor Mavrin TOWARDS A NEW MODEL OF CULTURAL MANAGEMENT – THE EUROPEAN CAPITAL OF CULTURE PROGRAMME	179
Barbara Marušnik, Boris Marjanović PERFORMANCE OF CROATIAN ECONOMY MEASURED WITH KNOWLEDGE-BASED ECONOMY PARAMETERS.....	189
Josip Mesarić, Stjepan Rudan, Joze Kuzic METHODOLOGICAL PROBLEMS AND APPROACH TO INNOVATING AND BUILDING THE CURRICULUM OF GENERAL MANAGEMENT	201
Mónika R. Molnár, István András EMBEDDEDNESS OF MULTINATIONAL COMPANIES IN LOCAL COMMUNITIES: THE COMPLEX CULTURE AND COMMUNICATION RESEARCH PROJECT	211
Ninoslav Novak, Mirko Cobović BUSINESS IMPROVEMENT USING CLOUD COMPUTING IN COMPANIES IN THE REPUBLIC OF CROATIA.....	223
Rajko Odobaša COMMERCIALIZATION OF HIGHER EDUCATION AND CHANGES IN THE MANAGEMENT OF PUBLIC EDUCATION INSTITUTIONS: EXAMPLES AND LESSONS FROM ANGLO-AMERICAN UNIVERSITIES	233
Mirko Pešić CRISIS AS A CHANCE TO REORGANIZE THE GROWTH AND DEVELOPMENT	247
Milan Puvača, Ivica Zdrilić RESISTANCE TO CHANGE IN EDUCATIONAL PROCESS ADAPTATION	255
Ivana Šandrk Nukić COMPETITIVENESS OF CONSTRUCTION FIRMS: CASE STUDY OF „GRADNJA Ltd” OSIJEK.....	263
Ana Skledar Matijejić, Zlatko Barilović, Igor Vrečko THE POSSIBILITIES OF USING ENGLISH LANGUAGE TEACHING FOR DEVELOPING PROJECT MANAGEMENT COMPETENCES	275
Marko Šostar THE ROLE OF DEVELOPMENT AGENCIES IN REGIONAL DEVELOPMENT	285

Kenan Spaho	
ORGANIZATIONAL COMMUNICATION STRATEGY AS KEY FACTOR OF COMPANY SUCCESS	297
Šercer Mario	
OPERATIONAL PLANNING IN THE COMPANY „XYZ“ Ltd.	307
Ines Škoko	
IMPROVING THE QUALITY OF SERVICE THROUGH THE QUALITY OF HUMAN RESOURCE MANAGEMNT	317
Tadija Vrdoljak, Željko Jagnjić, Ivan Šverko	
PROJECT ORGANIZATION, COMMUNICATION AND MOTIVATION DURING A BANK MERGER.....	329
Anica Vukašinović, Berislav Bolfek	
THE ROLE OF MANAGEMENT IN FUNCTION OF THE SYSTEM OF PRIMARY EDUCATION IN BROD-POSAVINA COUNTY.....	341
Slavomir Vukmirović, Marko Čičin-Šain	
STRATEGIC ANALYSIS OF KEY ISSUES IN INFORMATION SYSTEMS MANAGEMENT IN CROATIAN COMPANIES	353
Wolfgang Gabrutsch	
RISIKOMANAGEMENT	365
General Economics	
Zoran Jeremić, Đankarlo Milokanović	
ASPECTS OF DEVELOPMENT SPORT TOURISM IN ISTRIA.....	401
Vedran Lovrinčević	
ECONOMIC INDICATORS OF THE EUROPEAN UNION'S FIFTH ENLARGEMENT AS AN ENCOURAGEMENT FOR CROATIA	411
Microeconomics, Macroeconomics and Monetary Economics	
Sead Kreso, Selena Begović	
MATURITY (MIS)MATCHING IN CURRENCY BOARD (LIKE) REGIMES.....	423
Damir Štokovac	
ANALYSIS OF THE ECONOMIC GROWTH IN SELECTED EUROPEAN TRANSITION COUNTRIES	439
Gabrijela Žalac, Sanja Bošnjak, Mario Banožić	
CROATIA IN THE CONTEXT OF THE EU STRATEGY FOR THE DANUBE REGION	453
International Economics	
Luțaș Mihaela, Mihuț Ioana Sorina	
ECONOMIC GROWTH: CHALLENGES, OPPORTUNITIES AND MAIN DETERMINANTS.....	467

Josip Romić FOREIGN DIRECT INVESTMENT THEORY: THE MAIN DETERMINANTS OF FDI THEORY.....	477
Flavius Rovinaru, Mihaela Rovinaru, Larisa Nicoleta Pop COMPARATIVE ANALYSIS OF THE INTERNATIONAL AND ROMANIAN MARKET FROM THE PRICE VOLATILITY AND RISK PERSPECTIVE.....	487
Mladen Vedriš, Ozren Pilipović, Nenad Rančić AGENCIES FOR FOREIGN INVESTMENT PROMOTION - POSSIBLE INSTITUTIONAL SUPPORT FOR STRUCTURAL REFORMS AND ECONOMIC GROWTH.....	499
Financial Economics	
Sonja Keppler, Timo Keppler EVALUATING THE ATTRACTIVENESS OF NEW MEDICAL TECHNOLOGY VENTURES - AN ANALYSIS OF VENTURE CAPITALISTS' PRODUCT-RELATED INVESTMENT CRITERIA.....	531
Gheorghe Ciobanu, Ioana - Cristina Sechel THE PARADOXES OF MODERN STOCK EXCHANGE MARKETS. CHARACTERISTICS OF INVESTMENT BEHAVIOR OF BROKERS FROM ROMANIA	543
Ciobanu Gheorghe, Deceanu Liviu-Daniel THE SOVEREIGN DEBT CRISIS – A DISRUPTIVE ELEMENT IN THE GLOBAL ECONOMY	553
Frank Forster FINANCIAL PERFORMANCE MEASUREMENT OF SWISS PAINTING PORTFOLIOS AND MARKET SEGMENTATION.....	565
Gherman Mircea-Cristian, Ciupac-Ulici Maria-Lenuta THE IMPACT OF STOCK MARKET LIBERALIZATION ON VOLATILITY	579
Branimir Marković, Slobodan Stojanović THE ROLE AND REGULATION OF CREDIT RATING AGENCIES IN THE MODERN FINANCIAL MARKETS	591
Branko Matić, Hrvoje Serdarušić, Maja Vretenar SOME FEATURES OF THE RELATIONSHIP TO PERSONAL FINANCES WITHIN POPULATION OF EASTERN CROATIA	603
Izabela Pruchnicka-Grabias RISKS CONCERNED WITH CREDIT DEFAULT SWAPS APPLICATION	613
Urban Bacher, Florian Göpferich ZUR ZUSAMMENARBEIT DES AUFSICHTSRATES EINES KREDITINSTITUTS MIT INTERNEN STELLEN (INNENREVISION, COMPLIANCE-OFFICER ETC.)	633

Edward Pielichaty DIE BEDEUTUNG DER TRANSAKTIONSKOSTEN BEI DER BILANZBEWERTUNG VON KREDITFORDERUNGEN	645
--	-----

Public Economics

Boris Crnković, Željko Požega, Goran Sučić FISCAL EFFECTS OF STATE OWNERSHIP OF ENTERPRISES.....	657
---	-----

Ivana Barković Bojanić, Mirta Šaban THE PUBLIC SECTOR (IN)EFFICIENCY: CROATIAN EXPERIENCE.....	671
--	-----

Health, Education and Welfare

Zoran Alimpic IMPACT OF CAPABILITIES ON PERFORMANCE IN PRIVATE ACUTE HOSPITALS IN SWITZERLAND	685
---	-----

Ivana Ivančić, Nada Bosanac MANAGING QUALITY: TQM IMPLEMENTATION IN CROATIAN VOCATIONAL EDUCATION AND TRAINING SYSTEM.....	707
--	-----

Bisera Jevtić FREQUENCY VIOLENCE AMONG CHILDRE IN THE SCHOOL COMMUNITY.....	717
---	-----

Anita Kedačić ACCREDITATION OF MEDICAL HEALTH INSTITUTIONS IN THE REPUBLIC OF CROATIA	729
---	-----

Nevenka Kovac HEALTH TOURISM: AN OPPORTUNITY FOR CROATIAN HEALTHCARE AND CROATIAN TOURISM	737
---	-----

Zoran Pandža ROLE OF HUMAN RESOURCES IN INCREASING THE NATIONAL COMPETITIVENESS.....	749
--	-----

Velma (Tahmaz) Pijalović HEALTH POLICY IN EUROPEAN UNION COUNTRIES.....	761
--	-----

Helena Štimac STUDENTS' VIEWS ON THE RELATIONSHIP BETWEEN HIGHER EDUCATION AND LABOR MARKET	771
---	-----

Vladimir Srb, Iris Broman CODIFICATION NECESSITIES IN ANIMAL LEGISLATION FOR EFFICIENT MANAGEMENT	783
---	-----

Law and Economics

Rodica Diana Apan ABOUT THE INTERFERENCE OF THE JUDICIAL ORDINARY PROCEEDINGS WITH THE INSOLVENCY PROCEEDINGS IN DEBT RECOVERY	795
--	-----

Nataša Lucić, Katarina Marošević
THE ECONOMIC ANALYSIS OF TORT LAW807

Josipa Živić, Vjekoslav Puljko
COUNCIL REGULATION 4/2009: MAINTENANCE RIGHT IN
THE TERRITORY OF THE EUROPEAN UNION821

Economic Systems

Ivan Kristek
PERFORMANCE ANALYSIS OF THE BANKING INDUSTRY IN THE
REPUBLIC OF CROATIA FROM 2001 TO 2010 837

Nebojša Stojčić, Katija Vojvodić
DETERMINANTS OF PROFITABILITY OF FIRMS IN THE RETAIL SECTOR:
THE CASE OF CROATIA..... 849

Industrial Organization

Ksenija Černe, Robert Zenzerović
AUDIT FEES DETERMINANTS IN THE CROATIAN
AUDITING SERVICES MARKET 863

Karin Širec
CONCEPTUAL MODEL TO MANAGE TACIT KNOWLEDGE..... 877

Administration and Business Economics

Bodo Runzheimer
NEUE BILANZPOLITISCHE KONZEPTION FÜR DIE
SEGMENTBERICHTERSTATTUNG NACH INTERNATIONAL FINANCIAL
REPORTING STANDARD 8 (IFRS 8) IM DEUTSCHEN BILANZRECHT 889

Danny Buyer , Thomas Cleff , Dirk Frank
EMPIRISCHE BEFUNDE ZUR NUTZUNG DER CONJOINT ANALYSE ZUR
MARKTSIMULATION IN DER DEUTSCHEN MARKTFORSCHUNGSPRAXIS.... 905

Markus Häfele
ZWECKGESELLSCHAFTEN IM KONSOLIDIERUNGSKREIS NACH
FINANZKRISE UND BILANZRECHTSMODERNISIERUNGSGESETZ
– EINE EINFÜHRUNG –..... 933

Johana Bath, Thorsten Eidenmüller:
HOW DO PRODUCT BUNDLING AND INTERNATIONALIZATION
INFLUENCE THE MARKET FOR PROFESSIONALSERVICES IN HIGH PRIZE
COUNTRIES?..... 943

Mane Medić, Mladen Pancić, Ivan Kelić
SOCIAL MEDIA MARKETING AS PART OF INTEGRATED
MARKETING COMMUNICATION IN CREATING A BRAND 951

Dario Dunković, Dinko Jukić
SETTINGS OF DISTRIBUTIVE TRADE GROWTH INDICATOR
USING FACTOR ANALYSIS METHOD..... 961

Sanja Knežević, Lena Sigurnjak, Anita Kulaš RECOGNIZING OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT IN SMALL AND MEDIUM ENTERPRISES IN BRODSKO POSAVSKA COUNTY.....	971
Pupavac Drago ROAD NETWORK AND REGIONAL DEVELOPMENT - CROATIAN EXPERIENCE OF THE LAST DECADE.....	981
I. Miklošević, S. Ravlić, P. Turić IMPACT OF LABOUR MOBILITY AND USE OF BUSINESS INTELLIGENCE IN ORDER TO CREASE THE COMPANY EFFICIENCY IN THE EU MARKET	991
Economic Development, Technological Change, and Growth	
Domagoj Karačić THE SECTOR DISTRIBUTION OF COMMUNAL ECONOMY OF CITIES IN CROATIA.....	1001
Irena Bosnić, Dejan Tubić GLOBALIZATION AND AGROTOURISM DEVELOPMENT: THE CASE OF SLAVONIA AND BARANIA.....	1011
Anton Devčić CONCEPT OF INTELLIGENT REGION IN USE OF EUROPEAN UNION FUNDS	1021
Urban, Rural and Regional Economics	
Ivan Ferencak, Marina Đukić ECONOMIC INFLUENCES ON MEDIA NEWS PRODUCTION – NEWS AS A MARKET GOOD	1035
Mitja Jeraj TOWARD THE NEW CONSTRUCT; ENTREPRENEURIAL CURIOSITY	1043
Ivo Mijoč, Dubravka Pekačević, Marija Mihaljević, REVIEW OF THE FACTORS AFFECTING FINANCIAL REPORTING SYSTEM COMPETITIVENESS	1057
Miscellaneous Categories	
Dražen Barković, Jelena Stanišić, Nenad Stanišić IMPROVING SWOT ANALYSIS BY USING THE ANALYTICAL HIERARHY PROCESS	1071
Norbert Pap, Janka Teodóra Nagy, Andor Végh SOME THOUGHTS ABOUT THE GEOGRAPHICAL WAY OF THINKING IN THE HUNGARIAN CULTURE	1083
Linda Juraković, Romina Sinosich ANALYSIS AND ROLE OF LEADER PROGRAMME IN RURAL DEVELOPMENT OF CROATIA	1099
Sanja Bijakšić, Sandra Jelčić, Arnela Bevanda DIMENSIONS OF RETAIL SERVICE QUALITY THROUGH CUSTOMERS' PERCEPTION	1109

Marko Šantić, Mirela Mabić

TOURISTS' SATISFACTION WITH THE QUALITY OF EXTRA SERVICE
IN THE TOURIST DESTINATION GRADAC AT THE SEASIDE.....1123

Vorwort

Es ist uns ein Vergnügen, das Konferenzband „Interdisziplinäre Managementforschung VIII/ Interdisciplinary Management Research VIII“ vorstellen zu können. Ein Buch aus dieser Reihe ist zum ersten Mal 2005 erschienen, als Resultat der Zusammenarbeit zwischen der Wirtschaftsfakultät in Osijek, Kroatien und der Hochschule Pforzheim, Deutschland, und insbesondere durch das Magisterstudium des Management. Die Zusammenarbeit der zwei genannten Partnerinstitutionen ist unter anderem durch jährliche wissenschaftliche Symposien gekennzeichnet, auf welchen interessante Themen aus verschiedenen Bereichen der Wirtschaft und des Managements vorgestellt und folglich in einem Band veröffentlicht werden. Jedes Jahr ziehen die wissenschaftlichen Symposien Akademiker anderer kroatischer, sowie ausländischer Universitäten, einschließlich Deutschland, Ungarn, Polen, Rumänien, Slovenien, Montenegro, Bosnien und Herzegovina, Serbien, Indien, Irland, Czechien, Israel, Italien, Sudafrica, Belgien, Schweiz, USA, Slowakei, Dänemark, Mazedonien, und Großbritannien an, die ihren wissenschaftlichen und professionellen Beitrag zur Diskussion über zeitgenössische Fragen aus dem Bereich des Managements leisten. Die Aktualität der behandelten Fragen, der internationale Charakter im Hinblick auf Themen und Autoren, die höchsten Standards der Forschungsmethodologie sowie die Kontinuität dieser Konferenzreihe wurden auch von der internationalen akademischen Gemeinde erkannt, weswegen sie auch in internationalen Datenbanken, wie Thomson ISI, RePEc, EconPapers und Socionet, zu finden ist.

Die neueste Ausgabe von „Interdisziplinäre Managementforschung VIII/ Interdisciplinary Management Research VIII“ umfasst 87 Arbeiten geschrieben von 155 Autoren. Der Erfolg früherer Ausgaben ging über die Grenzen der Länder hinaus, deren Autoren schon traditionell Teil der Reihe waren und zog neue Autoren aus Australien an. Jedes der Autoren leistete einen bedeutenden Beitrag zu diesem fachübergreifenden Managementforum.

Als Herausgeber dieses Bandes hoffen wir, dass diese Reihe auch weiterhin Akademiker und Professionelle dazu bewegen wird, in Forschung und Beruf die höchsten Standards zu beanspruchen, und dass es weiterhin als Ansporn zu weiteren Formen von Zusammenarbeit unter Teilnehmern dieses Projektes dienen wird.

Prof. Dr. Dražen Barković

Prof. Dr. Bodo Runzheimer

Foreword

It is our pleasure to introduce the book “Interdisziplinäre Managementforschung VIII/ Interdisciplinary Management Research VIII” to you. The first volume appeared in 2005 as a result of co-operation between the Faculty of Economics in Osijek (Croatia) and Pforzheim University (Germany), particularly through the postgraduate programme “Management”. The co-operation between these partnering institutions has been nurtured, amongst else, through annual scientific colloquiums at which interesting topics in various fields of economics and management have been presented and later published in the proceedings. Over the years, the scientific colloquiums have drawn the attention of academic scholars from other Croatian universities, as well as from other countries including Germany, Hungary, Poland, Romania, Slovenia, Montenegro, Bosnia and Herzegovina, Serbia, India, Ireland, Czech Republic, Israel, Italy, South Africa, Belgium, Switzerland, USA, Slovakia, Denmark, Macedonia, and the United Kingdom each making a contribution in academic and professional discussion about contemporary management issues. Actuality and importance of the issues discussed, the international character of the book in terms of authors and topics, the highest standards of research methodology and continuity in publishing have been recognized by the international academic community, resulting in the book now being indexed in world-known data bases such as Thomson ISI, RePEc, EconPapers, and Socionet.

The latest edition, i.e. “Interdisziplinäre Managementforschung VIII/ Interdisciplinary Management Research VIII” encompasses 87 papers written by 155 authors. The success of former editions has echoed beyond the traditionally participative countries and authors and now includes new authors from Australia, each providing a valuable contribution to this interdisciplinary management forum.

As editors we hope that this book will continue to encourage academic scholars and professionals to pursue excellence in their work and research, and to provide an incentive for developing various forms of co-operation among all involved in this project.

Prof. Dr. Dražen Barković
Prof. Dr. Bodo Runzheimer

MANAGEMENT

MANAGEMENT FUNCTIONS IN SMALL ENTERPRISES

Ana Udovičić,
Polytechnic of Šibenik, Croatia, ana_u@vus.hr

Abstract:

Small enterprises have an important place in Croatian economy with the tendency of growth and the main reason is successful management. Small businesses in Croatia are considered drivers of economy development. Knowledge of management functions and actualizations of management functions is a path of success for small enterprises. This paper is concerned with the functions of management in small enterprises and the impact of management function for small business excellence. Moreover, this paper is concerned with defining concrete measures for management of small enterprises in order to enhance the organization performance and success.

The research for this paper was conducted among small enterprises in Šibenik-Knin County. The research goal is to define the level of actualization of management function among small enterprises.

JEL Classification: G32, L53

Key words: small enterprises, management functions, management

Introduction

Today's economy is defined as an economy of constant change and innovations. Small organizations present a vital sector for the Croatian economy but they still lag in experience, education and management skills in comparison with other small businesses in developed European countries. Large number of successful business started as small organizations and had grown over the time. Small businesses in Croatia are considered drivers of economy development.

The definition of the size of a small organization is legally defined. This paper is concerned with the management function of small organizations (less than 50 em-

ployees). Moreover, this paper is concerned with the importance of successful small business management. For the purpose of this paper, the research was conducted among small organizations in Šibenik-Knin County in order to define the current conditions of small businesses' management and the level of the actualization of management functions among small organizations.

1. MANAGEMENT OF SMALL ORGANIZATION

Small business economy in Croatia includes more than 78.000 trades associations and makes 99,5% registered business subjects in Croatia. SME sector keeps generating the largest and fastest growth concerning the numbers of entrepreneurship and the number of employees, revenues and profits. SME become the sector which stimulates and motivates the overall national economy (Kersan-Škabić & Banković; 2008: p 60).

In Green paper¹ "Entrepreneurship in Europe", the European Committee emphasizes a social meaning of entrepreneurship (Škrtić, 2006: p.200-202):

- Entrepreneurship helps generating new work places and economic growth: research has shown that entrepreneurship gives a positive contribution for economic growth. In Croatia, small and medium entrepreneurship in period of 12 years (from 1994, till 2006.), enabled 77 000 new working places;
- Entrepreneurship has crucial importance for competitiveness: new entrepreneurship initiatives have positive effect on competitiveness, on implementation of effective and innovative business solutions which have a positive impact on economy as a whole;
- Entrepreneurship develops new personal potentials: entrepreneurship enables employees to fulfill their higher needs (self-fulfillment and independence, personal challenge) which exceeds beyond material motives;
- Entrepreneurship develops basic social interest: entrepreneurship is a leading force for market oriented economy and the results bring social prosperity, new employment possibilities and variety of choice for consumers.

¹ Green Paper is the most recent of a series of Reports from the European Commission designed to encourage entrepreneurship². In the United Kingdom, the latest of a series of similar papers was that produced by HM Treasury and the Department of Trade and Industry's (DTI) Small Business Service (SBS) in November 2002.

Management functions are defined as: planning, organizing, leadership and controlling. The practice has shown that the defined functions are adjusted to the problematic of small organizations in a daily business. In small organization one person manages more than one function so it is impossible to define what function is the most time is consuming. Every function is equally important for the achievement of the final goal. The decision about time devotion for the certain function lies at the managers which are in most cases the owners of the small organization. This decisions changes based on the situation of the external and internal environment (Netahli, 2008: p.9).

Planning is the starting function and it is based on goals to be achieved and defined vision and mission of the organization. Organizing function represents connecting people with related means in order to achieve a shared goal. Good organizing enabled optimal use of all resources, successful proceedings of business process while the human work is not overlapping and employees do not waste time on needles work. Leadership as a management function has a duty to influence at employees in order to perform in the most effective way. Control represent a comparison of planned and achieved results in the business process (Netahli, 2008: p. 9-14).

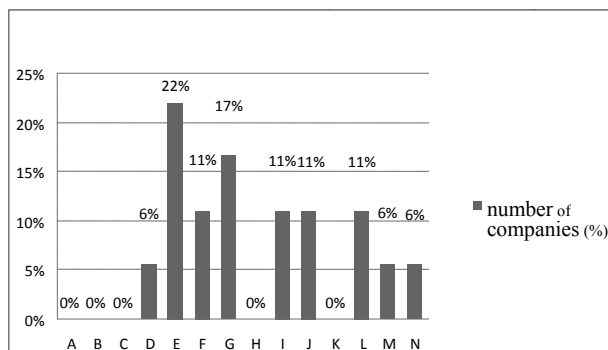
2. METHODOLOGY OF RESEARCH

The goal of the research was to determine the practices of management functions small organizations of Šibenik-Knin County. The research was conducted in January, 2012. Questionnaire (entitled to managers/directors) was sent to 50 small enterprises in Šibenik-Knin County based on database of the Croatian Chamber of Economy and the Croatian Company Directory. Total of 28 fully answered questionnaires was returned.

2.1 Profile of researched organizations

The research covered companies in commerce sector (22%) and transportation and storage (16, 67%) which is justified since commerce sector is a second important sector in the County, followed by the accommodation and catering industry according to number of employees (EE, 2011.)

Table 1: Basic branch of activity of researched companies



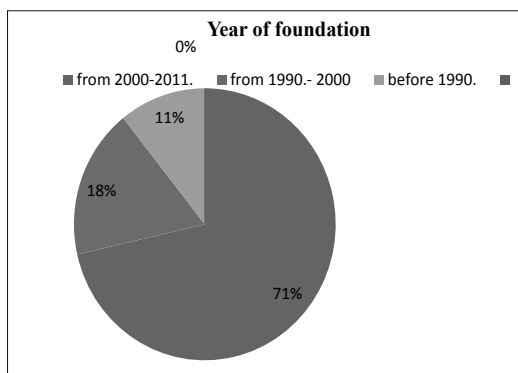
Source: data from questionnaire

Explanatory note: A – agriculture, hunting, livestock farming; B – electricity supply, air conditioning; C- water supply, waste management; D –architecture; E – commerce; F – accommodation and catering industry G- transportation and storage;; H – public utilities; I – financial services and insurance ; J – real-estate; K– public sector and defense; L – health care and social care ; M – education ; N – art, relaxation and entertainment

2.2. Foundation of the researched companies

The research had shown that the majority of the small organization in the County (71 %) were founded in the last decade which shows that the young enterprises dominate the market. Total of 18 % of researched organizations were founded in the period from 1990 till 2000., and 11 % of researched companies were founded before 1990.

Graph 1. Year of the foundation



Source: data from questionnaire

2.3. Planning

The examinees were asked to define the purpose of planning function based on: defining the business position of the organization, defining the direction of performance, determining the main goals to be achieved and determining the style and purpose of future performance.

Table 2. The purpose of planning function in small organization in Šibenik-Knin County

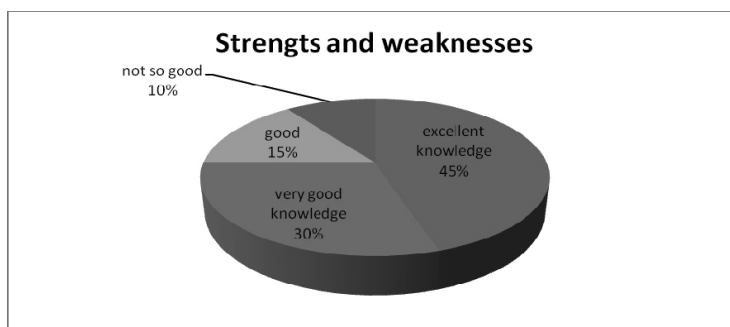
Purpose of planning function	Current condition	Desired condition
Business position of the organization	21,80 %	100,00 %
Direction of performance	38,16 %	100,00 %
Main goals to be achieved	50,00 %	100,00 %
Stile and purpose of future performance	40,86 %	100,00 %

Source: data from questionnaire

2.4. Knowledge of the organization strengths and weaknesses

The managers/owners were asked to define their understanding and knowledge of the organization strengths and the weakness. The research had shown that a large number of managers/owners have the great amount of knowledge about the weaknesses and strengths (45 %) and 30 % of them have a very good knowledge.

Graph 2: Strengths and weaknesses



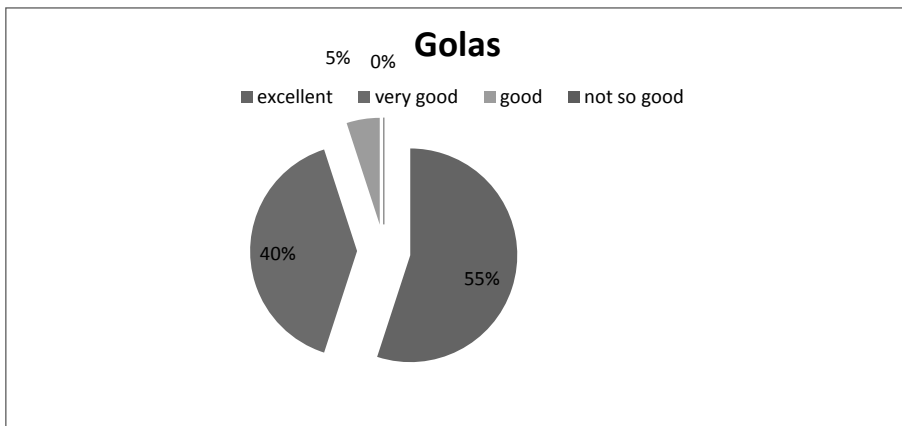
Source: data from questionnaire

2.5. Goals

The research was concerned with the defined goals and whether the goals are clearly and realistically defined and adjusted with the current conditions and possibilities of the certain organization.

Graph 3. shows that a large number of entrepreneurs know and understand excellent their goals (55 %), followed by a large amount of entrepreneurs that know their goals very good (40%).

Graph 3: Defined goals



Source: data from questionnaire

2.6. Strategy

The research was concerned with the strategy of the entrepreneurs. The managers/owners were asked to define to what extent they know the organization' strategy and wheatear the strategy is clearly defined and documented. The research had shown that a large number of entrepreneurs (30%) do know their strategy but that the strategy is not documented and that even greater number of entrepreneurs (65%) does not know the strategy of their organization.

Graph 4: Strategy

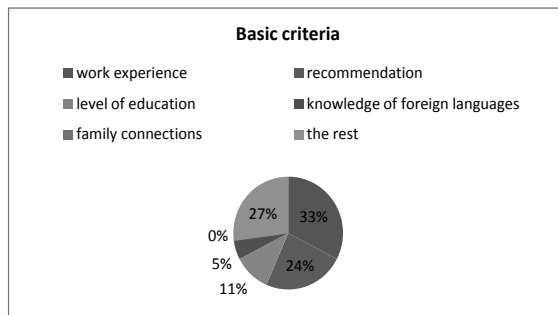


Source: data from questionnaire

2.7. Employment function

The following graph shows the criteria followed by management when looking for new staff. The main criteria (33%) among entrepreneurs were family connections followed by recommendation (24%).

Graph 5: Basic criteria when looking for new staff

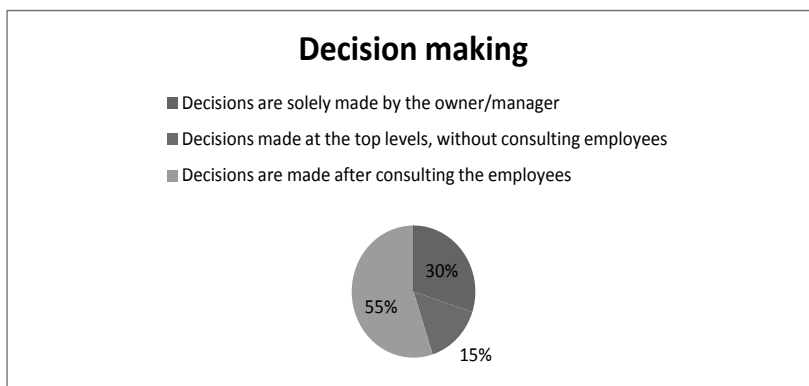


Source: data from questionnaire

2.8. Leadership function

Leadership is one of the most important management functions. The research was concerned with the ways the decision were made and wheatear the employees were involved and included in the process.

Graph 6: Process of decision making



Source: data from questionnaire

2.9. Controlling

The following figure shows the managers/owner belief of the purpose of controlling in small and medium organization. The research had shown that only 5 % of entrepreneurs believe that the purpose of controlling is guidance of work from all the employees in the organization. It can be conclude that the controlling function is not clearly defined and that manager does not have a clear decision on what will be controlled, how it would be controlled, where and how the control will be conducted.

Table 3: Controlling function in small organizations in Šibenik-Knin County

Purpose of controlling	Percentage
Individual guidance of work from all the employees	5 %
Successful business	25%
Rewards and punishment	30 %
Resolving emerging working problems	60 %

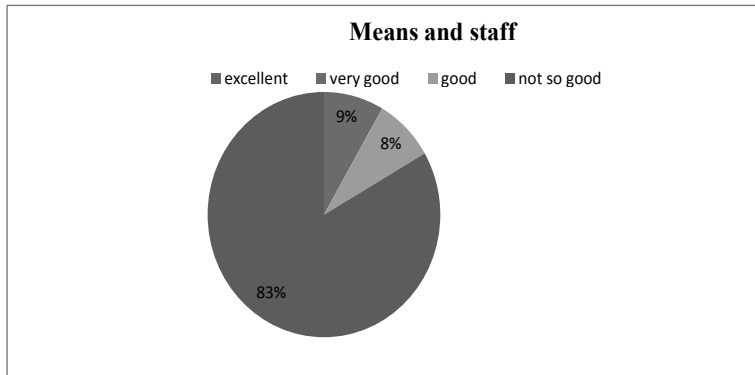
Source: data from questionnaire

2.10. Organizing function

The research was concerned with the level of organization of means and staff in the organizations.

The following graph shows either the reluctance of the examinees to answer and/or lack of knowledge of this function.

Graph 7: Organizing function



Source: data from questionnaire

2.11. Research limitations

One of the research limitations was the unwillingness of significant number of entrepreneurs for disclosure of their practices concerning the management functions even though the anonymity was guaranteed. The second limitation was the possible dishonesty of the examinees in order to portrait organization in more positive manner. With the stated limitations, the gathered data were useful for bringing conclusions on current condition of management functions in small business in Šibenik-Knin County.

Conclusion

Contribution of this paper is reflected in results of empirical research on functions of management in small organization in Šibenik-Knin County which have shown that a considerable number of entrepreneurs do not understand the importance of management functions.

Empirical research has shown four most important findings:

- 1) The research had shown that a large number of entrepreneurs (30%) do know their strategy but that the strategy is not documented and that even greater number of entrepreneurs (65%) does not know the strategy of their organization.
- 2) The main criteria when looking for new staff (33%) among entrepreneurs was family connections.

- 3) Only 5 % of entrepreneurs believe that the purpose of controlling is guidance of work from all the employees in the organization.
- 4) More than half of the entrepreneurs (55%) make important decisions after consulting with the other employees.

Management of small businesses in Šibenik-Knin County need to understand the importance of a well defined, understandable and documented business strategy; have to reconstruct the organization with the needs of the market and need to improve the knowledge of the external environment and its effects at the organization.

Bibliography

EEO (2011.) Metode analize obrazovnih potreba za gospodarski razvoj: Šibensko – kninska županija, Programme of the European Union in Croatia: EuropeAid/127475/D/SER/HR

Kersan-Škabić, I. & Banković, M. (2008.) Malo gospodarstvo u Hrvatskoj I ulazak u Europsku Uniju, *Ekonomski misao i praksa* Dbk. 1, (57-76), UDK/UCD: 339.92

Netahl, S.: Menadžment malog poduzeća, *Zbornik radova Veleučilišta u Šibeniku*, 1-2, 2008., stručni članak, str. 9-14.

Škrtić, M. & Mikić, M. (2006). Gospodarsko značenje hrvatskog poduzetništva – šanse i zamke, *Zbornik radova Ekonomskog fakulteta u Zagrebu*, 4, (191-203), UDK: 338:65.012(497.5)

Udovičić, A.: Small and medium entrepreneurship (SME) in Croatia as an important component for economic growth, VII. *Interdisciplinary Management research*, Poreč, 13. – 15. svibnja 2011., str. 442-435.

Official web site of Croatian chamber of economy *Industry and Technology Department*: Small and medium enterprises (SM's); pages 1- 5; available at: http://www2.hgk.hr/en/depts/industry/Malo_gospodarstvo_10_web.pdf Retrieved: (21-02-2011)

<http://hgk.biznet.hr/hgk/> Retrieved: (01-03-2012)

The Commission's Green Paper is the most recent of a series of Reports from the European Commission designed to encourage entrepreneurship; whole document available at: <http://www.publications.parliament.uk/pa/ld200203/ldselect/ldeucom/142/142.pdf>

THE INFLUENCE OF KNOWLEDGE ECONOMY ON HUMAN RESOURCE MANAGEMENT IN CROATIAN ORGANISATIONS

Katarina Arnold Bratić, B.Sc.

ABSTRACT

Today, in 21st century the main intangible resource and the driver of economic development for the knowledge economy is the knowledge itself. Knowledge is a human product, and it can be reached and generated as a resource for providing the added value exclusively by people. Therefore, with the investment and knowledge development the intellectual capital becomes a key factor for organization development, whereas the human resource management becomes the foundation for creating and maintaining competitive advantage.

The aim of this paper is to examine the development level of human resource management function, as well as the importance of investing in the human resources by means of education in Croatian organizations. The theoretical part discusses the significance of human resources as well as the role of human resource management in the knowledge economy with the specific review on education. The attention of the research is focused on the analysis of the current state, with respect to the human resources management in the function of lifelong education and development, through which programs is it done and how high is the level of satisfaction efficiency of the employees concerning the programs. The resource results might serve for decision makers in Croatian organizations as guidelines for improving investment in education and human resource development for the purpose of achieving competitive advantage on the market.

JEL Classification: O15

Keywords: human resources, human resource management, knowledge economy, education and development, knowledge

1. INTRODUCTION

In the present more and more turbulent and complex business environment one is aware of constant changes in the economical science. In the last couple of years in management theory and practice significant changes occurred as a consequence of development in informatics technology, science and technology in general, which changed the business policy.

In the uncertain environment with constant changes, the business entities show interest in finding new original solutions in order to adapt to more and more demanding market conditions. Therefore, growing attention is being paid to the human factor, which is gaining in importance in development economics, as well as to its creativity, skills and knowledge, which represent an irreplaceable success factor. Thereby, a human factor gains a background for further improvement and upgrading of existing knowledge, completing thereby a concept of lifelong learning. By the policy of permanent education a person as an individual creates a platform of society in its social and economical sense. Accordingly, we could speak about knowledge economy, new economy, i.e. of the economy using intellectual capital for the purpose of achieving competitive advantage, and which is in a constant fight against changes in the global market.

Nowadays, a contemporary knowledge organization emphasizes its competitiveness through capabilities and human potentials that are becoming a key for creating new economic values. Thereby, a human resource management is becoming a centre of business strategy through education and creating knowledge as an important intangible resource. Eventually, knowledge is a basis for survival and development of organization, which has to be constantly expended in order to contribute to organizational success in the global race and to upraise human resource management at the highest level.

Research Methodology

Since the intellectual capital is becoming the more significant resource and postulate for success achievement in knowledge economy, human resource management is becoming a basis for creating and maintaining competitive advantages. Consequently, by investing and developing of knowledge, capabilities and skills, a human resource is becoming a crucial factor for organization development and survival. It was my intention in this paper to research development of the function of human resources and the importance of investing in human resources through education and development of employees in Croatian organizations. The basis aim was to analyze

the current state, i.e. the role of human resources management in the function of permanent education and development of the employees, which educational programs have been usually used for its implementation and how high the level of satisfaction of the employees was. For the purpose of data collection regarding the functioning of human resource management concerning permanent education and development the research has been based on random sample of 105 employees in Croatian organizations. As a research instruments I have used a survey consisting of closed-ended questions and snowball questions, thus gathering quantitative data linked to practice. The research has been done in February 2012 via online method (www.kwiksurvey.com) and distributed via social networking. The results were sorted by Statistical Package for the Social Sciences SPSS 17,0. According to the above mentioned random sample of examinees, research data are significant indicator and point to the real state of existence and effects of human resource management in education and development of the employees in Croatian organizations.

2. THE SIGNIFICANCE OF HUMAN RESOURCES IN THE KNOWLEDGE ECONOMY

Since a human factor has become an irreplaceable basis of success, human resource management in the knowledge economy is the focus of many scientists. Therefore, human resource management is becoming not only the most significant business function, but also a specific function and access management taking into consideration that people are the most significant recourse as well as the key strategy and competitive advantage (Batijarević-Šiber, 1998, pp. 121). Therefore, in the last couple of years the special intention is paid to the human resources that are becoming one of the most analyzed terms.

There are different interpretations by different authors in knowledge economy regarding a contemporary term of human resources. A development of the contemporary term originates in the 18th century, precisely from Adam Smith, who pointed out in his works the importance of individual education and development for the society as a whole, whereas according to the production factor Karl Marx puts on the first place success of a man and its knowledge development. However, emphasizing the importance of people for the organizational success is nothing new. Rather new is a real practical interest of the company and its management for human resources and development as well as vital interest not only for business development and successfulness but also for the survival of the company (Bahtijarević-Šiber, 1999, pp. 43). Nowadays, there are many definitions of human

resources in the literature. According to one of them, a term “human resource management” is defined as a way how organizations manage their personnel, and it has an influence on their development and improvement (McCourt & Eldridge, 2003, pp 2). Thereafter, in the economy based on knowledge, hidden in a man as well as in his education and development, is the basic driver for society development in terms of economy. Organizations in such economy demand changes in managing way and in relationship between people in the contemporary economy of the 21st century, the knowledge economy where education and development of employees becomes a key resource. Hence, human resource as intangible resource representing total knowledge, skills and capabilities serves for business development and attaining objectives, which the organization disposes of. Consequently, the organization strategy is a discovering and investing in human resources necessary for attaining own strategic objectives as well as social objectives in terms of improvement of socioeconomic position and development of human intellectual capacities.

2.1. Coherence of Human Resource Management and Knowledge Economy

The strong coherence between the terms human resource management and knowledge economy is a characteristic for contemporary business activity. Since the role of human resource management is important for successful organization, knowledge as a basis of knowledge economy is becoming a human intellectual capital. The famous Nonaka discusses in his book a coherence of these two terms, where he emphasizes the advantages of Japanese companies, which is based on adopting implicit knowledge, new management role, and importance of organizational and business practices in knowledge-based companies. That approach embodies knowledge creation and puts it in exactly the right place – in the very centre of human resource management of an organization (Nonaka, 1998, pp. 26). The creation of the only intangible knowledge resource is exclusively possible by people, so the human resource management is responsible for its creation and distribution. The human resource management as a process of design, development and guiding of human knowledge, capabilities and willingness towards demands arising from organizational targets, has nowadays exceptional importance and the role in knowledge management (Marušić, 2006, pp. 58). On the other hand, knowledge management recognizes the role of knowledge as significance, and presents it as the best production resource and model for creating added value. Thereby, its competitiveness is directed to knowledge investment in people as well as in using high quality human resources. The knowledge in an organization is being developed based on

mutual relationship of implicit and explicit knowledge on the level of individual, group, organization and between organizations (Leopold, et al., 2005, pp. 15). They indicate the specific ways how human resource management can contribute to knowledge management, namely by implementation of various methods regarding organizational strategy. In the knowledge economy high demands are placed on human resource management. One of the most important is creating and implementing the strategic goals which will ensure successful organizational results.

2.2. The Role of Human Resource Management in Contemporary Organizations

As a result of changes in the environment and with appearance of knowledge economy significant changes have occurred in contemporary managing models. The new ways of management include changes which demand new approaches, opinions, and different contemporary management structure where knowledge is becoming a basic development resource existing in people's heads, and is more complex than other resources. Hence, the knowledge management model is becoming a strategic goal of human resource management in the contemporary business of 21st century, whereas human resource is becoming a basis for its implementation. With the growing impact of globalization, in the economy appears the knowledge economy based on investing in people and thus replaces informatics economy, which competitive advantage has been based on investment in informatics technology, which completely changes the role of human resources management. Not only had that such a change in economy changed policies and practice of management control but also a society as a whole. The new role of human resource management is focused on people and its resources by using them efficiently and investing in their development. Beside creating policy, management system and taking care for people, talent search is becoming one of the most important tasks. In a theory, an organization that invests in its unique and specific capabilities in managing talent in order to produce extraordinary results for the organization is called Talent-powered organization (Cheese, et al., 2008, pp. 10-11). In such organizations managers are endeavoring to discover high quality people who have capabilities such as creativity, communication skills, multi education, sense of responsibility, which are a source of success. A quality of an individual depends on desire and willingness to adopt new knowledge, therefore the main focus is on permanent education. Beside the strategy of talent search, the aim of human resource management is developing its resources by long-term investing in education and development of the employees. The establishment of organization that effectively invests in education and develop-

ment of the employees is the strategic imperative for increasing market success and competitiveness.

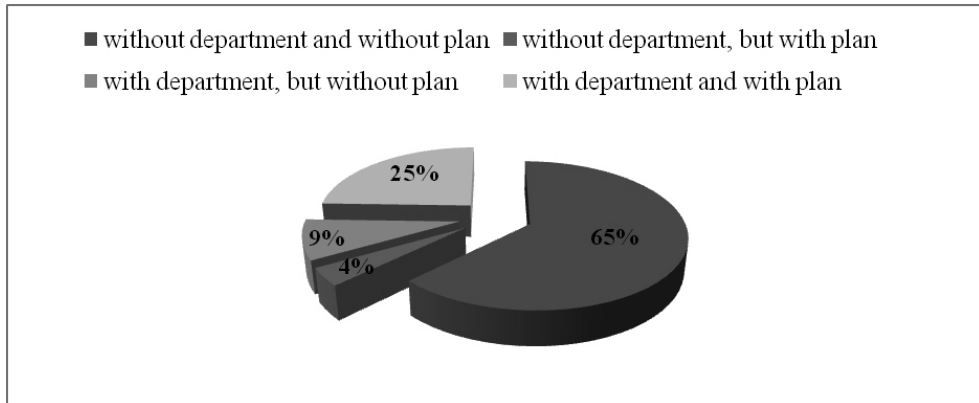
Nowadays, in a century of knowledge where knowledge is the main driver of development, the role of management of human resource is becoming more dynamic, demanding and complex. The ever-present changes on the market demand adjusting to the new conditions and constant investment in education and development of individuals and organization as well.

3. THE ANALYSIS OF RESEARCH RESULTS

Due to the fact that 21st century is a century of knowledge, education and development are becoming obligatory functions in business activities. Knowledge is becoming a basis of organizational competences for realization of the strategic goals. Thus, contemporary organizations change their business policy and are focused on discovering human resources and investing in their education and development. On that ground, the research has been done using survey, where the data have been collected classified according to the research area. The research has been done on 102 employees in Croatian organizations, and the interpretation of results is divided according to the ownership of the organization.

According to the research, the research results (Graph 1.) show that Croatian organizations have poorly developed function of education and development, i.e. they are not even preparing annual plans for education and development of their employees, who are crucial for organizational development and survival. It is necessary to point out that even 64% of organizations do not have formed department or a plan for education and development, while 25% of them pay attention to education and development of their employees as a relevant strategic function.

Graph 1. Organizational structure according to the existing department and plan for education and development of the employees



Author's analysis according to the research data collected on February 2012.

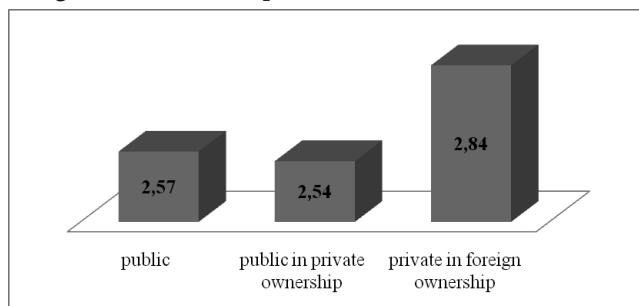
Table 1. Investing in education and development according to the property structure One-way ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,294	2	,647	,791	,456
Within Groups	81,020	99	,818		
Total	82,314	101			

Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

Supplied data in table 1. are the results of ANOVA test based on the answers given by employees concerning their evaluation of level of investment of an organization in education and development, depending on ownership structure of the organization where they are employed. According to the ownership, the entities were divided into three groups: public (i), public in private ownership (ii), and private in foreign ownership (iii). The examinees rated their answers using an ordinary scale consisting of following 5 grades: nothing (1), little (2), moderately (3), much (4), very much (5). With the research per one-factor analysis of variance it was concluded that there is no statistically significant difference ($p = 0,456 < 0,05$) in the level of investment according to the ownership structure. Likewise, the level of investment regarding the arithmetic means obtained in research in all ownership structures is estimated as little to moderate (Graph 2.).

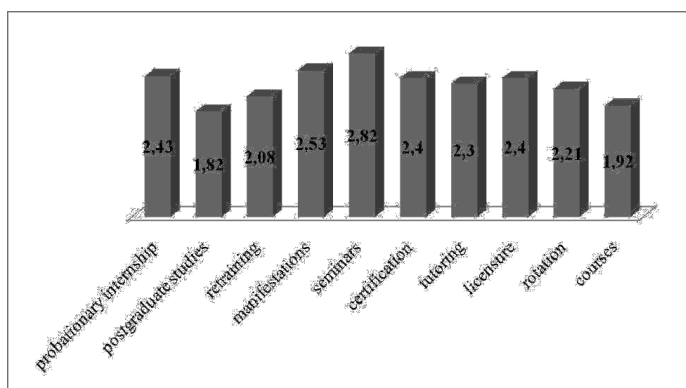
Graph 2. Arithmetic means of level of investment in education and development according to the ownership structure



Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

Within research the influence of ownership structure of the organization has been examined toward the programs for education and development of the employees. On the ordinary scale the examinees evaluated the implementation of the following programs in their organization: probationary internship (i), financing of postgraduate studies (ii), retraining/vocational rehabilitation (iii), participation in scientific manifestations (iiii), professional seminars (iiiii), professional licensure examination (iiiii), professional certification seminars (iiiii), tutoring (iiiii), job rotation (iiiii), foreign language courses and informatics courses. The level of implementation and representation of all programs for education and development was evaluated with very poor grade in all ownership structures (Graph 3.).

Graph 3. Arithmetic means of the level of establishing of program for education and development in Croatian organizations



Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

Table 2. Programs of education and development according to the ownership structure per One-Way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Probationary Internship	Between Groups	17,724	2	8,862	7,116	,001
	Within Groups	123,296	99	1,245		
	Total	141,020	101			
Postgraduate Studies	Between Groups	14,781	2	7,390	7,618	,001
	Within Groups	96,043	99	,970		
	Total	110,824	101			
Retraining/ Vocational rehabilitation	Between Groups	2,164	2	1,082	,758	,471
	Within Groups	141,209	99	1,426		
	Total	143,373	101			
Manifestations	Between Groups	,127	2	,064	,039	,962
	Within Groups	163,284	99	1,649		
	Total	163,412	101			
Seminars	Between Groups	7,141	2	3,570	2,242	,112
	Within Groups	157,683	99	1,593		
	Total	164,824	101			
Certification	Between Groups	6,738	2	3,369	2,493	,088
	Within Groups	133,782	99	1,351		
	Total	140,520	101			
Tutoring	Between Groups	6,722	2	3,361	2,362	,099
	Within Groups	140,856	99	1,423		
	Total	147,578	101			
Licensure	Between Groups	,367	2	,183	,126	,882
	Within Groups	144,153	99	1,456		
	Total	144,520	101			
Rotation	Between Groups	11,319	2	5,660	4,266	,017
	Within Groups	131,357	99	1,327		
	Total	142,676	101			
Courses	Between Groups	4,804	2	2,402	1,741	,181
	Within Groups	136,569	99	1,379		
	Total	141,373	101			

Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

According to the one-factor analysis of variance it has been established that there is statistically very significant difference in the implementation of probationary in-

ternship program $F(2, 99) = 7,116$, $p = 0,001$, financing of postgraduate studies $F(2, 99) = 7,618$, $p = 0,001$, and in job rotation $F(2, 99) = 4,266$, $p = 0,017$ in all three groups of ownership structure (Table 2.). In spite of statistical significance in the above mentioned programs, there is a large actual difference between arithmetic means of ownership in the organizations. The extent of this difference was calculated by means of a formula for eta-squared:

$$\text{Eta-squared} = \frac{\text{Sum of squares between groups}}{\text{Total sum of squares}}$$

The eta-squared indicator for probationary internship was 0,13, for postgraduate studies 0,13, while for job rotation was equal to 0,08, which represents a large differences in implementation of programs for education in groups of ownership in the organizations. The Tukey HSD post hoc test showed that the implementation of probationary internship was more implemented in state-owned organizations than in private-owned, either, domestic or foreign, the financing of postgraduate studies more in state-owned organizations and in private organizations in foreign ownership, while the job rotation has the largest presence in private organizations in foreign ownership.

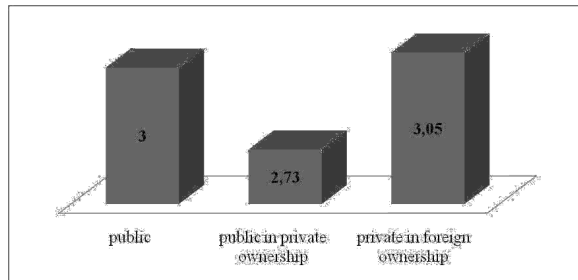
Table 3. Self-estimation of the influence of educational program on work improvement One-Way ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1,961	2	,981	,723	,488
Within Groups	134,245	99	1,356		
Total	136,206	101			

Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

On the ground of self-estimation of the examinees who participated in some educational programs implemented by their organizations, individual standpoints have been gathered, i.e. subjective opinion concerning to what extent the educational programs had an influence on their work improvement. According to the ownership structure, the results collected with one-factor analysis of variance show that there is no statistically significant difference ($p = 0,488 < 0,005$) (Table 3.), whereas according to the descriptive analysis the examinees evaluated the influence of the existing programs on their work with the grade good (Graph 4.).

Graph 4. Arithmetic means of self-estimation of the examinees concerning the influence of educational program on work improvement according to the ownership structure



Author's illustration, Data analysis harvested by survey in Statistical Package for the Social Sciences 17.0 (SPSS 17.0)

4. CONCLUSION

The research results regarding the practice of education and development in Croatian organizations indicate that there is an insufficient development of human resource management. The consequences of low development are displayed in insufficient use of human resources as well as in creating and expanding of knowledge. The significance of the term knowledge is negligible since organizations do not consider their employees as the most important resource.

Based on theoretical and research results of this paper, Croatian organizations have to develop their human resource management concerning education and developing of their own employees. In the knowledge economy the investing in education and development is very important, because the more organizations invest and improve the existing knowledge, skills and capabilities of their employees the more contribution is made to the organizational success. Education and development of human resources is the key for the future organizational success, but also for society in general on the way to knowledge-society. The companies providing intellectual services have a large role in the word economy, and their importance will be even larger in the future (Drucker, 1997, pp. 20 - 24).

LITERATURE

Bahtijarević-Šiber, F. (1999), *Managment ljudskih potencijala*, Golden marketing, ISBN 953-6168-77-4, Zagreb, pp. 43

- Cheese, P., Thomas R., Craig E. (2008) *The Talent Powered Organization, Strategies for Globalization Talent Management and High Performance*, Kogan Page Limited, ISBN 978-0-7494-4990-2, London, pp. 10-11
- Leopold J., Harris L., Watson T. (2005), *The Strategic Managing of Human Resources*, Pearson Education Limited, ISBN 0273631659, England, pp. 15
- Marušić S. (2006), *Upravljanje ljudskim potencijalima*, Adeco, ISBN 953-97228-7-X, Zagreb, pp. 58
- McCourt, W., Eldridge, D. (2003), *Global Human Resource Management*, UK: Edward Elgar, ISBN 1-84376-854-2, Cheltenham, pp. 2
- Nonaka I. (1998), *The Knowledge – Creating Company*, Harvard Business Review of Knowledge Management, a Harvard Business School Press, ISBN 0-87584-881-8, Boston, pp. 26
- Alfaro Navarro J.L., López Ruiz V. R., Nevado Peña D. (2011), *Estimation of intellectual capital in the European Union using a knowledge model*, Zbornik radova Ekonomski fakultet Rijeka, Vol. 29, No. 1, pp. 109-132., ISSN 1331-8004, Sveučilište u Rijeci, Ekonomski fakultet, Rijeka Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=103556 (28.8.2011.)
- Bahtijarević-Šiber, F. (7/98), *Informacijska tehnologija i upravljanje ljudskih potencijalima*, Slobodno poduzetništvo, Zagreb, pp. 121, ISSN 1330-2833
- Chivu I., Popescu D. (2008), *Human Resources Management in the Knowledge Management*, Revista Informatica Economica nr. 4, pp. 54-60, ISSN 1453-1305 Available at: <http://revistaie.ase.ro/content/48/CHIVU%20Iulia%20&%20POPESCU%20Dan.pdf> (5.3.2012.)
- Drucker, P.F. (1997). *The future that has already happened*, Harvard Business Review, Vol. 75, No. 5, pp. 20-24
- Kolaković M. (2003), *Teorija intelektualnog kapitala*, Ekonomski pregled, Vol.54, No 11-12., pp. 925-944, ISSN 0424-7558 Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=40500 (17.7.2011.)
- Paauwe, J., Boselie P., *Challenging (Strategic) Human Resource Management Theory* (February 2002, 05). ERIM Report Series Reference No. ERS-2002-40-

ORG. Available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=370991 (1.9.2011.)

Pejić Bach M.(2004); Upravljanje ljudskim resursima na rastućim tržištima u ekonomiji znanja-pristup ustavne dinamike, *Ekonomski pregled*, Vol. 2 No. 1., pp. 67-84, ISSN 0424-7558 Available at: http://hrcak.srce.hr/index.php?show=clanak&cid_clanak_jezik=41432 (14.2.2012.)

MANAGING MASS MEDIA INFLUENCE ON CONSUMER BUYING BEHAVIOR

Almir Peštek, Ph.D.¹

¹School of Economics and Business Sarajevo, University of Sarajevo,
Bosnia and Herzegovina, almir.pestek@efsa.unsa.ba

ABSTRACT

Influence of mass media significantly changed purchase habits of individual consumer and its attitudes towards purchased products and services. They became creators of purchase motives and therefore important for the society as a whole. The aim of this paper is to present theoretical and practical aspects of measurement the influence of mass media on buying behavior and consumers' perceptions as well as to recognize the most important mass media channels. Commonly used channels were selected: TV, magazines (weekly and monthly), daily newspapers, online portals and catalogues. This paper is based on a survey conducted by authors in September 2011. Data were gathered through personal interviews with 100 respondents and analyzed using statistical methods. This research offers important insights in influence of mass media in Bosnia and Herzegovina on customers' perceptions and behavior as well as the implications for managing marketing communication channels in practice.

JEL Classification: M31, M37

Keywords: mass media, communication, consumer behavior, purchase phase

INTRODUCTION

How did we become dependent on constant need for possessions and showing off goods and brands? Such treatment towards consumption was created over the past 50 years and mass media had the key role within.

When it comes to consumers, common sense doesn't play an important role during the purchase. Primarily, it is the sense of pleasure and satisfaction. Mass media with its influence significantly changed purchase habits of individuals and their

attitudes towards products and services it is buying. They are helping in creation of the purchase motive for consumers, and this leads us to the increased importance of possession and showing the possessions for individual and for the society as well. Mass media influence, in its essence, brings powerful economic interests and contents that are reflecting on our lives, in the scope we are ready to accept.

The aim of this paper is to recognize how and in which amount media are influencing consumer purchase behavior.

LITERATURE REVIEW

Mass Media and Mass Communication

Mass communication could be described as the social activity of managing signs of informational, educational and recreational contents through which professional groups in specialized institutions enables understanding with mass public – initiating it on certain social activity (Đorđević & Pešić; 2004). Mass communication media are represented with print, audio and audio-visual carriers of communicated message to the public or to the narrow target segment. These media are also called basic media (Kraljević Soče; 2007). They have always been a channel for implementing advertising. Advertising could be described as the most visible marketing activity that is implementing by using mass media. It is every paid form of communication from an identified source that is promoting ideas, goods and services through mass media (Schiffman & Kanuk; 2004).

Shaping and development of efficient communications begins with defining communication goals and with selecting target public. Next step in the process is defining clear communication message and in the end selecting appropriate media target public will be reached through. Main goal of advertising is specific communication task and level of achievement that should be accomplished at target public within the defined period of time (Kotler & Keller; 2008). Primary communication goals are in the range of: creating the awareness, promoting sales, creating interest, building image etc (Van Raaij et al.; 2001).

The most important thing in creation of efficient communication is clear definition of target public. Public is consisted out of individuals, and each of them has its properties, needs, interests and thus, right segmentation is necessary (Kotler; 1999). Target public could be: potential customers, current customers, decision makers and the influential referent groups, society at large (Kotler; 1999).

Communication message could be described as a thought, idea, attitude, image or other information that sender wants to launch to the intended public. In order to define it, sender needs to know exactly what it wants to say and why, and it should know personal characteristics of its target public. Only then it can create message through words and/or pictures (Schiffman & Kanuk; 2004). Maybe one of the most famous model of message creation in practice is Attention, Interest, Desire and Action (AIDA) (Kotler; 1999). Efficiency of the message is dependent on its structure too. Some researches show that best advertisements are the ones that ask questions and that it is enabling potential consumers to bring their own conclusions (Kotler; 1999). The credibility of sources information is given through is also one of the key factors that will influence its acceptance (Čičić et al.; 2010). Additional factors that are furthering credibility are: expertise, reliability and attractiveness. Messages from attractive sources attract more attention and have greater response rates (Kraljević Soče; 2007).

When it comes to the choice of mass media, there is an issue of finding the most cost efficient way to address the target market (Kraljević Soče, 2007). Numerous mass media are available to the company and it should be aware of: desired scope, frequency and influence, and in the end about the type of media. The final effect of the exposure is dependent on the reach and scope of media, frequency and the influence (Kotler; 1999). Reach could be described as a number of different individuals or households that are exposed to the certain media programme at least once over the defined time period. Frequency is telling us how many times within the defined period certain individual or household is exposed to the message and its influence is represented as a qualitative value of one exposure. The question that is posed in practice is: what is the best combination of reach, frequency and influence within the given budget? There is one stream of opinion that target audience should be exposed to the message as many as possible times while others think that too much exposure has negative effect as it could create monotony or irritation (Kraljević Soče, 2007).

In Table 1 below the most important types of mass media are presented: TV, radio, newspapers, magazines, Internet and outdoor advertisements.

Table 1. Properties of mass media

Mass medium	Advantages	Disadvantages
TV	Combines pictures, sounds and motion, attractive for senses, high attention and high reach	High absolute costs, high congestion, exposure is perishable, lower selectivity of the audience
Radio	Mass consumption, high geographical and demographical selectivity, low costs	Exclusively audio presentation, lower attention than with TV, exposure is perishable
Newspapers	Flexibility, timeliness, good coverage of local market, high acceptance, high persuasiveness	Brevity, bad quality of reproduction, low level of circulation
Magazines	High geographical and demographical selectivity, credibility and status, high quality reproduction, continuance	Long purchase period (not adjusted to the advertisers requests), distribution losses
Internet	High selectivity, interactive possibilities, relatively low costs	Measurement problems, characteristics of public, possibilities of fraud, low reach
Outdoor advertising	Flexibility, high repetitiveness of exposure, low costs, low competition	Limited public selectivity, creative limitations

Source: Schiffman & Kanuk; 2004

In practice, it is often hard to reach target segment of public when it comes to mass media. This represents one of the main problems for this communication mix element (Kraljević Soče; 2007). There are several other problems besides: mass communication has one-way direction (message receiver doesn't have the ability to react to the message), there are many other (similar) competitor messages, different stimuli from the environment are competing for customer perception, people accept messages that are in line with their attitudes, knowledge and values. On the other hand, importance of Internet becomes significant for the mass media and it starts overtaking the others as it is direct, acceptable, and measurable and it opens the possibility for the two-way communication and achievement of better market results for companies.

Buying behavior and perception

In today's society, purchase became matter of communication where different perceptions and identities are purchased, and different needs are satisfied (Pantić;

2008). Lekler (2004) reckons that there are several aspects of involvement in purchase: personal interests, brand value, hedonistic value of product or service, risk exposure, subjective probability of making a mistake. When it comes to purchasing process there are several methods defined in theory (Lee and Marshall, 1998, Davis and Rigaux, 1974, Moschis and Mitchell, 1986, Woodside and Motes, 1979) most authors agrees on five steps process that begins with recognizing the problem, follows with information search, valuing alternatives, decision on purchase and post-purchase behavior.

When it comes to mass media and advertising influence the most important principle is to encourage demand and to show the message receiver how he/she could satisfy its needs. Researches prove that when it comes to advertisements for females, messages should be referred to 'female interests'. Approach towards men is different and it should be focused on professional interest or outdoor/adventure interest (Ivanović; 2006). Another important issue is psychological influence and influence of color, shape and other elements. There are three perceptual processes: selective attention, selective retention and selective distortion. Perception influences the overall process and it determines which information will be noticed, how they will be interpreted, organized and used. It influences all marketing activities and important areas are: media strategy, design and packaging, exposure measurements.

METHODOLOGY

Focus of this research was on the influence of mass media on consumers purchase process. Two types of products from retail industry were selected: clothes and food. Additionally, focus was to analyze the influence of mass media exposure to the customers' perceptions of themselves.

The aim of this paper is to present theoretical and practical aspects of measurement the influence of mass media on buying behavior and consumers' perceptions as well as to recognize the most important mass media channels. Specific goals of the research were:

- Investigate the influence of mass media on the consumers when it comes to purchasing clothes and food.
- Investigate the influence of mass media to customers' perceptions of themselves.

Three main hypotheses were derived from aim and goals and defined as follows:

- H1: Magazines represent mass media with most important influence when it comes to making a decision about purchasing clothes.
- H2: Newspapers and catalogues are mass media with most important influence when it comes to making a decision about purchasing food.
- H3: Photos/videos of females that are available in media and advertisements are influencing the perception of female consumers of themselves.

Commonly used channels were selected: TV, magazines (weekly and monthly), daily newspapers, online portals and catalogues. This paper is based on a survey conducted by authors in September 2011. This research specifically targeted female respondents. Data were gathered through personal interviews with 200 respondents and analyzed using statistical methods. Survey was consisted out of nine questions: four demographic questions and 24 statements regarding mass media (Field et al; 1999; Dijkstra et al.; 2005). Statements were measured via five points Likert scale ranging from absolutely unimportant – 1, to the most important – 5, and from absolutely disagree – 1, to absolutely agree – 5.

RESULTS AND DISCUSSION

All respondents belong to the so called middle age group – from 16 to 30 years. 22% of respondents having university degree, 38% completed colleagues and the rest has high school diploma.

In order to analyze the structure of the sample, measures of height and weight were taken too. Results are presented in Table 2. From the results it could be seen that most of the respondents have average height and weight for their age. This will be significant for the analysis of perception of customers themselves.

Table 2. Measures of height and weight in the sample

Height (cm)	Percentage (%)	Weight (kg)	Percentage (%)
161-165 cm	34	51-60	20
166-170 cm	49	61-70	58
171-180 cm	17	71-80	22
Total	100	Total	100

Source: Author's calculation

When it comes to the importance of mass media in decision making on food purchase, 88% respondents ranked catalogues as the most important and 12% ranked newspapers. However, when average scores are analyzed (Table 3.) it could be seen that newspapers have the top score and they are followed by catalogues. Based on these findings, we can conclude that Hypothesis 2 is confirmed.

In contrary, results regarding habits and process of purchase of clothes totally differ from the previous ones. When making decision on clothes purchase, 60% respondents agree that magazines are crucial for their decision and this source is followed by catalogues and online portals (27% and 23% respectively). When average scores are analyzed (Table 3.) magazines still have the highest score and they are followed by online portals and catalogues. Therefore, we can conclude that Hypothesis 1 is confirmed.

During the interviews, within the informal conversation with the respondents, there are several reasons they select magazines as most important:

- they are accessible and relatively affordable
- they offer different pictures of clothes, their prices and locations for purchase
- they are interesting, lively, informative, and some of them very useful (they give advices for clothes combining, sewing etc.)

Frequency of exposure was also analyzed and TV took the first place (67% of respondents and 4,67 in average). It is interesting to notice that although it is the most viewed mass media, respondents don't regard it as importance for purchase of selected goods. Second place was won by Online portals (with 33% of share and 4,21 average score).

Table 3. Average scores for responses regarding importance of mass media for purchasing habits

	Purchase of food	Clothes purchase	Frequency of exposure
TV	3,08	1,83	4,67
Magazines	1	4,73	1,84
Newspapers	4,88	2	2,86
Online portals	2,55	4,63	4,21
Catalogue	3,49	3,31	1,42

Source: Author's calculation

Table 4. Average scores for statements regarding perception of one's own appearance

Statement	Average score
Photos/videos available in mass media and advertisements in mass media make me want to lose my weight.	1,48
Photos/videos available in mass media and advertisements in mass media influence on my opinion about perfect physical form.	1,52
I was on a diet because of the article/message in certain mass media.	3,35
I started exercising because of the article/message in certain mass media.	4,35

Source: Author's calculation

Perception of one's own appearance was analyzed with set of four statements. When it comes to perception (first two statements in Table 4), respondents disagree with them and thus signal that their perception of themselves is not influenced by mass media. However, when it comes to the initiative they undertook because of the messages in mass media (third and fourth statement in Table 4) they rank they mostly agree with them. This partially confirmed Hypothesis 3.

CONCLUSION

Modern consumers can choose product or service they want to buy from a broad specter of offer (that differs in price and quality). Companies' marketing communication efforts is entitled for directing consumers towards that company and its products and services. This is the way of creating competitive advantage with the other companies. Therefore, communication with usage of mass media as the most frequent one becomes one of the key elements of successful business.

This research offers important insights in influence of mass media in Bosnia and Herzegovina on customers' perceptions and behavior as well as the implications for managing marketing communication channels in practice. It is evident that mass media will continue to dominate in communication mix and that customers' perceptions are highly influenced by such messages. This is proven through research on two types of retail products on B&H market.

Based on this preliminary, exploratory study, we can see that important conclusions regarding customer behavior and influence of mass media could be drawn. However, one of the main limitations of the research is regarding the size of sample and measurements used. Therefore, authors propose broader approach to the topic by conducting study with larger scope and development of specified measures for

the defined constructs. It would also be interesting to compare customers by doing a cross-national study in this respect.

REFERENCES

- Čičić, M., Husić, M. & Kukić, S. (2010). Ponašanje potrošača. Mostar: Ekonomski fakultet Sveučilišta u Mostaru.
- Davis, H.L. & Rigaux, B.P. (1974). Perception of marital roles in decision processes. *Journal of Consumer Research*, 51-62
- Dijkstra, M., Buijtel, H.E. & Van Raaij, W.F. (2005). Separate and joint effects of medium type on consumer responses: a comparison of television, print, and the Internet. *Journal of Business Research*, 58(3), 377-386
- Dorđević, A. & Pešić, V. (2004). Uticaj medija na proces donošenja odluke o kupovini. *Godišnjak za psihologiju*, 127
- Field, A., Cheung, L., Wolf, A., Herzog, D., Gortmaker, S. i Colditz, G. (1999). Exposure to the mass media and weight concerns among girls. *Pediatrics*, 103 (3)
- Ivanović, T. (2006). Psihološki pristup reklami. *Montenegrin Journal of Economics*, No.3
- Kotler, P. (1999). Upravljanje marketingom: analiza, planiranje, primjena i kontrola. Zagreb: Informator.
- Kotler, P. & Keller L., K. (2008). Upravljanje marketingom. 12th Ed. Zagreb: Informator
- Kraljević Soče, S. (2007). Istraživanje uticaja masovnih medija na potrošače. *Informatologia*, 40(4), 301-307
- Lee, C.K.C. & Marshall, R. (1998). Measuring influence in the family decision making process using an observational method. *Qualitative Market Research: An International Journal*, 1(2), 88-98
- Lekler, N. (2004) Proces odlučivanja o kupovini. u: *Psihologija u marketingu - prostupi i razmatranja*, Beograd
- Moschis, G.P. & Mitchell, L.G. (1986). Television advertising and interpersonal influences on teenagers participation in family consumer decisions. *Advances in consumer research*, 13(1), 181--186

Pantić, D. (2008). Psihologija reklame: Kako da ti kažem da me kupiš? Zbornik radova Fakulteta dramskih umetnosti, 13-14, 361-368

Schiffman, L. & Kanuk, L. (2004). Ponašanje potrošača. 7th Ed. Zagreb: Informator

Van Raaij, W.F., Strazzieri, A. & Woodside, A. (2001). New developments in marketing communications and consumer behavior. *Journal of Business Research*, 53(2), 59-61

Woodside, A.G. & Motes, W.H. (1979). Husband and wife perceptions of marital roles in consumer decision processes for six products. *American Marketing Association Proceedings*, AMA, Chicago, IL, 214-219

SELECTING THE BEST LOCATION OF A GEOTHERMAL WELL THROUGH THE APPLICATION OF THE MULTICRITERIA DECISION MAKING METHOD – TOPSIS

Martina Briš Alić, univ.spec.oec.¹, Alen Alić, B.Sc., Nino Bošnjak, univ.spec.oec.

¹Ph.D. Candidate, Croatia, mbris@efos.hr

ABSTRACT

Decision making problem is the process of finding the best option from all of the feasible alternatives. In this paper, from among multicriteria models in making complex decisions and multiple attribute models for the most preferable choice, Technique for order preference by similarity to ideal solution (TOPSIS) approach has been dealt with.

TOPSIS method is based on an aggregating function representing “closeness to the ideal”, which originated in the compromise programming method. To eliminate the units of criterion functions in TOPSIS, vector normalization is used. The TOPSIS method determines a solution with the shortest distance to the ideal solution and the greatest distance from the negative-ideal solution, but it does not consider the relative importance of these distances.

The aim of this paper is to select the best location of a geothermal well by using the multiple criteria decision making – TOPSIS.

The paper also discusses some of the numerous advantages of renewable energy sources as compared to those non-renewable ones, and explores the ways of promoting geothermal energy and other renewable energy sources to the public.

JEL Classification: C68

Key words: Multiple criteria analysis, compromise, TOPSIS, comparison, alternatives, criteria, geothermal energy, wells, promotion

1. GEOTHERMAL ENERGY

Global warming and the increase in the concentration of greenhouse gas in the atmosphere cause widespread concern in narrow scientific circles, as well as in the general public. Greenhouse gases are mostly produced by burning fossil fuels, as a result of industrial processes, waste disposal and deforestation. In order to regulate greenhouse gas emissions in the atmosphere, the so-called Kyoto Protocol was adopted. Together with the United Nations Framework Convention on Climate Change, it is an appendix to the international treaty on climate change. The Kyoto Protocol was ratified by the Republic of Croatia in April 2007. The countries that have ratified it account for 61% of polluters. The increased prices of raw materials, as well as unstable political and economic situations have also been causing problems.

In order to increase energy independence, the European Union – one of the leading world associations – subsidizes and encourages the use of renewable energy sources that have been preserved in nature and are completely or partly sustainable, such as wind energy, water energy, accumulated solar energy, geothermal energy. Member states of the European Union aim at increasing the use of renewable sources from 8.5% in 2005 to 20% of total energy use by 2020.

This paper uses TOPSIS, one of the methods of multicriteria analysis, at a renewable source of energy, geothermal energy. TOPSIS method has been used in decision making on selecting a location for the utilization of geothermal energy in the Republic of Croatia, with respect to predetermined criteria.

Geothermal energy is energy that is contained below the earth's surface, in rocks and fluids. This is the energy that can be obtained from the earth's crust and be used to generate energy (Kurevija, Golub, 2008, 2). This type of energy is often called "green energy", since these sources do not pollute the environment. Furthermore, they account for very small amounts of greenhouse gas effect. There are other advantages too, one of them the fact that the use of geothermal energy and other renewable energy sources facilitates employment and helps to achieve greater independence related to energy sources. Furthermore, it offers new possibilities for education and in tourism.

It is necessary to promote "green employment" as a solution to global crisis – both economic and ecological – since the increased use of geothermal energy, as well as other renewable energy sources, facilitates employment connected to the observed sector – scientists researching renewable energy sources and developing new

technologies, staff working on the maintenance of such systems and accompanying activities that produce a renewable source of energy – biomass, such as agriculture, wood manufacturing and others.

Since the demand for energy generated from renewable energy sources is increasing, it will be of crucial importance to meet the requirements by offering renewable technologies and solutions on the market in an appropriate way. These systems should be quickly and suitably installed. The only way to achieve this is to offer timely and systematic professional development – current and future electricians, plumbers, construction workers and other profiles involved in meeting the future needs for renewable energy sources.

Vocational schools can directly benefit from the observed energy sources by including this new area into their curricula thus contributing to its development and modernisation. This should enable them to offer a wider spectre of educational profiles, which would make them more attractive to future students. Modern vocational schools that observe market trends should attract a higher number of students, which should distinguish them among the same types of schools.

It is necessary to promote “green vacation” and “green tourism”, since there are many consumers who are willing to go to considerable expense in the name of social responsibility when planning their vacations. They are willing to pay more for ecological aspects of hotels and their impact on the environment. “Green tourism” should as much as possible rely on the use of renewable energy sources, as well as use it for promotion. The number of hotels that use their environmentally-friendly measures in advertising is on the increase. These range from efficient use of energy, the use of renewable energy sources to waste disposal. There are hotel chains that build recognizable “brands” – 100% renewable, carbon neutral hotels and other, which attracts target guest categories¹.

The general public should be informed and educated about these advantages at all levels. Target groups should be identified and the correct combination of promotional activities should be determined in order to show existing conditions and possibilities, inform identified target groups and finally enable the communication among stakeholders.

¹ Obnovljivi izvori energije u mojoj zajednici, http://www.aweres.net/Preuzmi/OIE_u_mojoj_zajednici.pdf (accessed on Februar 19, 2012)

The existing state could be determined by organising professional forums, round-table discussions, and surveys. The activities could be carried via television and radio by broadcasting informative and educational shows and similar, by conducting interviews that would be published in magazines and newspapers. In order to inform the public about geothermal energy and other resources of renewable energy and to decrease their resistance to the topic and increase the acceptance, it is necessary to give presentations on the advantages of the renewable energy sources, organise public discussions and establish direct contact.

The ratio of renewable energy sources in total energy demand of the Republic of Croatia increased from 0.05% in 2005 to 0.5% in 2010. The increase of the ratio to 6.6% is predicted in the period leading to 2030. Electric energy system should develop so that there will be no need for importing electrical energy.²

2. TOPSIS METHOD

Among multicriteria methods there is a simple TOPSIS method, Technique for Order Preference by Similarity to an Ideal Solution. It was developed by C. L. Hwang and K. Yoon in 1981 (Hwang and Yoon, 1981). TOPSIS method is based on the principle that chosen alternatives should be as close to the positive ideal solution as possible and as far from the negative ideal solution (Lu, J. et al., 2007:32). Therefore, the ideal solution is the one geometrically closest to the ideal positive solution, i.e. farthest from the ideal negative solution.

TOPSIS method first requires a definition of the multicriteria problem solution. This paper observes the problem defined in the following way:

$$\max\{f_1(a), f_2(a), \dots, f_m(a) | a \in A\} \quad (1)$$

A is a group of possible alternatives $\{a_1, a_2, \dots, a_i, \dots, a_n\}$. Each of the alternatives is described by m attributes that are used as criteria in decision making $\{f_1(\cdot), f_2(\cdot), \dots, f_j(\cdot), \dots, f_m(\cdot)\}$.

In order to solve the problem, it is necessary to perform the normalisation of attribute values. Hwang and Yoon (1981:131) recommend the following procedure of decision matrix normalisation, which has been frequently used in multicriteria

² Energija u Hrvatskoj 2010. - godišnji energetske pregled, http://www.eihp.hr/hrvatski/projekti/EUH_od_45/Energija2010.pdf (accessed on Februar 28, 2012)

analysis methods (compare the alternative, simpler approach in Yurdakul i Çoğun, 2003:1000).

for maximum type criteria - (2a): for minimum type criteria - (2b):

$$f_j(a_i) \neq 0 \quad r_{ij} = \frac{f_j(a_i)}{\sqrt{\sum_{i=1}^n (f_j(a_i))^2}} \qquad f_j(a_i) \neq 0 \quad r_{ij} = 1 - \frac{f_j(a_i)}{\sqrt{\sum_{i=1}^n (f_j(a_i))^2}}$$

$$f_j(a_i) = 0 \quad r_{ij} = 0 \qquad f_j(a_i) = 0 \quad r_{ij} = 1$$

$$i = 1, \dots, n, \quad j = 1, \dots, m$$

All criteria do not have to possess equal importance. Therefore, each vector column of normalised decision matrix R (3) is multiplied by the criteria ‘weight’ which has been determined by one of the techniques for assessing criteria importance (such as AHP method). A weighted normalised decision matrix V (4) is thus obtained, which is composed of $v_{ij} = w_j r_{ij} \quad i = 1, \dots, n, \quad j = 1, \dots, m$ elements (Hwang and Yoon, 1981:131; Agrawal, Kohli, Gupta, 1991:1637).

Two virtual alternatives A^+ and A^- will be constructed from the weighted normalised decision matrix (cf. for example Agrawal, Verma, Agarwal, 1992:2727; Hwang and Yoon, 1981:131 and others).

$$\begin{aligned} A^+ &= \left\{ \left(\max_i \{v_{ij} | j \in J\} \right) \left(\min_i \{v_{ij} | j \in J'\} \right) \mid i = 1, \dots, n \right\} = \{v_1^+, v_2^+, \dots, v_j^+, \dots, v_m^+\} \\ A^- &= \left\{ \left(\min_i \{v_{ij} | j \in J\} \right) \left(\max_i \{v_{ij} | j \in J'\} \right) \mid i = 1, \dots, n \right\} = \{v_1^-, v_2^-, \dots, v_j^-, \dots, v_m^-\} \end{aligned} \tag{5}$$

For

$$\begin{aligned} J &= \{j = 1, \dots, m | \text{criterion } J \text{ belongs to utility criteria, i.e. to criteria that are maximized}\} \\ J' &= \{j = 1, \dots, m | \text{criterion } J \text{ belongs to cost criteria, i.e. to criteria that are minimized}\} \text{ and} \\ J \cap J' &= \emptyset, \quad J \cup J' = \{1, \dots, m\} \end{aligned}$$

The ideal positive solution – A^+ is the most preferred alternative. It has the highest value v_{ij} with criteria that are maximised, and the lowest value v_{ij} with criteria that are minimised.

The ideal negative solution $-A^*$ is the least preferred alternative. When looking for the ideal negative solution, the procedure for obtaining the maximum and minimum value is reverse as compared to searching the maximum and minimum values in the ideal positive solution.

It is necessary to calculate two distance measures in relation to two virtual alternatives A^+ and A^- for each alternative A_i :

- a) it is necessary to determine distance S_i^+ which identifies the distance from the positive ideal solution using the relation:

$$S_i^+ = \sqrt{\sum_{j=1}^m (v_{ij} - v_j^+)^2} \quad i = 1, \dots, n \quad (6)$$

- b) S_i^- distance as the distance from the ideal negative solution A^- using the relation:

$$S_i^- = \sqrt{\sum_{j=1}^m (v_{ij} - v_j^-)^2} \quad i = 1, \dots, n \quad (7)$$

The final step in TOPSIS method includes determining the relative proximity (C_i^+) of the alternative to the ideal solution by using the following relation:

$$C_i^+ = \frac{S_i^-}{S_i^+ + S_i^-} \quad 0 \leq C_i^+ \leq 1 \quad i = 1, \dots, n \quad (8)$$

TOPSIS index C_i^+ is standardised in the interval of $[0,1]$. The value of C_i^+ index grows from the minimal value 0 to the maximal value 1 with respect to the distance of A_i alternative from the ideal negative solution A^- and its proximity to ideal positive solution A^+ .

It is possible to rank observed alternatives by using C_i^+ index. The alternatives are ranked according to decreasing C_i^+ values. The best alternative is the one which is closest to, or even is, value 1. Other alternatives are ranked according to decreasing values.

3. AN EXAMPLE OF DECISION MAKING BY USING TOPSIS METHOD

The implementation of TOPSIS method in the process of decision making when selecting the location for utilising geothermal energy in the Republic of Croatia according to determined criteria is described below.

The project goal is defined as production of electricity by using renewable sources, i.e. geothermal energy. The development of new technologies, rising prices of fossil fuels and available subsidies (the government, EU, various environmental funds...) have resulted in a positive economic environment for utilization of geothermal energy.

Utilization model: drilling of a geothermal well will result in production of geothermal medium which will be used to power turbines for production of electricity.

Based on available information and after processing all input parameters, the outsourcing partner submitted four locations that are adequate for drilling of a geothermal well and nine criteria that will be considered in the process of selecting the best location (Table 1).

Table 1: Decision matrix

min/max	max	max	min	max	max	max	max	max	max
Criteria, alternatives	Thermodynamic properties of geothermal medium	Requirement fulfilment	Physical requirements of geothermal medium	Location attractiveness	The possibility of condition improvement of geothermal medium	The highest possible amount of geothermal medium for continuous production	Existence of drilling site	Purpose of drilling site	Location-impact <i>vis maior</i>
Location 1	96	9	7	9	6000	4000	9	0	7
Location 2	125	7	4	7	3000	2600	1	0	7
Location 3	80	5	20	5	2600	2000	3	1	1
Location 4	86	3	14	7	2000	1400	11	1	7

The criterion “Requirement fulfilment” and the criterion “Location attractiveness” are described by the following quality marks/reviews: “very low”, “low”, “medium”, “high” and “very high”. Quality attributes are quantified according to the following value scale:

Table 2: Quantification of quality attributes

Quality assessment	very low	low	medium	high	very high	Criterion type
Quantity assessment	1	3	5	7	9	max
	9	7	5	3	1	min

It is necessary to determine normalised decision matrix R . An example of calculation according to the formula (2a) - for maximum type criteria or (2b) - for minimum type criteria will be shown for r_{11} element:

$$r_{11} = \frac{96}{\sqrt{96^2 + 125^2 + 80^2 + 86^2}} \frac{96}{196,56} \approx 0,49$$

Other elements of normalised decision matrix R are calculated in the same way (Table 3).

Table 3: Normalised decision matrix R

min/max	max	max	min	max	max	max	max	max	max
criteria, alternatives	Thermodynamic properties of geothermal medium	Requirement fulfilment	Physical requirements of geothermal medium	Location attractiveness	The possibility of condition improvement of geothermal medium	The highest possible amount of geothermal medium for continuous production	Existence of drilling site	Purpose of drilling site	Location-impact <i>vis maior</i>
Location 1	0,49	0,70	0,73	0,63	0,80	0,75	0,62	0,00	0,58
Location 2	0,64	0,55	0,84	0,49	0,40	0,49	0,07	0,00	0,58
Location 3	0,41	0,39	0,22	0,35	0,35	0,37	0,21	0,71	0,08
Location 4	0,44	0,23	0,46	0,49	0,27	0,26	0,76	0,71	0,58

By multiplying the elements of normalised decision matrix R and the weight of criteria obtained by the use of Analytical Hierarchy Process – AHP (Table 4), weighted normalised decision matrix V is obtained (Table 5).

Table 4: Criterion weights calculated by the Analytical Hierarchy Process – AHP

CRITERIA	Thermodynamic properties of geothermal medium	Requirement fulfilment	Physical requirements of geothermal medium	Location attractiveness	The possibility of condition improvement of geothermal medium	The highest possible amount of geothermal medium for continuous production	Existence of drilling site	Purpose of drilling site	Location-impact <i>vis maior</i>
Weight	0,18	0,05	0,02	0,05	0,06	0,16	0,33	0,07	0,08

Table 5: Weighted normalised decision matrix V

criteria, alternatives	Thermodynamic properties of geothermal medium	Requirement fulfilment	Physical requirements of geothermal medium	Location attractiveness	The possibility of condition improvement of geothermal medium	The highest possible amount of geothermal medium for continuous production	Existence of drilling site	Purpose of drilling site	Location-impact <i>vis maior</i>
Location 1	0,087	0,035	0,016	0,031	0,051	0,121	0,203	0,000	0,046
Location 2	0,113	0,027	0,019	0,024	0,026	0,078	0,023	0,000	0,046
Location 3	0,072	0,019	0,005	0,017	0,022	0,060	0,068	0,049	0,007
Location 4	0,078	0,012	0,010	0,024	0,017	0,042	0,248	0,049	0,046

Virtual alternatives positive ideal solution – A^+ and negative ideal solution – A^- will be constructed from the weighted normalised decision matrix (Table 6).

Table 6: Positive ideal and negative ideal solution

Virtual alternatives	C1	C2	C3	C4	C5	C6	C7	C8	C9
A+	0,113	0,035	0,019	0,031	0,051	0,121	0,248	0,049	0,046
A-	0,072	0,012	0,005	0,017	0,017	0,042	0,023	0,000	0,007

By using Table 5 and Table 6, two distance measures (S_i^+ and S_i^-) in relation to two virtual alternatives A^+ and A^- will be calculated (Table 7).

S_1^+ as distance from the first alternative Location 1 to the first ideal solution A^+ and S_1^- as distance from the first alternative Location 1 to negative ideal solution A^- will serve as an example of calculation according to formula (6) and (7):

$$S_1^+ = \sqrt{(0,087 - 0,113)^2 + (0,035 - 0,035)^2 + (0,016 - 0,019)^2 + (0,031 - 0,031)^2 + (0,051 - 0,051)^2 + (0,121 - 0,121)^2 + (0,203 - 0,248)^2 + (0,000 - 0,049)^2 + (0,046 - 0,046)^2} \approx 0,07$$

$$S_1^- = \sqrt{(0,087 - 0,072)^2 + (0,035 - 0,012)^2 + (0,016 - 0,005)^2 + (0,031 - 0,017)^2 + (0,051 - 0,017)^2}$$

Table 7: Distances S_i^+ and S_i^- and relative distances C_i^+

	S_i^+	S_i^-	C_i^+
Location 1	0,07	0,21	0,74
Location 2	0,24	0,07	0,23
Location 2	0,20	0,07	0,26
Location 4	0,10	0,23	0,71

The final step in TOPSIS method includes determining relative speed (C_i^+) alternative from ideal solution. An example of calculation according to formula (8) will be shown for index C_1^+ :

$$C_1^+ = \frac{0,206}{0,072 + 0,206} \approx 0,74$$

Table 7 shows S_i^+ distance values and S_i^- distance values, as well as calculated values of C_i^+ for all alternatives.

C_i^+ index makes it possible to rank the observed alternatives (Table 8).

Table 8: Ranking of alternatives

Location 1	0,742
Location 4	0,709
Location 3	0,256
Location 2	0,231

Table 8 shows that Location 1 is the best alternative, since it is closest to the positive ideal solution (C_1^+ index value is 0,742), whereas alternative Location 2 is closest to the negative ideal solution (C_2^+ index value is 0,231).

Therefore, the best option for utilisation of geothermal energy in the Republic of Croatia is Location 1, with respect to determined criteria.

4. CONCLUSION

Multicriteria analysis and its methods have become almost indispensable in operational management, planning and general management at any level. The TOPSIS method is frequently used in business practice due to its simplicity. A major advantage of this analysis technique is that TOPSIS does not require any special software in the area of operational research. From an economic point of view, however, it is advisable to use some kind of spreadsheet software such as Microsoft Excel in order to automatize calculations required within TOPSIS.

The TOPSIS method is based on the concept that the optimal alternative is the one that is in geometric terms closest to the ideal positive solution, i.e. furthest away from the ideal negative solution.

The paper has presented a practical application of the TOPSIS method in the decision making process regarding the choice of location for geothermal energy exploitation in the Republic of Croatia. It was assumed there were four alternatives – Location 1, Location 2, Location 3 and Location 4, and nine criteria on which the decision would be based.

Since Location 1 is closest to the ideal positive solution, it follows that this is the best alternative for geothermal energy exploitation in the Republic of Croatia.

5. REFERENCES

- Agrawal, V.P., Kohli, V., Gupta, S. (1991.) Computer aided robot selection. The multiple attribute decision making' approach. *International Journal of Production Research* 29, 1629-1644.
- Agrawal, V.P., Verma, A., Agarwal, S. (1992.) Computer-aided evaluation and selection of optimum grippers. *International Journal of Production Research* 30, 2713-2732.
- Energija u Hrvatskoj 2010. - godišnji energetska pregled, http://www.eihp.hr/hrvatski/projekti/EUH_od_45/Energija2010.pdf (accessed on Februar 28, 2012)
- Hwang, C.L., Yoon, K. (1981.) *Multiple Attribute Decision Making – Methods and Applications. A State-of-the-Art Survey*, Springer – Verlag, Berlin/Heidelberg/New York
- Kurevija, T., Golub, M. (2008.) Iskorištavanje geotermijskih ležišta - skripta, <http://rgn.hr/~tkurevi/PDF/SKRIPTA-GEOTERMALNA%20ver%201.1.pdf> (accessed on Januar 13, 2012)
- Lu, J., Zhang, G., Ruan, D., Wu, F. (2007.) *Multi-Objective Group Decision Making – Methods, Software and Applications with Fuzzy Set Techniques*. Imperial College Press, London.
- Obnovljivi izvori energije u mojoj zajednici, http://www.aweres.net/Preuzmi/OIE_u_mojoj_zajednici.pdf (accessed on Februar 19, 2012)
- Yurdakul, M. Çoğun, C. (2003.) Development of a multi-attribute selection procedure for non-traditional machining processes. *Proceedings of the Institution of Mechanical Engineers*, 2. dio, *Journal of Engineering Manufacture* 217, 993-1009.

STRATEGIC MANAGEMENT BASED ON TOURISM DEVELOPMENT GUIDELINES FOR NATIONAL PARKS

Bruno Grbac, Ph.D.¹, Željko Bulat, LL.M., LL.B.²

¹Faculty of Economics Rijeka, Croatia, grbac@efri.hr)

²Krka National Park, Public Institute, Croatia, zeljko.bulat@npk.hr

ABSTRACT

The management of protected areas is a very sensitive and demanding task, particularly since national parks, as protected areas, face greater difficulties and restrictions in the management and use of their resources than other tourism areas. Though successful tourism accompanied by a growth in the number of visitors to protected areas significantly contributes to socioeconomic development, it can also lead to the paradoxical fact that rapid and oftentimes uncontrolled growth can cause pronounced degradation of the environment, which in turn significantly reduces the attractiveness of individual tourism localities.

The risks of increased tourism development, and the existing state of tourism and tourism trends are explained through the example of Krka National Park. This park is also used as an example of good management practices in developing sustainable tourism in protected areas, with the application of a functional model of the physical organisation of tourism, with regard to the spatial and temporal distribution of visitors. Furthermore, recommendations are provided as to the implementation of possible strategies and measures by which it is possible to achieve sustainable tourism development. An overview is provided of how tourism revenues generated in protected areas can serve education and, as such, significantly contributes to the appropriate use and protection of biological resources, while also encouraging the preservation of culture and traditional crafts and supporting the sustainable economy of the surrounding local communities.

JEL Classification: L83

Key words: strategic management, protected areas, sustainable tourism development, Krka National Park

1. INTRODUCTION

National parks as protected areas are considered to be among the most attractive tourist destinations and in terms of tourism they make a specific product offering a combination of sundry features and activities taking place under specific conditions and subject to certain management constraints. The modern management concept applying to national parks as protected areas requires that the people in charge develop tourism potentials which, along with conservation of a locality, are supportive of long-term economic development and maximum inclusion of local communities, with efforts being put through a careful choice of acceptable forms of tourist activities to reduce negative impacts on the protected area and optimise the economic benefits, while keeping the visitors satisfied.

Although a highly developed tourism can produce both positive and negative effects on parks as protected areas, the fact is that tourism services can bring multiple benefits and make an important contribution to other functions, provided that the protected areas are properly organised and managed in a way that will least compromise the ecological rules governing them. This primarily applies to the fact that income derived from visitors or another form of tourism can greatly contribute to the development and conservation of national parks, as well as other less attractive protected areas. Indeed, examples in the recent practice of some national parks show that, given a proper management strategy, tourism in protected areas can also offer an educational chance and thus significantly contribute to the sustainable utilisation of biological resources, encourage the preservation of traditional culture and crafts and help the economies of local communities.

2. DEVELOPMENT RISKS POSED TO PROTECTED AREAS, KEY TRENDS IN TOURISM

The most important *risks* coming from the impact of tourism and recreation in protected areas are related to the direct occupation of land for the construction of tourist amenities and infrastructure¹ and the detrimental effects and pressures on the environment arising from activities specific to tourism and recreation. This applies first of all to various trendy sports that have developed through differentiation of activities independent of the season² and to the chiefly summer sports³ and the

¹ traffic infrastructure – means of transportation for tourists (buses, vessels, tourist trains, funiculars), accommodation capacities, plus sports and entertainment facilities, visitor centres, gazebos, etc.

² backpacking, walking, paragliding, paintball, etc.

³ biking and highland biking, bungee jumping, canyoning, climbing/free climbing, rafting, etc.

chiefly winter sports⁴. Thus, for example, as a proof of the harmfulness of sports in a part of the protected area shows that a degradation of nature has indeed occurred⁵ (Müller, 2004, p. 112-114).

On the whole, people throughout the world show more and more environmental awareness and voice their dissatisfaction and concern about the problems arising from repeated threats posed to the environment. Such environmentally sensitive consumers are becoming increasingly aware of the harmful effects of tourism on the environment and hence increasingly interested in travels to areas where they will inflict minimum damage to nature. In the mid-20th century the modern society became faced with the task to ponder upon future prospects in terms of threats posed to the natural environment. With the increasing environmental repercussions the question of sustainable relationship between society and nature has been gaining in topicality.

Recent tourism trends as presented in the latest study by the Institute of Tourism⁶ show that the protected areas are playing an increasingly important role in the development of tourism to the effect that nature-based tourism accounts for 7% of total world tourism demand, with annual growth rate of 10-30%, whereas demand for ecotourism accounts for 7-10% of total world tourism demand with annual growth rate varying between 2% and 4%. At the same time, the number of visitors to national parks is growing at an average rate of 13%, which by far exceeds the overall visitor growth rate of 7%.

This is of particular importance in the protected areas of the Adriatic coastal zone that already show signs of serious saturation with tourism development, especially if the fact is taken into account that 7 out of altogether 8 national parks are located there. Having in mind the above mentioned trends, it is obvious that special attention should be paid to the management of protected areas in terms of improved planning and control, with a view to averting possible conflicts between

⁴ free riding, ice climbing, motor sledding, snow boarding, etc.

⁵ 22 plant species flourish in Löchlefels, Danube valley, in areas excluded from mountaineering, in rock caches, whereas in an area of intense climbing (accessible to climbers for a decade by now) only 3 plant species have survived.

⁶ Institute of Tourism (2007): TOMAS '2006 – National parks and nature parks in Croatia – visitor attitudes and spending, Zagreb. Accessible on: http://www.iztztg.hr/UserFiles/Pdf/Tomas/2006_TOMAS_NP_I_PP_HR.pdf
Accessed: (02-02-2012).

the protection of nature and the development of tourism. Furthermore, it is noticed that tourists are becoming increasingly sophisticated in their demands, as particularly manifested in their expectations of travel features and experiences that include natural and cultural authenticity, contacts with local population, information about flora and fauna, special eco-systems and nature in general. Such trends put tourism into a strategic position of being able to contribute to or undermine the sustainability of natural, especially protected areas and the developmental potentials of local communities and their surroundings (Petrić, 2007, p. 462-463).

It is therefore the duty of the management of protected areas to monitor the trends in tourism demand, in order to respond to market changes in a timely manner. It is the said trends that are most advantageous to protected areas, so in communication with visitors the environmental protection efforts should be given preference. In this regard it is crucial to realise that money spent by each and every visitor is another step towards long-term and sustainable development of the protected area concerned. The development of ecotourism is more subtle than the other forms of tourism and is constrained by environmental considerations, which is important in terms of balance that management should achieve between conservation and tourism.

Taking into account possible risks and consequences resulting from inappropriate tourist use of a protected area, it is essential to determine the key measure and make the tourism evaluation of the area. Therefore the first thing to do is to draw up the management plan, then carry out a long-term and scientific evaluation of the area, define maximum reception capacity in and out of season, properly size and deploy tourist facilities taking into consideration the principles of traditional local architecture, make adjustments with local legislation, implement projects in protected areas through multidisciplinary partnership of institutions and services (in respect of education, monitoring, traffic, recreation, catering etc.) (Martinić, 2010, p. 314-315).

Hence the tourism planning and development in protected areas should primarily rely on the *physical planning documents* (mostly the management plan) and the *development programme documents* relevant to the protected area concerned, in accordance with performed zoning work. What should be defined above all are the *key tourism function development parameters* (visit itineraries, potential number of visitors, type, number and deployment of tourist and catering capacities, utilities, telecommunications, internal traffic system, etc.). It is only by applying the key

tourism development elements in protected areas, and these are *information and control* along with clearly *defined and consistent policy and observance of the rules*, that the kind of tourism can be practiced which is both acceptable for nature and profitable (Martinić, 2010, p. 287-314).

3. VISIT AND TOURISM DEVELOPMENT PLANNING IN PROTECTED AREAS

Considering the fact that tourism brings benefits, on one hand, and, on the other, causes damage and that these effects are intertwined, the development planning of a protected area is a very important and complex process that requires proper understanding of social and environmental, as well as and political trends as development planning determinants.

In order to enhance understanding and raise awareness of the purpose of protected areas, IUCN⁷ has conceived a categorisation system based on the management goals set for protected areas, based on which some forms of recreation and visits occur as an objective in national parks and in any of the listed types of protected areas, except for a strict natural reserve.

Modern visiting systems for protected areas are based in principle on an *organised visiting system* in the form of mass tours of various sites along with carefully preconceived routes, following a system of communications and internal transportation of visitors. The *internal traffic system* is built as a part of the visiting system, aimed to exclude public transit movements in the park, which has proved so far to be a rather efficient way of taking the burden off the most attractive zones.

Such a visiting traffic system is at present well developed at NP Krka, whereas a comprehensive internal visiting system is in place at NP Brijuni and NP Plitvice Lakes (e.g., a pathway and transport system – electric ships and trains). Nevertheless, the *limit capacity*⁸ and *reception capacity*⁹ are considered the most important environmental criteria of planning and spatial organisation in protected areas, although the calculation of optimum values of such carrying capacities is not always an easy task, due to different types of special entities in a protected area, different by

⁷ *International Union on Conservation of Nature*

⁸ the greatest permissible number of visitors that still does not endanger the natural balance.

⁹ area reception potential, i.e., the capability of the eco-system to maintain itself encourage human activities to evolve to an extent without negative feedback (according to EUROPARC definition – NGO of Europe's protected areas).

their characteristics, environmental sensitivity and the intensity of potential tourist use (Martinić, 2010, p. 292 - 300).

In the past decade Kušen introduced the *functional visiting system* as a concept of relieving critical parts while at the same time considerably increasing the number of visitors in the remaining parts of a protected area, in a way that the *physical, environmental and ecological reception* capacity of the area is not exceeded and the quality of tourist experience not diminished. The basis of this system is the *tourism area organisation model* with a system of key tourist attractions, where their arrangement and reception capacity are decisive factors in shaping up the visitor movement pattern, with indispensable IT support for controlled visitor entrance and guidance. The solution is therefore sought and found in the creation of complementary functional visitor movement flows combined with a greater number of entrance points and access directions, thus ensuring a better overall capacity of the visiting system inside the boundaries, as well as evenly distributed load on all attraction potentials (Kušen, 2005, p. 707-723).

It is crucial that the *tourism plan and development* in protected areas have pre-defined goals and a vision and that they result from the spatial plan and the management plan, because documents contain an optimum measure of adjusted interests of the protected area in relation to the relevant regulations, strategies, sector plans, etc. That is the only way to avoid the damaging effects of ad hoc planning and oversizing, where the tourist and catering amenities can with their location, appearance and size essentially degrade the natural scenery of a park. This is, for example, noticeable at the NP Plitvice Lakes in the case of Jezero Hotel saddled above Kozjak Canyon. That is an example of a tourist building of unseemly appearance and size. Besides, it is certainly *recommendable in planning the development of tourism in protected areas* that the natural and cultural environment makes an integral whole with the park when it comes to assessing the values and benefits influencing the development of tourism and that the activities that the visitors make use of are top-class, where visitor satisfaction is of primary importance. (Martinić, 2010, p. 321 - 323).

In the tourism planning and development it is necessary to clearly *determine all tourism effects*, to minimise the negative ones, *optimise the benefits* it brings to the destination of the protected area and in all this *actively include the stakeholders* involved in tourism (*investors, business sector, local self-government, local population and NGOs, as well as visitors*), briefly, all those that share both the responsibility for

the quality of services and the benefits of tourism. In that segment the utmost role is played by *marketing* which has meanwhile gained in importance by attracting tourists through proper messages sent out to potential guests sensitizing them to the area they are going to visit and thereby preventing or minimising the adverse effects of tourism development (Marušić, Prebežac, 2004, p. 357).

4. STRATEGIC MANAGEMENT FOR TOURISM IN PROTECTED AREAS

Sustainable tourism development is a key challenge and includes the application of the principle of sustainability to all tourist activities in a protected area. For that reason, when it comes to systematic planning and development of a destination, it is important to keep in mind that you cannot plan such tourism development without being aware of a development vision based on the principle of sustainable development as a long-term process of harmonising concept-guided economic development, environmental protection and social responsibility in a protected area. (Vukonić, 2010. p. 35-36)

Briefly, before adopting a tourism development strategy it is necessary to make a detailed analysis of the potentials and resources of an area and to study the market while keeping an eye on the trends and competitors' activities. It is also vital to define and adopt a strategy in collaboration with all key stakeholders and interest groups, combined with an *analysis of potentials* and inventorying of all elements involved in the supply of services. This should yield a reliable database that will serve as a basis for visitor management, as well as a source of information for visitors and travel agencies, including marketing and communication materials. Development and marketing of protected areas are very sensitive issues and it is absolutely clear that without development and marketing the parks cannot attain their objectives nor improve their financial stability. Hence the need for a *market analysis and selection of target groups* that the park and the marketing activities will focus on. This will result in a more efficient use of funds allocated for promotion, as well as a specific infrastructure aimed at the target group, whereby other parts of the park will be additionally protected.

It is important to build and secure *public and political support* for the sustainability of protected areas by informing the general public about the economic benefits of tourism in such areas. It is through communication established with all interest groups that the *tourism development strategy* is to be announced and made publicly accessible. After the reached agreements on planned tourism development

in protected areas, it is crucial to *implement the adopted plans*, which includes the completion of planned activities, the *recruitment of required human resources and consultations with financial experts to decide on the most favourable financial strategy*. On top of that, in order to reach all the set goals, it is necessary to introduce a *continuing monitoring* of the implementation of the strategic development plans. (Martinić, 2010. p. 319- 327).

If the tourism management in a protected area fails to implement the mentioned strategic plans and activities, the area is bound to face functional problems. The fact is that quite a portion of protected areas in Croatia have shown a low degree of implementing the adopted management plans. The reason is a shortage of human and financial resources, combined with a very poor institutional communication with local populace, which makes management even more difficult or prevents it from functioning properly.

Thus we inevitably arrive at the vicious circle effect, with the way out being extremely arduous. Attempts are then made to compensate for the loss of profitability by increasing the visitor rate at any price, which further reinforces the mass character of tourism accompanied by a chronic lack of cash for taking appropriate steps to alleviate detrimental environmental effects (Müller, 2004, p. 22).

Regarding the given IUCN Guidelines for planning and management of sustainable tourism in protected areas, with the aim to ensure more efficient management of visitors and development effects of tourism, the park managements have at their disposal a wide range of strategies and pertaining tactics and techniques, such as those listed in Table 2 below. (Eagles et al. 2002, Petrić, 2008, p. 23-24).

Table 2. Visitor management strategies and tactics

Strategy	Management tactics and techniques
Reduce the use of the entire protected area	Limit the number of visitors in the whole area (by seasons or by the times of the day, arrange and define group sizes, differentiated pricing) Discourage the use of other areas (previous booking of arrivals, area closures) Demand certain skills or outfit Put up barriers to bar access to some localities
Reduce the use of problematic areas	Provide information on the problems in a concrete area Discourage/ prohibit tours of problematic areas (zoning) Limit the number of visitors or the time of sojourn Eliminate structures or installations, improve them in alternative areas Encourage travels by unusual routes Define requirements for additional skills or outfit Charge different entrance tickets
Modify the used location within a problematic area	Discourage/ prohibit camping or similar activities Locate structures and amenities on resistant places Encourage or discourage travels by unusual routes Differentiate visitors by type
Modify the way and time of use	Encourage use out of peak season Discourage/ prohibit use where potential impacts are high Introduce access fees in peak load periods
Modify the way of using and the type of visitors	Discourage / prohibit harmful acts/outfit Encourage / demand specific outfit, skills, conduct Educate in ethical behaviour towards wilderness Discourage/ prohibit camping in wilderness or coming with pets
Modify visitor expectations	Instruct visitors on proper use of protected areas Inform about possible protection
Shore up the resilience of the resource	Keep the site safe from influences Strengthen the site
Retain/ renew resources	Eliminate problems Renew damaged localities

Source: Eagles, Paul F.J., McCool, Stephen F. and Haynes, Christopher D.A. (2002). Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. IUCN Gland, Switzerland and Cambridge, UK. xv + 183pp. ISBN: 2-8317-0648-3.

5. NP KRKA – AN EXAMPLE OF GOOD MANAGEMENT PRACTICES BASED ON TOURISM DEVELOPMENT GUIDELINES

While all frequently visited national parks in Croatia are faced with difficulties and constraints in tourist development management, some of them, such as NP Krka, recently show that, given a good problem analysis, planning and application of appropriate management strategy, a successful long-term management based on tourism development guidelines is possible after all. The example of NP Krka shows that an increase in the number of visitors due to favourable tourist trends in a season may have partly adverse effects¹⁰ on the natural environment and in addition create seemingly insurmountable *visitor problems* of organisational and technical type.

These visitor problems in NP Krka are first of all manifested by an erratic spatial arrangement of visits as well as saturation of certain attractive localities such as Skradinski buk (Skradin Waterfall) that already reached the saturation limit¹¹ in midsummer, due to an inadequately developed marketing management strategy in the past and earlier insufficient use of other attractions. In order to address the said problems, minimise the degradation risks and ensure professional and efficient management of NP Krka conservation area within a framework of sustainable development, it was essential to define the vision and long-term goals and to draw up the Management Plan¹².

The attainment of the goal required a *previous evaluation of this protected area, a market analysis* with a research study and a *visitor profile definition*¹³, plus identifica-

¹⁰ NP Krka visitor distribution over the year is extremely unfavourable, because in summer (June-August) about 70% of visitors arrive. A great number of them gathering on the most visited location are causing a series of negative effects on the environment: waste contamination, increased toxic gas emissions from intensified road traffic, animals disturbed by noise, especially as a result of intensified boating in the park's waters, the erosion of soil and gypsum layers because of treading outside the marked pedestrian paths, and the shoreline erosion and damage inflicted on water vegetation because of bathing in the river. (Bulat, JU NP Krka, 2011, p. 62).

¹¹ The number of visitors has come close to the anticipated daily maximum of 10,500 (Kušen et. al. 2002, p.141).

¹² A strategic long-term document that sets out the management goals for NP Krka; there are also actions plans aligned with the vision, the mission, the policies and the general strategy. The content and methodology of drawing up the management plan (adopted on workshops that included all stakeholders) are based on Article 81 of the Nature Protection Act (NN 70/05 and 139/08) and are aligned with the content of the management plans drawn up within the framework of the Karst Ecosystem Conservation Project (KEC).

¹³ Most visitors of the park are middle-aged (37 years), but younger than the average Croatian tourist (40 years), whereas markedly on the rise (38%) is the number of young highly educated visitors, better educated than the average Croatian tourist (21%), who are interested in cultural tourist attractions,

tion of the needs and affinities of the target group. Thus a technical and scientific tourism evaluation study was prepared by the institute of Tourism in which, based on a preceding SWOT analysis and the survey questionnaire method, it was concluded that in terms of demand the greatest number of park visitors are middle-aged and correspond to the eco-tourist profile¹⁴, specifically the group of “soft”¹⁵ ecotourists that is going to become the most potent segment in the years to come.

Previously the most favourable *area organisation of the park* in terms of tourism development was defined, with the possibility of creating the pertaining protective buffer zone that would allow to significantly change the visiting system and to map out a proper marketing strategy aimed to attain the main *objective* of tourism development at NP Krka – and that is around one million visitors a year combined with *well-balanced activation of all attraction potentials; activation of tourism development in the buffer zone* and improvement of living conditions, *endeavour to ensure a memorable experience* and offer a unique tourist product, with due *care for natural and cultural treasures*.

For relieving the most critical section of NP Krka, the *functional visiting model* has been adopted, where first defined is the reception capacity of a key tourist attraction, then the reception capacity of transportation means along a particular line, and the reception capacity. By adding these reception capacities, the *total reception capacity* is obtained, based on which the estimated possible daily number of visitors is derived, provided that visitor entrance is channelled and controlled, as shown in the graphic representation below - Figure 1. (Kušen et. al., 2003, p. 141).

come from the region and nearer tourism generating areas that represent principal market segments, travel with their families and more often with friends, not so often with children, tend to come again if domestic and largely only once if foreign visitors, stay about 4.5 hours, come as part of one-day excursions, with a typical time of arrival between 10 and 11 a.m.

¹⁴ Ecotourists are mostly individuals aged 35-65 years, highly educated, widely travelled and well-off. They abstain from disrupting natural attractions of the destination, support those types of accommodation and catering that do not harm the environment and that reflect the life of the local community.

¹⁵ The “soft” ecotourists quite often combine ecotourism with cultural products, they are less active physically and content themselves with observation and interpretation of the communities they are visiting, they are more ready to travel in organised groups and usually demand a higher level of services. Ecotourism can take place for a greater part of the year, chief source of information being recommendations, specialised websites, blogs and own research, in organising their travels such tourist also very much rely on their own resources or, depending on the specificity of a travel (location, distance and the like), only in part on the services of specialised agencies.

new tourist attractions¹⁶ and cultural products, the more so as, according to research on parks conducted to date¹⁷, one-day arrivals account for the overwhelming majority of visits, with the new first visits markedly increased. The systematic research studies conducted by JU NP Krka¹⁸ underlines as an essential condition of area and time distribution of visitors the application of the *differentiation strategy* along with the application of prices differentiated *according to the degree of attractiveness* (the highest prices charged for the more visited attractions like Skradin Waterfall, Visovac, Roški Waterfall and lower prices for exclusive visits to other individual sites like Burnum and Manojlovac). There is also a possibility to introduce entrance tickets *in dependence on the time of entry into the park* (differentiated tickets – more favourable at the times of the lowest rush during some two-hour morning or late afternoon intervals) *and the number of entries into the park* with *discount family tickets*, as well as *multi-day tickets*, because combining a greater number of daily tour programmes for established routes makes it possible to develop a *multi-day visit programme* with accommodation provided in the buffer zones.

Owing to such an organised visiting system (plus the possible new multi-day visit programme) JU NP Krka can cover the costs of the package of services, while being able to successfully pursue a *diversified financial management strategy*¹⁹ and thus acquire funds for the protection and development of conservation areas and concentrate on the *product development strategy* by introducing new incentives for visitors to return, such as *new attractions and services resulting from market demands* (e.g., participation in eco/ethno-workshops, participation in photo competitions,

¹⁶ Burnum – a fort with amphitheatre and an archaeological collection, Manojlovac – gazebo a memorial in honour of a visit by Emperor Francis I of Austria, Roški Waterfall – Šostera Mill and an ethnographic presentation of the traditional culture of life and work, Krka Monastery – a church and monastery, arch. finds, and Stinice – monument to King Petar Svačić and a gazebo with a structure for cultural events.

¹⁷ Institute of Tourism (2007): TOMAS '2006 – National parks and nature parks in Croatia

¹⁸ through an internal information system of monitoring arrival and departure times of most visitors, a tourist analysis (of visitor patterns, number and structure, motivation, amenities offered, quality and satisfaction), visitor surveys, panel discussions and public debates with key stakeholders, as stated in: Bulat, Ž., JU NP Krka (2011). Management Plan, p. 55-60, 118-119.

¹⁹ Revenues by far exceed expenditures, where a considerable portion (nearly 95%) is earned from own activities and only a small portion of budgetary funds is used for financing the park's regular activities. In addition to this, there are other diversified sources of donations and sponsorships from domestic and international organisations and EU funds allocated for culture and sustainable visitor management projects.

etc.), *visitor facility expansion* (additional multimedia information centres, educational play-rooms for children, autochthonous dishes on the menus of the mills, modernisation of souvenirs assortment, etc.), *staff training in the techniques that enrich visitors' experience* (courses to improve foreign language and news presentation skills).

Add to it the implementation of *enhanced promotion and information* strategy concerning the tourist products or attractions, which is not confined to advertising and information, but is also engaged in *marketing eco-education* and any valid ways of communication with Krka's regional and foreign markets, especially the modern and functional websites richer in content with links to social networks, interactive mobile guides, advanced multimedia presentation at the park's information centres, radio broadcasts, video productions, newspapers, magazines, journals and bulletins, information points, panels and posters, publication of the park's own biannual journal ("Buk") in printed and digital editions for local population and other users. In view of the educational role of ecotourism, printed guides, brochures and professional editions are used as a means of information, as well as *educational actions* initiated in the form of children's workshops and schools in nature, eco-workshops and lectures for adults, which ultimately motivates visitors to show more respect for the protected area, thanks to being better informed about desirable behaviour and recommended activities. *Special promotional events* staged in a season of the year play an important role in the promotion of the park's values. Also worth mentioning are cultural and special events (e.g., revival of the past by the Burnum Ides performance, the marking of the dates associated with conservation (e.g., the World Water Day, the International Biodiversity Day, and the like).

Apart from significant revenues from its own activity, NP Krka's tourism directly brings a series of other social benefits and helps to create new jobs in the tourism sector and in complementary industries. Moreover, it stimulates the development of the local community (businesses thriving on vigorous tourist traffic), of agriculture and agricultural products sought on the tourism market), the improvement of municipal and traffic infrastructure, generally, it encourages growth in the park's immediate surroundings.

It goes without saying that for the successful tourism development management at NP Krka a lot of credit goes to the establishment of good relations with the public, the social environment and the stakeholders, accompanied by *management flexibility*. Such management combines field activities and implementation moni-

toring measures²⁰ laid down in the management plan, based on which expected and achieved results, and, if needed, acquired experiences and new insights are analysed, and adjustments made for future activities. As the management of NP Krka is an ongoing process subject to changes because of changing conditions or expansion of knowledge over time, a revision of the Management Plan will be necessary²¹ to ensure rational dealing with newly arisen situations and circumstances. The said revision must specify the causes of accomplishments/failures in the implementation of action plans and, based on the lessons learned, appropriately redefine the goals and lay down new management measures.

6. CONCLUSION

In spite of possible risks and adverse effects that may lead to the degradation of protected areas and their fundamental values due to oversized and uncontrolled growth of tourism in certain parts of the protected area, there is a lot more positive and diverse social and economic effects on the sustainability of local industries, whereas tourism in national parks is often the chief source of income used to finance the main functions and activities of the protected areas.

For successful management of national parks based on tourism development guidelines it is essential to define long-term strategic development visions and goals based on the principles of sustainability which are basically acceptable for tourism, because it is an activity that can be successful only if the natural environment is preserved. Other crucial management components in this regard are related to the evaluation of a protected area, the preparation and adoption of management plans along with the establishment of a stable organisational structure and good relations with all stakeholders, the establishment of an organised visitor system after defining the total or acceptable limit capacity, the planning of funding and investment potentials, and a marketing strategy (without which it is impossible to attract visitors, let alone educate them and achieve positive financial results), and, last but not least, the indispensable infrastructure without which even the best preserved

²⁰ The park's employees responsible for monitoring the implementation of the Management Plan are required to store in the GIS database all data collected in the field and all the results of scientific projects. (Bulat, JU NP Krka, 2011, p. 108.)

²¹ The Nature Protection Act (NN 70/05 and 139/08), Article 80, stipulates that after 5 years a revision of the Management Plan is to be made.

sites cannot survive on the tourist market without jeopardising the already reached sustainability of the protected area.

Finally, tourism in national parks can be said to have powerful promotional impact on the whole system of protected areas, thereby raising the awareness of their importance and merit. On the other hand, it cannot be said that tourism irretrievably devours natural resources. On the contrary, through planned development and appropriate strategic management based on tourism guidelines the areas are enriched, their culture and traditional values preserved and the sustainable industries of local communities invigorated, and that is what reaffirms the interdependence and complementary nature of the tourist and protective functions of national parks as conservation areas.

REFERENCES

Books

- Kušen, E., Hendija, Z., Klarić, Z. (2003). *Tourism Evaluation of NP Krka*, Institute of Tourism, Zagreb, p. 141
- Martinić, I. (2010). *Management of protected Areas in Croatia*, Zagreb University, Faculty of Forestry, ISBN 978-953-292-015-4, p. 283-323
- Marušić, M., Prebežac, D. (2004). *Tourist Market Research*, Zagreb: Adeco, 2004, ISBN 953-97228-5-3, p. 357.
- Müller, H. *Tourism and Ecology: interconnection and action areas*, Massmedia, 2004. ISBN 953-157-456-1, p. 22, 114.

Articles from collections of papers

- Bulat, Ž., JU NP Krka (2011). *Management Plan*, Bulat, Ž., Marguš, D. (ur.), AKD, Zagreb, ISBN 978-953-7406-06-6, p. (5) 62, 118-119.
Accessible on: <http://npkrka.hr.win9.mojsite.com/buk/plan-upravljanja/#/4/>
Access: (03-02-2012)
- Kušen, E. (2007). *Defining a functional visitor system for NP Krka*, Proceedings of the Symposium "Krka River and NP Krka – natural and cultural heritage, conservation and sustainable development", Šibenik, ISBN 978-953-7406-01-6, p.707-723

Articles from journals

- Petrić, L. (2008). How to develop tourism in protected coastal areas in a sustainable way? *Acta Turistica Nova*, Vol.2 No.1, 5-24, ISSN: 1846-4394
- Vukonić, B. (2010). Is sustainability questionable ? *Acta Turistica Nova*, Vol.4 No.1, 33 – 42, ISSN: 1846-4394.

Other sources

Table 2

- Eagles, Paul F.J., McCool, Stephen F. and Haynes, Christopher D.A. (2002).

Sustainable Tourism in Protected Areas: Guidelines for Planning and Management. IUCN Gland, Switzerland and Cambridge, UK. xv + 183pp. ISBN: 2-8317-0648-3. Quoted in: Petrić, L. (2008). How to develop tourism in protected coastal areas in a sustainable way? (23-24).

Accessible on:

http://www.iucn.org/about/union/commissions/wcpa/wcpa_puball/wcpa_bpg/?2167/Sustainable-tourism-in-protected-areas-guidelines-for-planning-and-management

http://cmsdata.iucn.org/downloads/pag_008.pdf

IMPACT ANALYSIS OF PUBLIC DEBT MANAGEMENT ON THE CREDIT RATING OF A COUNTRY

Bruno Dernaj Ph.D. Candidate

ABSTRACT

This paper shows the impact analysis of public debt management on the credit rating of a country which will be measured in two variables. The first variable is the amount of public debt to GDP ratio, expressed in percentages. With this variable we will try to research impacts of the shown ratios on the credit rating of the Republic of Croatia and the European Union Countries, which is evaluated by the agencies for evaluation of credit ratings: Moody's and Standard & Poor's. The second variable is the choice of institutional models of public debt management, which will also examine its influence on the level of the country's credit rating. This paper consists of three parts, of which the first part discusses the theory of public debt and the importance of public debt share in the GDP. The second part illustrates an overview of levels of public debt share in the GDP of the EU countries and the Republic of Croatia, expressed in percentages, and their credit ratings in the years 2007. and 2011. as well as the commentary and research results obtained by a comparative method. The third part contains the answer to the question whether the choice of the institutional model of public debt management influences the country's credit rating.

JEL Classification: F34

Keywords: public debt management, public debt share into GDP, credit rating, Agency for Public Debt Management

1. INTRODUCTION

This paper highlights the links between public debt management and credit rating in a country. The representatives of public debt management are the variables of the share of public debt in GDP expressed in percentage, which are the indicators of the debt status and an institutional model of public debt management. The

following hypothesis was stated: the share of public debt in GDP as an indicator of the debt status significantly influences the credit rating in a country. This paper will try to illustrate whether this is true or not by comparing the shares of public debt in GDP with credit ratings of all EU countries to the credit ratings of the Republic of Croatia with a comparative method. Another aim of this paper will be to answer the question whether the amount of the credit rating in a country depend on the chosen institutional model of public debt management. The answer to that question will be sought in the theory on chosen institutional model of public debt management, and certain given institutional model of public debt management of chosen countries will be compared to their credit ratings.

2. PUBLIC DEBT

«The public debt in a particular moment consists of all budget deficits of the previous period. This means that the debt increases in the year in which the deficit was reached and in the year in which a surplus was achieved the debt decreases. Expressed in economical terminology, debt is a ‘status variable’ measured in a specific moment, and the deficit and surplus are the ‘flow variables’ measured in a certain time period.» (Rosen & Gayer; 2010., p. 521.) The valid legal provisions on public debts were passed by the Budget Act Official Gazette (NN 96/03) and (NN 87/08). The annual laws on fulfilling the budget lays down the total amount of a new state debt and state guarantees which the state can take over or issue during a budget year and the maximum amount of the state debt at the end of the year. The level of public debt at the end of the period t can be calculated with the following equation:

PICTURE 1. Equation for calculating the public debt

$$B_t = (1+r)B_{t-1} + (G_t - T_t)$$

where is:
 B_t = public debt
 r = interest on public debt
 G_t = public Expenditure (except fees for interest)
 T_t = public revenues
 $G_t - T_t$ = primary deficit in the period

Resource: Kolarević & Hreljac (2011.) Javni dug kao ključna varijabla ostvarenja ciljeva ekonomske politike, *Ekonomski pregled*, 62 (3-4) 208. - 229., p.210.

«A wise household can enter a debt in order to buy capital assets like a house or a car; a wise country can also borrow money in order to finance the purchase of long term assets.» (Rosen & Gayer; 2010., p. 525.) Public debt is certainly one of the most important elements of public finances of every country and of the Republic

of Croatia. «The importance of public debt as an instrument of economic politics becomes evident from the fact that the Maastricht treaty listed it as one of the criteria for the accession to the European Union. According to this criterion, the public deficit may not exceed 3% of the GDP, and the public debt 60%.» (Jurković; 2002., p. 128.). The public debt of the Republic of Croatia, even though it is approaching this limit, has not yet reached 60% of GDP, which may not be exceeded; therefore we can say that the state fulfils the criterion determined by the Maastricht treaty.

2.1. The relationship between public debt and the GDP

«The relationship between total debt and the GDP is an indicator by which it is the easiest to compare the amount of the external indebtedness of different countries. Although it is very popular with empiric research, due to the availability of data for its calculation, this indicator does not say anything about the capability of the country in question to settle the external debt. » (Koški; 2008., p. 184.) Since the relationship between the public debt and the GDP is, as mentioned before, the most useful and a very popular indicator of the debt status of a country in a certain moment, it is good to know how it is being calculated. The relationship between public debt and the GDP can be expressed by the following analogy.

PICTURE 2. Analogy of the relationship between public debt and the GDP

$$\frac{B_t}{Y_t} = (1+r-g) \frac{B_{t-1}}{Y_{t-1}} + \frac{(G_t - T_t)}{Y_t}$$

where is:
 Y_t = GDP in the period
 g = GDP growth rate

Resource: Kolarević & Hreljac (2011.) Javni dug kao ključna varijabla ostvarenja ciljeva ekonomske politike, *Ekonomski pregled*, 62 (3-4) 208. - 229., p. 210.

After editing this relation, we get an equation which describes the change of the share of public debt into GDP.

PICTURE 3. Equation of the change of the public debt share in the GDP

$$\frac{B_t}{Y_t} - \frac{B_{t-1}}{Y_{t-1}} = (r-g) \frac{B_{t-1}}{Y_{t-1}} + \frac{(G_t - T_t)}{Y_t}$$

Resource: Kolarević & Hreljac (2011.) Javni dug kao ključna varijabla ostvarenja ciljeva ekonomske politike, *Ekonomski pregled*, 62 (3-4) 208. - 229., p. 210.

3. RESEARCH

The following table illustrates the projections of the share of public debt into GDP ratio of all countries in the EU, the average result of all EU countries (EU 27), and projections of the share of public debt into GDP of the Republic of Croatia.

TABLE 1 Projections of the public debt share into GDP of EU countries and of the Republic of Croatia

% of public debt share in the GDP	2008.	2009.	2010.	2011.	2012.
Belgium	89,6	96,2	98,6	100,5	102,1
Bulgaria	13,7	14,7	18,2	20,2	20,8
Czech Republic	30,0	35,3	40,0	43,1	45,2
Denmark	34,1	41,5	44,9	47,5	49,2
Germany	66,3	73,4	75,7	75,9	75,2
Estonia	4,6	7,2	8,0	9,5	11,7
Ireland	44,3	65,5	97,4	107,0	114,3
Greece	110,3	126,8	140,2	150,2	156,0
Spain	39,8	53,2	64,4	69,7	73,0
France	67,5	78,1	83,0	86,8	89,8
Italy	106,3	116,0	118,9	120,2	119,9
Cyprus	48,3	58,0	62,2	65,2	68,4
Latvia	19,7	36,7	45,7	51,9	56,6
Lithuania	15,6	29,5	37,4	42,8	48,3
Luxembourg	13,6	14,5	18,2	19,6	20,9
Hungary	72,3	78,4	78,5	80,1	81,6
Malta	63,1	68,6	70,4	70,8	70,9
Netherlands	58,2	60,8	64,8	66,6	67,3
Austria	62,5	67,5	70,4	72,0	73,3
Poland	47,1	50,9	55,5	57,2	59,6
Portugal	65,3	76,1	82,8	88,8	92,4
Romania	13,4	23,9	30,4	33,4	34,1
Slovenia	22,5	35,4	40,7	44,8	47,6
Slovakia	27,8	35,4	42,1	45,1	47,4
Finland	34,1	43,8	49,0	51,1	53,0
Sweden	38,2	41,9	39,9	38,9	37,5
Great Britain	52,1	68,2	77,8	83,5	86,6
EU 27	61,8	74,0	79,1	81,8	83,3
Croatia	28,9	35,3	40,9	45,9	49,9

Resource: Strategy of public debt management in the period 2011. – 2013. p. 23.

If the illustrated projections prove at least approximately correct, we can conclude that in 2012 the Republic of Croatia will have better results of the share of public debt in the GDP than some much more developed countries.

3.1 Credit rating

«Credit rating is defined as a sum of features of the credit demander, such as status, assets, businesses and perspective, which altogether determine the rating of someone's credit capability. ¹⁾»

TABLE 2. Credit rating of the EU countries and the Republic of Croatia

States	Moody's		Standard & Pears	
	2007.	2011. (09.02.)	2007.	2011. (09.02.)
Belgium	Aa1	Aa1	Aa+	Aa+
France	Aaa	Aaa	Aaa	Aaa
Italy	Aa2	Aa2	A-	A-
Luxembourg	Aaa	Aaa	Aaa	Aaa
Netherlands	Aaa	Aaa	Aaa	Aaa
Germany	Aaa	Aaa	Aaa	Aaa
Denmark	Aaa	Aaa	Aaa	Aaa
Ireland	Aa1	Baa1	A-1	A-
Great Britain	Aaa	Aaa	Aaa	Aaa
Greece	A1	Ba1	A-	BB+
Portugal	Aa2	A1	Aa-	A-
Spain	Aaa	Aa1	Aa	Aa
Austria	Aaa	Aaa	Aaa	Aaa
Finland	Aaa	Aaa	Aaa	Aaa
Sweden	Aaa	Aaa	Aaa	Aaa
Czech Republic	A1	A1	A-	A-
Cyprus	A1	Aa2	A-	A-
Estonia	WR	WR	A-	A-
Latvia	A1	Baa2	BBB+	BBB-
Lithuania	A2	Baa1	A-	BBB-
Hungary	A2	Baa1	BBB+	BBB-
Malta	A2	A1	A-	A-
Poland	A2	A2	A-	A-
Slovakia	A1	A1	A-	A-
Slovenia	Aa2	Aa2	Aa	Aa
Bulgaria	Baa2	Baa2	BBB+	BBB-
Romania	Baa3	Baa3	BBB-	BB-
Croatia	Baa3	Baa1	BBB-	BBB-

Resource: Strategy of public debt management in the period 2011 – 2013. p. 18.

The previous table shows that different rating agencies, although they evaluate differently, they almost equally changed their ratings from 2007. compared

¹ Leko, V. & Mates, N.: *Rječnik bankarstva i financija*, Masmedia, Zagreb, 1993., p. 253.

to those in 2011. Therefore we can conclude that the agencies evaluate according to almost the same criteria. Only in five out of twenty-eight countries the ratings differentiate; those are: Spain, Slovakia, Bulgaria, Romania and Croatia – so we can say that the agencies evaluate according to the same criteria. Further on, the Republic of Croatia had, according to Moody's, the same credit rating in 2011 as Romania, Bulgaria, Hungary and Latvia, and according to *Standard & Poor's*, it had the same credit rating as only Hungary. The best credit rating in 2011, according to both agencies, had France, Luxembourg, the Netherlands, Germany, Denmark, Great Britain, Austria, Finland and Sweden.

«There are three large, long established credit rating agencies, all of which are based in the US, with tentacles stretching across the world. These three giants together account for about five sixths of the world market in rating services. They are Standard and Poors 13 (owned by McGraw Hill), Moody's, and Fitch (owned by Fimalac). One feature that the main raters share is a debt-quality grading system in buckets. There are four key categories, prefaced by A (the best), B, C, and D (the worst). The top three grades are subdivided: A embraces AAA, then AA, then plain A, and the B and C buckets similarly. Moody's suffixes its highest marks in each category with "aa", then "a". The top grades are defined as the safest – those bonds likeliest to pay interest, and repay principal, in full on due dates. Some of those subdivisions can be broken down further, with plus or minus suffixes.» (Sinclair et al., 2008., p. 12. and 13.)

According to the data found on the official Internet page of the agency for evaluating credit ratings Standard & Poor's² on 4th March 2012, the credit ratings in 2012 are decreased for most countries of the EU. For some EU countries the credit rating stayed the same and only for Poland it increased, but only the rating for the domestic currency – the rating for the foreign currency remained unchanged. When the credit rating decreases, in addition to other indicators such as political stability, recoverability of debts, GDP etc., the trust of investors decreases as well, who play the role of supplier of financial resources according to the needs and demands. This situation is specially highlighted in crisis times, when the demand for financial resources on a high level is big, but the supply deteriorates constantly.

“Although the risks linked to the decrease of the GDP, the growth of the fixed deficit and the state debt, the crisis of the banking and total financial sector, got

² <http://www.standardandpoors.com/ratings/sovereigns/ratings-list>

out of hand in practically all European countries, the decrease in credit rating took place in those countries, which were incapable to achieve the budget needs in the financial market in a certain moment because of the distrust of investors. » (Strategy of public debt management in the period 2011. – 2013. p. 17.)

3.2. Institutional models of public debt management

«There are three institutional models of public debt management. There could be an Office for debt management (ODM) as a separate department (sector) within the Ministry of Finance, or within the Central Bank. In the last twenty years there has been the aim to establish a separate and autonomous Agency for public debt management with clearly set links to the Ministry of Finance and the Central Bank.» (Bajo et al., 2011., p. 99.) The fact that the Agency for public debt management is called separate and autonomous, makes such an institutional model the favourite one if there would be a re-election of a future institutional model for public debt management and if it is not in force yet. The reason is that when separation and autonomy are mentioned, they are meant for the professional work of the agents which have an influence on politics of the Government and the Parliament, and the biggest advantage of such an agency, according to Bajo, Primorac and Andabaka Badurina, is the professional focus of the experts while implementing policies for public debt management passed by the people in charge. The Agencies autonomy is limited to operational work with instruments for public debt management, since the Ministry for Finance is liable for defining policies for public debt management. (Bajo et al., 2011., p. 100.) The following picture illustrates chosen examples of countries in which an autonomous agency is in force as an institutional model for public debt management.

TABLE 3. Public debt management agencies of the chosen countries

COUNTRY	NAME OF THE AGENCY	CREDIT RATING				%OF PUBLIC DEBT SHARE TO GDP:2011.	WEBSITE
		02.2011.		03.2012.			
		Moody's	S&P ¹	S&P			
				DC ²	FC		
Austria	Austrian Federal Financing Agency	Aaa	AAA	AA+	AA+	72	www.oebfa.co.at
Belgium	Belgium Debt Agency	Aa1	AA+	AA	AA	100,5	www.debtagency.be
Czech Republic	Debt and Financial Assets Management Department	A1	A	AA	AA-	43,1	www.mfcr.cz
France	Agence France Tresor	Aaa	AAA	AA+	AA+	86,8	www.aft.gouv.fr
Greece	Public Debt Management Agency	Ba1	BB+	SD	SD	150,2	www.mof-glk.gr
Ireland	National Treasury Management Agency	Baa1	A-	BBB+	BBB+	107	www.ntma.ie
Italy	Public Debt Directorate	Aa2	A+	BBB+	BBB+	120,2	www.dt.tesoro.it
Hungary	Government Debt Management Agency	Baa3	BBB-	BB+	BB+	80,1	www.akk.hu
Poland	Financial Assets and Liabilities Department	A2	A-	A	A-	57,2	www.mf.gov.pl
Slovakia	Debt and Liquidity Management Agency	A1	A+	A	A	45,1	www.ardal.sk
Sweden	Swedish National Debt Office	Aaa	AAA	AAA	AAA	38,9	www.rgk.sr
Portugal	Portugese Treasury and Government Debt Agency	A1	A-	BB	BB	88,8	www.igcp.pt
United Kingdom	Debt Management Office (DMO)	Aaa	AAA	AAA	AAA	83,5	www.dmo.gov.uk

Resources: Brione, 2006. and annual reports of agencies; Bajo, A. et al.; 2011., p. 101.; Currie et al.; 2003., p.11. - 49.; Strategy of public debt management in the period 2011. – 2013. p. 18. i 23.; <http://www.standardandpoors.com/ratings/sovereigns/ratings-list>

¹ S&P- Standard & Poors agency for assessments of credit rating

² DC- Domestic currency, FC - foreign currency

The institutional model for public debt management in the Republic of Croatia is the Office for debt management within the Ministry of Finance. In today's relationship between the Ministry of Finance and the Croatian National Bank the biggest problem is the lack of communication; secondly the distrust that occurs occasionally between these two institutions. (Raspudić-Golomejić; 2011., p. 152.) If the partial disagreements, which undoubtedly exist between the Office for public debt management within the Ministry of Finance and the Croatian National Bank, were settled while handling the public debt management of the Republic of Croatia, it would definitely improve the efficiency of public debt management. The question is: can these disagreements be settled by changing the institutional model of public debt management and can the indicators of public debt management be improved?

Since we have established that the autonomy of the agency for public debt management enhances professionalism, we will try to find the answer to the previous question in the countries where such a model is in force. Table 3 illustrates several countries where an autonomous agency is the institutional model for public debt management. The table shows that only four out of thirteen countries fulfilled the conditions of the Maastricht Treaty in 2011; which were Sweden, (38,9%), Slovakia (45,1%), The Check Republic (43,1%), and Poland (57,2) who is close to the limit of 60%. According to these indicators we cannot say that the Republic of Croatia would improve its indicators by changing the model for public debt management.

4. CONCLUSION

Table 1. showed us that the Republic of Croatia, according to the projections of the European Commission from fall 2010., had a better result of the share of public debt in the GDP than the average result of the EU countries (EU 27), and better than most countries individually. A lower percentage of the share of public debt in the GDP than Croatia had only Bulgaria, The Check Republic, Estonia, Lithuania, Luxembourg, Romania, Slovenia and Sweden. At the same time, the Republic of Croatia had a worse credit rating than all countries of the EU besides Romania, Latvia and Greece, which was illustrated with table 2. Likewise, the countries, which had the highest credit rating in 2011., had not the lowest share of public debt in the GDP besides Sweden and Luxembourg. On the ground of that we can draw the conclusion that the stated hypothesis is incorrect, namely that the stated

hypothesis was contradicted. In conclusion, the share of public debt in the GDP, as an indicator of the indebtedness status, does not crucially influence the level of the credit rating.

Further on, this paper answers the question from the introduction of this paper: can the level of the credit rating of a country depend on the set up institutional model for public debt management? The theory on institutional models for public debt management emphasizes that the agency as an institutional model for public debt management, due to its autonomy, stands out thanks to the professionalism of its experts. In order to answer this question, a few chosen countries, in which such a model is in force, will be researched. Table 3. shows that of all countries in which an autonomous agency for public debt management is in force, only Austria, France, the United Kingdom and Sweden had the highest possible credit rating (AAA) in February 2011. The same table illustrates that In March 2012. in comparison to February 2011., according to the agency for evaluating credit ratings *Standard & Poors*, all credit ratings decreased, besides for The United Kingdom and Sweden, where it remained unchanged (AAA), and for Poland, where the credit rating for the domestic currency increased (A) and it remained unchanged for the foreign currency (A-). To conclude we can say that the answer is negative, which means that the level of the credit rating of a country cannot depend on the set up institutional model for public debt management.

The final conclusion is that public debt management can probably have an impact on the credit rating of a country, but it does not have a crucial impact. This means that if the state has achieved high macroeconomic indicators such as employment, GDP, export, etc., poor management of public debt should not cause a low credit rating.

5. REFERENCES

-Bajo, A. et al. (2011.) *Osnove upravljanja javnim dugom*, Institut za javne financije, Zagreb, ISBN 978-953-7613-47-1

-Currie, E. et al.. (2003.) *Institutional Arrangements for Public Debt Management*, World Bank Policy Research Working Paper 3021, available at: http://www-wds.worldbank.org/servlet/WDSContentServer?WDSID=IB/2003/05/23/000094946_03051404103232/additional/109509322_20041117155518.pdf (access 25.02.2012.)

- Jurković, P. (2002.) Javne financije, Masmedia, Zagreb, ISBN 953-157-426-1
- Kolarević, S. & Hreljac, B. (2011.) Javni dug kao ključna varijabla ostvarenja ciljeva ekonomske politike, in: *Ekonomski pregled*, Zagreb, ,62 (3-4) str. 208-229
- Koški, D. (2008.) Analiza međuovisnosti deviznoga tečaja, bilance plaćanja i inozemnoga duga RH, doktorska disertacija, Osijek
- Leko, V. & Mates, N. (1993.) Rječnik bankarstva i financija, Masmedia, Zagreb, ISBN 953-157-000-0
- Raspudić-Golomejić, Z. (2011.) Koordinacija monetarne politike i politike upravljanja javnim dugom u Hrvatskoj – stanje i izazovi, in: *Hrvatski javni dug - Upravljanje i izazovi razvoja tržišta*, Institut za javne financije, Zagreb, p. 142. - 169., available at: <http://www.ijf.hr/upload/files/file/knjige/javni-dug-2011.pdf> (access 12.02.2012.)
- Rosen, H. S. & Gayer, T. (2011.) Javne financije, Institut za javne financije, Zagreb, ISBN 978-953-7613-31-0
- Sinclair, P. et al. (2008.) Bonuses, Credit Rating Agencies and the Credit Crunch, University of Birmingham, Discussion Papers 08-05, Birmingham, available at: <http://ideas.repec.org/p/bir/birmec/08-05.html#biblio> (access 24.02.2012.)
- Švaljek, S. & Andabaka Badurina, A. (2011.) Upravljanje javnim dugom prije, tijekom i nakon krize, in: *Hrvatski javni dug - Upravljanje i izazovi razvoja tržišta*, Institut za javne financije, Zagreb, p. 3.-24., available at: <http://www.ijf.hr/upload/files/file/knjige/javni-dug-2011.pdf> (access 12.02.2012.)
- Godišnje izvješće i strategija upravljanja javnim dugom; available at: <http://www.mfin.hr/hr/javni-dug-1> (access 22.12.2011.)
- Mjesečni statistički prikaz ministarstva financija broj-191 kolovoz 2011.; available at: <http://www.mfin.hr/hr/statisticki-prikazi-2011> (access 22.11.2011)
- Poseban dio Državnog proračuna RH za 2011. godinu i projekcije za 2012. i 2013. godinu, available at: <http://www.mfin.hr/hr/drzavni-proracun-2011-godina> (access 14.01.2012.)
- Strategija upravljanja javnim dugom za razdoblje 2011. – 2013.; available at: <http://www.mfin.hr/hr/javni-dug-1> (access 22.12.2011.)

websites

-<http://hgk.biznet.hr/hgk/tekst.php?a=b&page=tekst&cid=399>
(access 27.11.2011.)

-<http://www.standardandpoors.com/ratings/sovereigns/ratings-list/en/us/?sectorName=null&subSectorCode=39&start> (access 04.03.2012.)

AUTHENTIC LEADERSHIP AND POWER: DISCUSSING THE RELATION

Miha Marič, M.Sc.¹

¹University of Maribor, Faculty of Organizational Sciences, Slovenia, miha.maric@fov.uni-mb.si

ABSTRACT

Authentic leadership is seen as the latest evolutionary stage in the development of leadership styles, properties of this leadership style and the consequences of this style have therefore not have been fully explored. It has gained importance throughout the last decade in both, academic community as well as among practitioners in business environment. Authentic leadership, just like any other style of leadership, perhaps even more, requires the use of power. Power, which is a fundamental part of our lives, both private and organizational, is essential to the implementation of individual's will, on issues that concern us. Given that the authentic leadership highly stresses "knowing thy-self" and acting in that direction, we suppose that authentic leaders have a great deal of power. Our intention is to reveal this link between authentic leadership and power along with establishing directionality.

JEL Classification: L22

Keywords: authentic leadership, power, leadership, organization.

INTRODUCTION

There is a growing interest nowadays for authentic leadership in business practice as well as in academic literature. Avolio and Gardner's (2005) article on authentic leadership development is constantly ranked among the 25 ScienceDirect's »hottest articles« in the subject area of business, management and accounting, indicating the interest and importance of this research area within academia. Also, scientific articles on authentic leadership produced in less than a decade can be counted by the dozen. The reason for the interest of practitioners and academics in authentic leadership is the authentic leaders' impact that extends beyond first-line management, that is, to all the members of the organization. Authentic leadership is, ac-

According to the researchers of positive organizational behavior (Avolio & Gardner; 2005; Gardner et al.; 2009; Penger; 2006), the success factor of today's progressive organizations. Because authentic leaders are taking into account not only organizational but also social problems, they contribute to the society at large.

George (2003) starts his book with a desire for this new kind of leadership. In his opinion, we need authentic leaders, people of the highest integrity, committed to building enduring organizations. We need leaders who have a deep sense of purpose and are true to their core values. We need leaders who have the courage to build their companies to meet the needs of all their stakeholders, and who recognize the importance of their service to society. The unique factors of stress and pressures facing today's organizations are calling for a new leadership approach, which aims to recover or establish basic trust, hope, optimism, flexibility, relevance and viability, and thus create an appropriate identity of the organization (Peterson & Luthans; 2003). For a leader to be effective, he must influence people to carry out requests, support proposals, and implement decisions (Yukl; 2009, 207) – which in essence means that he needs power.

The paper is structured as follows: first we elaborate on the concept of authenticity and provide a definition and elements of authentic leadership; then we elaborate on the concept of power; at the end we discuss the relation between authentic leadership and power in organizations.

1. AUTHENTIC LEADERSHIP

Authentic leadership is the latest evolutionary stage in leadership development and emphasizes the leader's authenticity. The construct of authenticity was researched already by ancient Greek philosophers as »know thy-self«, and »thy true self«. Authentic leadership began to develop after the year 2004. It is of great interest among the leading researchers from the field of organizational behavior (Luthans & Avolio; 2003; George; 2003; Avolio et al.; 2004; Gardner & Schermerhorn; 2004; Avolio & Gardner; 2005; Gardner et al.; 2005; Ilies et al.; 2005; Sparrowe; 2005; Copper et al.; 2005). The first Slovenian researchers to dedicate their attention to authentic leadership and development of positive organizational identities are Penger (2006), Peterlin (2007) and Dimovski et al. (2009).

Although there is no single definition of authenticity, we know what it means when we detect authenticity, be it in a form of person, food, culture, politics, or a story. Authenticity is reality and means to identify the reality of a person's existence,

the reality of the place, food, community, or stories. When we name something *real* today, we demand it to be rooted in human ethics, the nature, geography – it has to originate from somewhere clearly defined and recognized. It has to be fair and appreciated for its simplicity. It has to be pure and noble, sound as a mountain stream. Authentic is the word that carries the meaning and depth of a person or object. Authenticity means that it contains a feature that is profound, contrary to superficial. Authenticity is not a conservative force that resides in a vanishing world. It is a force that looks forward, a force that attempts to adapt the traditional wisdom in favor of modern life. Authenticity is a process, a progressive revolution (Dimovski et al.; 2009).

According to Avolio and Gardner (2005), a key differentiation of authentic leadership from currently popular leadership theories (transformational, charismatic, servant and spiritual leadership) is that authentic leadership is more generic and represents what they would term a »root construct«, where *root construct* refers to the basis for what then constitutes other forms of positive leadership. Authentic leadership is a root construct that can incorporate transformational and ethical leadership. As noted with transformational leadership authentic leaders can be directive or participative, and could even be authoritarian. The behavioral style is not what necessarily differentiates the authentic from the inauthentic leader. Authentic leaders act in accordance with deep personal values and convictions, to build credibility and win the respect and trust of followers by encouraging diverse viewpoints and building networks of collaborative relationships with followers, and thereby lead in a manner that followers recognize as authentic. As this process cascades to followers, they may also operate in a similar manner portraying to leaders, colleagues, customers and other interested stakeholders their authenticity, which over time may become a basis for the organization's culture (Avolio et al.; 2004), which is the basis for the development of (positive) organizational identity (Penger; 2006).

Avolio et al. (2004) define authentic leaders as those who are deeply aware of their thinking and behavior, and those who others perceive as being aware of own and foreign values, moral aspects, knowledge and strengths. At the same time they are aware of the context in which they operate, and are confident, hopeful, optimistic, flexible and of high moral character (as quoted by Avolio, Gardner et al.; 2004). Luthans and Avolio (2003) define the related construct of authentic leadership in organizations as a process that draws on positive psychology capabilities and highly developed organizational context, which leads to greater self-awareness and self-

mastered positive behavior of leaders and other participants, all of which promotes a positive self-development.

The main reason that the researchers place so much attention to authentic leadership is because authentic leadership reaches all of the employees in organizations. Authentic leaders must identify the strengths of their followers and help them with their development and integration towards a common goal, purpose, vision and identity of the organization. Instead of adopting authenticity as a theoretical construct, it is better understood as an element of continuum, as leaders and their followers are becoming more and more authentic by maintaining their values, aspirations and identities (Copper et al.; 2005).

The concept of authenticity, discussed in this article, relates to the possession of own personal experiences – either thoughts, feelings, needs, requirements, desires, preferences, or beliefs. These are the processes by which we know ourselves, and which indicate that someone is acting in accordance with his real self, expresses himself in ways that are consistent with his inner thoughts and feelings, and thus manifesting his own identity (Harter; 2002). In our view, authenticity reflects one's general tendencies to view oneself within one's social environment and to conduct one's life according to one's deeply held values. At more specific levels, authenticity is manifested in concrete aspects of one's behavior and existence, such as in leading others.

2. POWER

The study of power in organization has been an interesting topic for many researchers. Power is considered by many as one of the most important factors in an organization. Some authors suggest that power lies in the potential, and others suggest that power is only present in its use. There is also an ongoing debate what makes individual powerful (Marič et al.; 2011).

Power is part of our lives, both private and organizational. Power is basically the ability to influence the desired outcomes. Power can be broadly defined as the ability to influence different outcomes, by pooling resources (human and material) to achieve the realization of certain things within the network of relationships (Rees; 1999) and at the same time to resist unwanted influence from others (Wagner & Hollenbeck; 2010). Individuals' who have power in the organizational environment often also have power even in their private lives and vice versa.

An individual's power in organizations can be best assessed with observations (Finn; 1995). However, on the other hand that is a long process, sometimes even subjective and would take a lot of man-hours to implement on a larger sample. That is why the power evaluating process takes part only on smaller samples at a time; for instance one company or one branch of a company at a time. An individual's power is also very relative; one could have it one day and lose it on another (Mintzberg; 1983). Or one could have power in one group, and have none in another group of people simultaneously. Power is difficult to measure, since it can only be perceived (Marič& Ferjan; 2011).

From the social-psychological perspective, a person's behavior is affected by his or her behavioral intentions, which are in turn influenced by an attitude and set of perceptions. Behavioral intention is regarded as a key antecedent in determining one's future behavior (Wu et al.; 2008). We could say that power concerns the capacity of individuals to exert their will over others. While formal power is defined, the informal power that is in many cases even more important is not so well defined (Marič& Ferjan; 2011).

In a company or in an organization there are basically two kinds of power: formal and informal power (Mintzberg; 1983). Formal power comes from one's place in the hierarchy, one's duties and their position and is well defined. Informal power on the other hand is less defined and often more important. On the one hand it is connected to formal power, but on the other it is affected with the interpersonal connections with other employees and even the outside world. Hierarchical levels are adjusted to convey the relative authority of employees (Rosenbaum; 1980).

Brass and Burkhardt (1993) distinguish between two kinds of structural position that serve as a basis for the exercise of power: formal (hierarchical level) and informal (network position). People may attempt to exercise power when they have gained a structurally advantageous position and, through that exercise, be perceived as powerful. The structural analysis of individual power has seldom progress beyond the concept of hierarchical authority. The distribution of power in an organization is viewed as determined by interaction of structure and behavior. They argue that structural position, measured as an individual's network centrality and level in the organizational hierarchy, and behavior relate independently and significantly to others' perceptions of the individual's power. They argue that certain structural positions and certain behavioral tactics can have independent effects on others' perceptions of an individuals' power. Structural positions may result in power re-

regardless of the use of behavioral tactics, or behavioral tactics may be associated with power regardless of structural position (Marič & Ferjan; 2011).

3. DISCUSSING THE RELATION BETWEEN AL AND POWER

Authentic leadership is seen as the final stage in the development of leadership styles, properties of this leadership style and the consequences of this style have therefore not have been fully explored. Authentic leadership, just like any other style of leadership, perhaps even more, requires the use of power. Power is an always important factor in one's personal as well as business life; it is essential to the implementation of individual's will, on issues that concern us. Given that the authentic leadership highly stresses "knowing thy-self" and acting in that direction, we suppose that authentic leaders have a great deal of power.

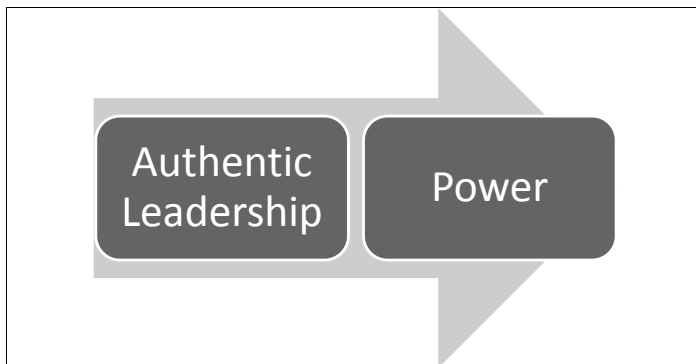
All human beings are divided into two groups, the "leaders" and the "followers". Most people are "followers", but those who do want to be "leaders" need power to achieve that others will follow them. Leadership enables good relationships and it balances power (Pinchot; 1992), which does not mean that everybody understands all of what leaders do and why it matters (Halliday; 2009). Power is not an end by itself; otherwise it could also be unintentional, but in any case as a result of power there will be a fulfillment of an interest or a benefit for the one who has power. It is important to understand that we need power to achieve desired results (Pfeffer; 1992, 343).

Interpersonal relations in organizations play an important role. People do not work in isolation. Most employees create value by combining their efforts and talents with those of other individuals at the organization (Hayes et al.; 2005). Relationships are often based on people's perceptions and interpretations and not necessarily on observable, behavioral fact (Krackhardt; 1990). Many authors research the values of managers and employees in the organization and their influence on individual's behavior and perception as well as implications for interpersonal interactions in organization (Meglino & Ravlin; 1998; Ferrary; 2002). Depending on the difference between the use value of individual and the exchange value of workers, social actors use their power to favor or oppose value (Ferrary; 2002). Chen et al. (2009) claim that collectivist values promote quality co-worker relationships and that quality relationships facilitate employee job performance and confidence in future relationship. Speaking in the most general terms, social science fluctuates

between two mismatched perspectives: objectivism and subjectivism (Bourdieu; 1989).

When discussing the relation between authentic leadership and power we have to consider, among other things, also directionality; that is whether one achieves power because one is an authentic leader or is it the other way around. We have decided to focus on the properties that one has and included another dimension into our equation to answer our question. The conclusion that we have reached by taking time into consideration is that the properties that make one an authentic leader are subsequently those that will give him power as shown in Figure 1. We came to that conclusion using the method of deduction as goes: is one is an authentic leader than one must have followers therefore one has power. We have also realized that when speaking in terms of authentic leader's power we should put a much larger emphasis on informal power than on formal power.

Figure 1: Establishing directionality between authentic leadership and power



Source: The authors

We have provided basic insights into the relation between authentic leadership and power, which we can summarize as follows: there is a relation between authentic leadership and power it is intense and the directionality is from authentic leadership to power which can be seen through time.

BIBLIOGRAPHY

Avolio, B. J. & Gardner, W. L. & Walumbwa, F. O. & Luthans, F. & May, D. R. (2004). *Unlocking the Mask: A Look at the Process by Which Authentic Leaders*

Impact Follower Attitudes and Behaviors, *The Leadership Quarterly*, 15(6), 801-823, ISSN 10489843.

Avolio, B. J. & Gardner, W. L. (2005). Authentic leadership development: Getting to the root of positive forms of leadership, *The Leadership Quarterly*, 16(3), 315-338, ISSN 10489843.

Bourdieu, P. (1989). Social Space and Symbolic Power, *Sociological Theory*, 7(1), 14-25, ISSN 0034-8635.

Brass, D. J. & Burkhardt, M. E. (1993). Potential power and power use: An investigation of structure and behavior, *Academy of Management Journal*, 36(3), 441-470, ISSN 0001-4273.

Chen, Y. & Tjosvold, D. & Pan, Y. N. (2010). Collectivist team values for Korean-Chinese co-worker relationships and job performance, *International Journal of Intercultural Relations*, 34(5), 175-481, ISSN 0147-1767.

Cooper, C. D. & Scandura, T. A. & Schriesheim, C. A. (2005). Looking forward but learning from our past: Potential challenges to developing authentic leadership theory and authentic leaders, *The Leadership Quarterly*, 16(3), 475-493, ISSN 10489843.

Dimovski, V. & Penger, S. & Peterlin, J. (2009). Avtentično vodenje v učeči se organizaciji, Planet GV, poslovno izobraževanje, ISBN 978-961-6529-67-9, Ljubljana.

Ferrary, M. (2002). Conflicts of interest and games of power concerning the standardization of the workforce, *Journal of Socio-Economics*, 31, 391-403, ISSN 1053-5357.

Finn, B. (1995). *Organization. Power and Change*. Handelshøjskolens Forlag, ISBN 9788716132482, Copenhagen.

Gardner, W. I. & Schermerhorn, J. R. (2004). Unleashing individual potential: Performance gains through positive organizational behaviour and authentic leadership, *Organizational Dynamics*, 33(3), 270-281, ISSN 00902616.

Gardner, W. L. & Avolio, B. J. & Luthans, F. & May, D. R. & Walumba, F. O. (2005). Can you see the real me? A self-based model of authentic leader and follower development, *The Leadership Quarterly*, 16(3), 343-372, ISSN 10489843.

Gardner, W. L. & Fischer, D. & Hunt, J. G. (2009). Emotional labor and leadership: A threat to authenticity?, *The Leadership Quarterly*, 20, 466-482, ISSN 10489843.

George, B. (2003). *Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value*, Jossey Bass A Wiley Imprint, ISBN 978-0787969134, San Francisco.

Halliday, E. (2009). Knowledge is power: In a world shaped by science. what obligation do scientists have to the public?, *Ethics Sci Environ Polit*, 9(1), ISSN 1863-5415.

Harter, S. (2002). Authenticity, in C. R. Snyder & S. Lopez (eds.), *Handbook of positive psychology*, Oxford University Press, ISBN 978-0195187243, Oxford.

Hayes, R. M. & Oyer, P. & Schaefer, S. (2005). Coworker Complementarity and the Stability of Top-management Teams, *The Journal of Law, Economics, & Organization*, 22(1), 184-212, ISSN 8756-6222.

Ilies, R. & Morgeson, F. P. & Nahrgang, J. D. (2005). Authentic leadership and eudaemonic well-being: Understanding leader–follower outcomes, *The Leadership Quarterly*, 16(3), 373-394, ISSN 10489843.

Krackhardt, D. (1990). Assessing the Political Landscape: Structure, Cognition, and Power in Organizations”, *Administrative Science Quarterly*, 35(2), 342-369, ISSN 0001-8392.

Luthans, F. & Avolio, B. J. (2003). Authentic leadership: A positive developmental approach, K. S. Cameron & J. E. Dutton, & R. E. Quinn (eds.), *Positive organizational scholarship*, Barrett-Koehler, ISBN 978-1-57675-232-6, San Francisco.

Marič, M. & Ferjan, M. (2011). Managing with power in the organisation to achieve common progress, T. Kern & V. Rajkovič (eds.), *People and sustainable organization*, Peter Lang, ISBN 978-3-631-62113-4, Frankfurt am Main.

Marič, M. & Žnidaršič, J. & Ferjan, M. (2010). Understanding and knowing my coworkers views and networks as a determinant of power in an organization, in: *Organizacija nauke i menedžment znanja: zbornik radova*(conference proceedings), ISBN 978-86-7680-216-6, Fakultet organizacionih nauka, Beograd.

- Meglino, B. M. & Ravlin, E. C. (1998). Individual Values in Organizations: Concepts, Controversies, and Research, *Journal of Management*, 24(3), 351-389, ISSN 0149-2063.
- Mintzberg, H. (1983). *Power in and Around Organizations*, Prentice Hall, ISBN 0136868576, Englewood Cliffs.
- Penger, S. (2006). Učeca se organizacija in oblikovanje pozitivne organizacijske identitete: študija primera slovenskega podjetja, doctoral dissertation, FELU, CO-BISS.SI-ID 16826598, Ljubljana.
- Peterlin, J. (2007). Razvoj voditeljstva v učeci se organizaciji, masters' dissertation, FELU, Ljubljana, available at: <http://www.cek.ef.uni-lj.si/magister/peterlin21-B-07.pdf> (accessed 1-2-2012).
- Peterson, S. J. & Luthans, F. (2003). The positive impact and development of hopeful leaders, *Leadership and Organizational Development Journal*, 24(1), 26-31, ISSN 0143-7739.
- Pfeffer, J. (1992). *Managing with Power*, Harvard Business School Press, ISBN 978-0875844404, Boston.
- Pinchot, E. S. (1992). Balance the Power, *Executive Excellence*, 9(9), 3-5, ISSN 87562308.
- Rees, R. (1999). Power: an example of its changing nature, *The Canadian Journal of Higher Education*, 29(1), 27-46, ISSN 03161218.
- Rosenbaum, J. E. (1980). Hierarchical and Individual Effects on Earnings, *Industrial Relations*, 19(1), 1-14, ISSN 1468-232X.
- Sparrowe, R. T. (2005). Authentic leadership and the narrative self, *The Leadership Quarterly*, 16(3), 419-439, ISSN 10489843.
- Wagner, J. A. III & Hollenbeck, J. R. (2010). *Organizational Behavior: securing competitive advantage*, Routhledge, ISBN 0-203-87353-X, New York.
- Wu, W. & Chang, H. P. & Guo, C. J. (2008). An Empirical Assessment of Science Teachers' Intentions toward Technology Integration, *The Journal of Computers in Mathematics and Science Teaching*, 27(4), 499-520, ISSN 0731-9258.
- Yukl, G. (2009). Power and the interpersonal influence of leaders, D. Tjosvold & B. Wisse (eds.), *Power and Interdependence in Organizations*, Cambridge University Press, ISBN 978-0-521-70328-4, Cambridge.

CONTACTLESS PAYMENT, A RFID DOMAIN AND ITS ACCEPTANCE BY CARD HOLDERS

Martin Fiedler¹, Timo Keppler Ph.D.², Ali Öztüren, Ph.D.³

¹Project Manager and Consultant, Munich, Germany, publication(a)fiedler-online.net

²Member of the Board and CEO, European Education Group AG, keppler(a)eu-edu.li

³Assistant Professor, Cyprus International University, Faculty of Economics and Administrative Sciences, School of Tourism and Hotel Management, Nicosia, Northern Cyprus, Mersin 10, Turkey

Abstract

The target group in a consumer environment often perceives RFID technology as a threat. The question, however, is: does the perception of RFID contain the potential to become a threat to the economic success of the investment in such technology?

The optimization potential of RFID technology - a driving factor in modern supply chain management - is increasingly opening up new market segments in other business processes. Among them are accelerated payments in the retail and service sector, for example the programs PayPass, ExpressPay and payWave issued by three global credit card companies or the new Girogo system for debit cards. Prototypes for the integration in smart phones are in the test stage already. The step of combining these two technologies opens up a mass market and offers the opportunity of developing a successful application on a worldwide scale.

This article examines the acceptance of RFID-based payment systems by the end user. It defines relevant factors based on existing literature and evaluates them empirically by using the Technology Acceptance Model in its version two.

JEL classification: D12, D81, L81

Keywords: RFID, TAM, acceptance, consumer, trade, retail, e-commerce, credit card, debit card, contactless, payment, process, risk, investment, radio frequency identification, e-passport, survey, usefulness, ease of use, petrol station, gas station, PayPass, payWave, ExpressPay, Girogo, NFC.

1. INTRODUCTION

In addition to being the year of the dragon, 2012 is also the year of contactless payments, if customers are to believe the Guardian or the industry behind the relatively new contactless payment system (Brignall; 2012). The United Kingdom, particularly London has been chosen for a rollout on a large scale for retailers with an international basis, public transport such as the Underground or taxis guaranteeing acceptance of the technology (Brignall; 2012). Visa takes on the challenge of introducing their contactless payment product to a wider clientele with maximum media attention during the Olympic Games. Although this is not the initial launch, the purpose of gaining international awareness for this relatively new payment product will be fulfilled.

Germany's retail industry is facing the challenge to implement a contactless payment process on a smaller scale within a test phase in the north of the country (Klick-Schmidt; 2012, Schneider; 2012). Accelerated payments, shorter queues and higher turnovers are some of the objectives for contactless payment processes and retailers are keen to benefit (Klick-Schmidt; 2012).

Asked for the future of smart phones as purses, Thomas Sontheimer, expert for payment systems at Accenture, describes that the path getting there will be difficult. In his opinion it would be useful to get users accustomed to contactless payments by introducing card based systems first (Schneider; 2012). But how do customers perceive this technology and which factors influence the acceptance or rejection of the technology besides the trust factor?

2. DIFFUSION OF CONTACTLESS PAYMENT

MasterCard's PayPass system is available to more than 100 million cardholders worldwide and the German share is over 1.2 million by now (Schneider; 2012). Visa is currently not providing that service in Germany but has over 30 million card holders in Europe and the German launch is planned (Schneider; 2012).

The rollout of Visa's payWave in Britain is based on a network of 8.000 buses with hop on payment availability and more than 2.000 taxis and railways across London accepting contactless payments (Brignall; 2012). Retail customers are addressed by various supermarkets and restaurant chains, such as McDonald's (Brignall; 2012).

Germany's contactless debit cards are in contrast to the concept of credit cards based on a prepaid payment model. The system will be provided at first in petrol stations, drugstores and bookshops in the Northern Germany (Schneider; 2012).

Initially all three card systems issued a significant number of cards and approached thereafter retailers and service providers to establish a certain level of acceptance for contactless payments. This procedure has been carefully chosen by card issuers to reach a critical mass on cards within the market to attract and influence retailers in investing in modern card terminals required for the new technology. The system can only start successfully, if new terminals and the number of issued cards reach a critical mass (Choi et al.; 1997, Braatz; 1999, 312, 322).

Besides the critical mass of cards and terminals the network effect is an important element for the success of a payment system. The more users are participating in a payment system, the higher the benefit for each individual user will be (Farrell and Klemperer; 2007, Katz and Shapiro; 1994).

Considering the concept of critical mass and network effect one trial of contactless payment is especially of interest. A Spanish consortium consisting of three companies assembled a mobile phone with a payment device. As many Spanish customers carry such artifact with them when leaving the house, a test environment was setup in the Spanish town of Sidges, near Barcelona. Customers were able to pay for various products or services, such as buying the newspaper or getting a haircut (Brignall; 2010). The idea behind a mobile phone as payment device is that an existing artifact of daily live is gaining the additional function of the legitimizing the payment processes. Embedded services in mobile phones could accelerate the intended critical mass and therefore lead into a positive network effect for the retail industry.

The trial in Sidges was a great success, as the participating customers declared already during the process that 90% of them would continue to use mobile payments. 50% of the payments have been received by supermarkets and 14% by restaurants (Brignall; 2010). An interesting factor was that the average payment was above the 20 Euro mark for non PIN authorization and customers were attracted by the system even if they had to enter a PIN into a terminal (Brignall; 2010). That fact could be interpreted by assuming that speed of payment will be of minor priority, once customers start using the contactless process.

3. SURVEY AND RESULTS

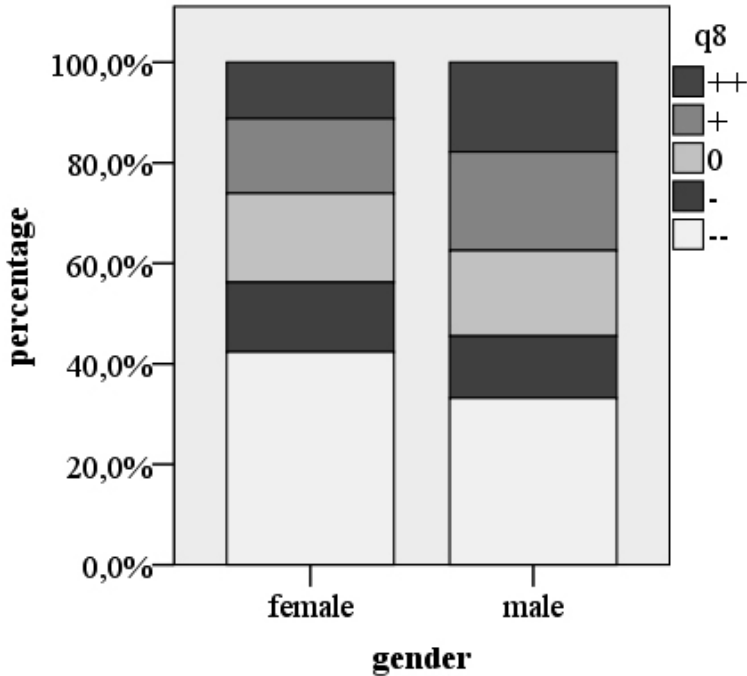
A quantitative survey was conducted at two German petrol stations in Hamburg to verify the impact of relevant factors for the acceptance of contactless payment. The stations of the Star brand have been chosen, as they are already offering contactless payments in Germany and have rolled out the payment process company-wide. Customers have had the chance to get familiar with the system or become at least acquainted with the process by seeing advertisements, even if they have no access to a contactless payment card. The city of Hamburg has been chosen due to the fact that the branch has well established business in the area and a sufficient number and diversity of stations to choose from. The two stations within Hamburg have been chosen requiring a 24 hour service frame, location on arterial roads with a significant number of commuters and a residential area and business district close by.

Altogether $n=1294$ customers have been interviewed by using a scheduled interview during their time on the premises of a petrol station. Each petrol station was staffed with three teams of at least two interviewers in an 8 hour shift system. Reinforcement was deployed during rush hours in the morning and evening by adding one more interviewer per station. Two weekdays - 48 hours - have been chosen for the process, Sunday, starting at 00:00 AM, with strong shop sales for beverages and snacks at night and bakery products and newspapers in the morning. Sundays were also strong in customer frequency at the car wash site, where customers more willingly participated in the survey as they had waiting time to spend. Mondays are traditionally known as strongest in sales of petrol products within the week.

The questionnaire included besides TAM questions the year of birth, questions with the answer yes or no and questions to be answered in a five point Likert scale with possible answers from 'I strongly disagree', referred to as '--', up to 'I strongly agree', noted as '++'.

Chart number one exhibits the perceived level of information subdivided according to gender. The rating asked for was: 'Contactless payment will improve my speed of payment'. There is a tendency that male customers answered that they feel better informed about contactless payments than female customers. Added up, the positive answers of '+' and '++' reach a level of 26.1% of the female and 37.3% of the male sample.

Chart 1, Perceived Level of Information about Contactless Payment by Gender



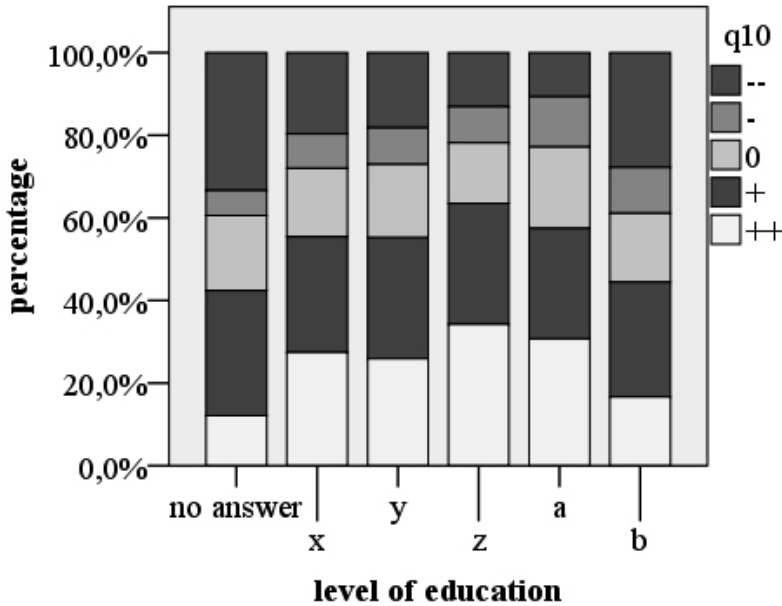
Source, author's calculation

Chart number two illustrates the prediction on speed of payment for the contactless payment process. It is sectioned by the highest level of education in ascending order, whereat 'x' represents the 'Qualifizierter Hauptschulabschluss', the lowest German school degree, and 'a' stands for a university degree. Interviewees declining answers are quoted as 'no answer' and section 'b' represents the group with no school degree.

As a result the prediction on the speed of payment can be seen as a positive effect of contactless payments overall, with a total of 57.3% answers in category '+' and '++'. 17.2% of all interviewees were of the opinion that speed of payment will be equal to the conventional process and 25.5% even predicted a negative development. Broken down on the level of education the groups of 'z' (a-level status) and 'a' (university degree) have the strongest expectation on positive speed effects with 63.6% and 57.5% of answer in category '+' and '++'. The strongest negative answers came from the category of 'no answer' and the group of interviewees with no degree, where 39.4% and 38.9% answered negatively in sections '-' and '--'.

An average of 17.2% of the respondents was of the opinion that both payment processes are of the same speed. The maximum here was within the group of ‘a’ with 19.7% and the minimum of 14.6% in the group of ‘z’.

Chart 2, Prediction on Speed of Payment by Level of Education



Source, author’s calculation

The hypothesis that it will be easier for customers using a smart phone to adopt contactless payment devices due to a reduced processing time cannot be supported. Question ten (q10_um), ‘contactless payment will improve my speed of payment’, was answered by 51.3% of customers with a smart phone believing that the payment process will be shorter with a contactless system (‘+’ and ‘++’ answers), whereas 65.4% customers without such mobile device maintain such belief.

Chart 3, Prediction of Speed of Payment by Possession of a Smart Phone

	q10_um									
	--		-		0		+		++	
	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %
yes	151	21,0%	72	10,0%	128	17,8%	213	29,6%	156	21,7%
no	54	9,8%	47	8,6%	89	16,2%	150	27,3%	209	38,1%

Source, author’s calculation

Looking at the extremes of ‘++’ and ‘--’, such situation will be supported. 21.0% of customers with smart phone believe that the payment process will be delayed and 21.7% believe in faster process time. 9.8% of the sample of non-smart-phone users believes in delays but 38.1% of them believe in an improvement. Conclusive information on different opinions partitioned by gender could not be found.

The survey revealed that customers being members in social online media like Facebook or Xing had more often a smart phone than the group of customers not participating in such service. 56.69% of the respondents claimed to be in possession of a smart phone. The question: ‘Do you participate in social online networks like Facebook or Xing?’ (‘social_online’) was answered by 51.7% of women and only 40.5% of men positively.

60.5% of members of a social online service possess a smart phone compared to only 39.5% of the group without that type of online presence. The other side of users without social online presence shows nearly the same values in the opposite direction with 29.4% of customers possessing a smart phone and 70.6% without one.

Chart 4, Participation in Online Media and Possession of a Smart Phone

		pos_smartphone		Total
		yes	no	
social_online	Count	344	225	569
	yes % within social_online	60,5%	39,5%	100,0%
	% within pos_smartphone	62,5%	31,3%	44,8%
	no Count	206	495	701
	no % within social_online	29,4%	70,6%	100,0%
	% within pos_smartphone	37,5%	68,8%	55,2%
Total	Count	550	720	1270
	% within social_online	43,3%	56,7%	100,0%
	% within pos_smartphone	100,0%	100,0%	100,0%

Source, author's calculation

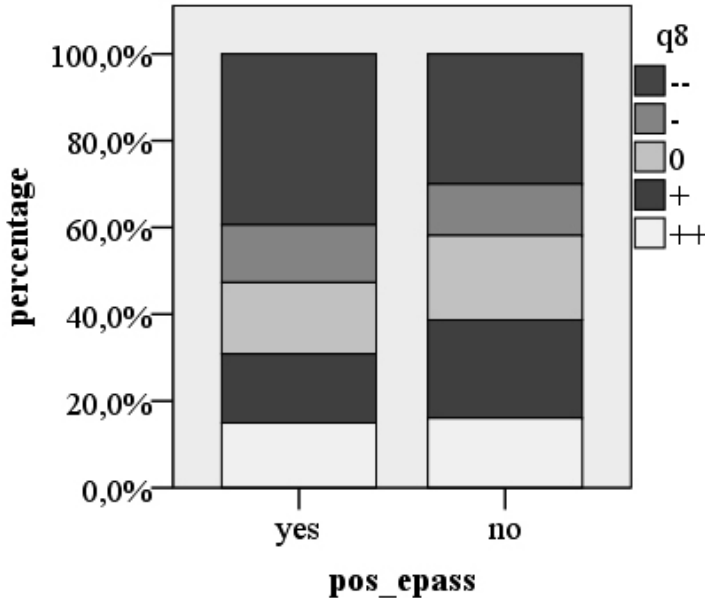
Further of interest was the possession of an electronic passport, an e-passport, for the analysis of customers as to the acceptance of contactless payments. The composition of such identification document is defined in the International Civil Aviation Organization's Document 9303 (ICAO; 2006). The core element is a contactless interface whereby the information stored can be transmitted over a short distance. Such electronic passports or identity cards are handed over by Germany's

government agencies along with an explanation and demonstration of how the device is to be used. Customers holding such passports should be acquainted with the technology and, therefore, influenced by the explanation procedure.

Chart number five illustrates the influence on the perceived level of information of the customer about contactless payments by holding an e-passport. Only 30.3% of customers holding an e-passport are rating their level of information about contactless payment as good or excellent ('+' and '++'), whereas 38.7% of non e-passport holders rate their level equivalently. Validating this output with the negative values ('-' and '--') reproduces the complementary situation. 52.7% of e-passport holders and 41.8% of non e-passport holders feel themselves not well informed about contactless payments.

The interpretation of this graph might be difficult to understand due to its dichotomy. On one hand it could be argued that the instruction procedure in the government's office leads to an increasing demand for information about the technology, on the other hand one could bring forward the argument that the explanation leads to more confusion.

Chart 5, level of information on contactless payment by possession of an e-passport



Source, author's calculation

Comparing the predicted speed of payment for contactless processes and the possession of an e-passport does not give a conclusive statement that could confirm one theory. 56.5% of e-passport holders and 59.6% of customers without e-passport predict the duration of the payment process to be reduced by contactless devices.

This result leads to the theory that the gained need for information about contactless payments may be found in the area of security and trust. Both elements have not been addressed by this survey.

4. CONCLUSION

Communicating the advantages of contactless payments will be a different task. Higher educated customers tend to see the argument for increasing speed in the payment process more than the less educated number of customers. Possessing a smart phone is on the other side an obstructive argument for seeing payment speed as an advantage of the new technology. The same point is valid for the possession of an e-passport. Customers with such instrument feel not as well informed about contactless payment technologies than customers without, even if a similar technology has been demonstrated to them in person.

An interesting element of the sample is the combination of social online media and the possession of a smart phone. Users participating in social online platforms have nearly doubled the probability to be in possession of a smart phone. An upcoming integration of such payment instruments in mobile phones will make this group a valuable field of customers, even if they do not see the benefits of contactless payments at the point of writing. A mobile phone user has after all paid for his device himself.

The perceived advantages from network effects for social online platforms pulls many users into buying a mobile internet device or smart phone to participate anywhere and anytime in the exchange of information with their closed user group. The benefits of this development can also be seen as being pushed by the technology of mobile internet access by manufacturers and network providers who established their devices before social online platforms became popular.

Contactless payments have one great advantage over the beginning of regular card payment systems. The essential chicken-and-egg-problem has been solved on the side of customers by the possibility to launch mobile applications on various

smart phone systems in advance. There is only one problem: sufficient technical devices to make the payment process profitable are still missing.

REFERENCES

- Braatz, F. (1999). *Alles über Zahlungsverkehr mit Karten: Kreditkarten, Scheckkarten, Kundenkarten, Geldkarten, Anbieter, Marktdaten, Technik, Sicherheit*, Neuwied; Kriftel/Ts., Luchterhand.
- Brignall, M. (2010). Mobile payments - the new technology coming to the UK. *the Guardian*, October 2nd, 5, money supplement.
- Brignall, M. (2012). This year the contactless 'wave and pay' revolution finally begins. *the Guardian*, January 21st, 2, money supplement.
- Choi, S. Y., Stahl, D. O. & Whinston, A. B. (1997). *The economics of electronic commerce*, Macmillan Technical.
- Farrell, J. & Klemperer, P. (2007). Chapter 31 Coordination and Lock-In: Competition with Switching Costs and Network Effects. In: Armstrong, M. & Porter, R. (eds.) *Handbook of Industrial Organization*. Elsevier.
- ICAO (2006). Machine Readable Travel Documents - Doc 9303. *Part 1, Volume 2*.
- Katz, M. L. & Shapiro, C. (1994). Systems competition and network effects. *The Journal of Economic Perspectives*, 8, 93-115.
- Klick-Schmidt, B. (2012). *Pilotversuch zum Bezahlen via RFID/NFC* [Online]. Available: <http://www.rfid-im-blick.de/201201051435/pilotversuch-zum-bezahlen-via-rfidnfc.html> accessed 27-02-2012
- Schneider, K. (2012). *Die Zukunft ist berührungslos* [Online]. Available: <http://www.handelsblatt.com/finanzen/recht-steuern/anleger-und-verbraucherrecht/bezahl-karten-die-zukunft-ist-beruehrungslos/6115114.html> accessed 31-01-2012

VALORIZATION OF ORGANIZATIONAL POWER AND POLITICS ROLE IN EASTERN CROATIAN ECONOMIC ENTITIES

Ivana Fosić, M.Sc.¹

Teaching Assistant, Faculty of Economics in Osijek, Croatia, ifosic@efos.hr

ABSTRACT

Employees use organizational power and politics in order to fulfil their organizational objectives and to strengthen their position in the organization. Success depends on how people understand organizational power and politics and how and when they apply them. This paper defines and explains the meaning of power and organizational politics as independent variables of organizational behaviour. Without proper application of power and organizational politics, an organization becomes less effective, and sometimes unable to achieve its own goals.

In the research part of this paper the emphasis is placed on organizational power and politics role in relation to other elements of organizational behaviour. The idea was to put emphasis on employee opinions on being inhibited in the workplace, on frequency of employees' delegation, and on the influence of power and political change on business. It is possible to conclude that appropriate use of organizational power and politics has positive effect on business in general.

JEL Classification: D23

Keywords: organizational power and policy, business subjects, organizational behaviour

1. UNDERSTANDING ORGANIZATIONAL POWER

Employees use power to fulfil their or organizational goals and often to strengthen their position in the organization. Success depends on how much a person understands the power that he or she uses and at what time and in what way is

this power applied. According to this, we can conclude that power is present in all types of organizations.

Highly developed technologies that define the rules, procedures, processes, schedules and detailed descriptions of work assignments assume that people are essentially similar, but they have different interests, needs, ambitions, attitudes, desires, feelings of responsibility, motivation, knowledge, skills and abilities.

(<http://www.vus.hr/Nastavni%20materijali/Osnove%20menadzmenta/osnove%20skripta/Osnove%20menadzmenta.pdf>) Thus, the perception of organizational power and politics depends solely on the individual.

In order to understand the functioning of the organization, it is necessary to become familiar with the notion of power. Power and influence are often used as synonyms, but there is a substantial difference in their meaning. Influence is an action with which person A changes the behaviour of person B. Power also includes at least two persons. S.P. Robbins (Robbins; 1992, 155) says that power is “the ability of person A to influence the behaviour of person B, so that person B does something that they would not otherwise have done“. This would mean that power is potential influence. It is possible to have power and not influence the group, but it is not possible to influence someone without power.

It can be said that authority is formalized power, power that someone possesses depending on the position in the organization and regulations. Organizational authority has the following characteristics: (Ivancevich & Matterson; 1990, 347)

- Authority is vested in hierarchical position. An individual has authority because of the position he holds, not because of personal characteristics.
- Authority is accepted by subordinates.
- Authority has a vertical structure. It decreases from top to bottom in the hierarchy of an organization.

We distinguish two bases of power – interpersonal and structural-situational. French and Raven (Idem, p. 348 according to John R. P. French and Bertram Reven, “The Basis of Social Power” in *Studies in Social Power*, ed. D. Cartwright (Ann Arbor: Institute for Social Research, University of Michigan, 1959) pp. 150-167) distinguish five interpersonal powers: legitimate, reward, coercive, expert and referent. In legitimate power influence is derived from hierarchical position. Individual at a higher position has legitimate power over the people below. Reward power is

possessed by a person who can reward their subordinates in some way. Such power is often used to additionally strengthen legitimate power. Namely, legitimate power will be even stronger if subordinates know that the leader can promote them, increase their salary, or recognize their work in some other way. Coercive power is the opposite of reward power. Leader can use it to punish subordinates (e.g. by reduction of income, abolition of privileges, termination of employment). An individual has expert power when he possesses some knowledge and skills that are highly appreciated. Experts may have great power although they are relatively low on the hierarchical ladder. The harder it is to replace one expert with another, the greater his power. This type of power depends on personal characteristics, while legitimate, reward and coercive power for the most part are the result of position. Referent power has its source in the charisma of the individual. A person with charisma enjoys the trust and admiration of the environment. Although it is usually used to describe politicians, charisma is also an important factor in managers.

Power is primarily determined by the structure of the organization. Structure is a kind of a control mechanism that serves to manage the organization. Structure can be the basis of power because it determines who manages the resources, makes the decisions and possesses information. It is clear that whoever owns or manages resources (people, money, raw materials) can certainly influence what happens in the organization. The higher the level of decision-making of a department or an individual, the greater is their power within the organization. Possession of information is a special form of power.

As in other areas of organizational behaviour and management, different contingency approaches to power are slowly merging. Two theses are accepted by the vast majority of authors of contingency theories of power: (Luthans; 1992, 432)

1. The greater the professional orientation of the group members, the referent power will have more influence on their actions.
2. The less interest and willingness to work on a task is shown by high-ranking members of the organization, the greater the possibility that lower-ranking members will concentrate power in their hands.

Contingency theory attempts to explain what influenceability depends on. Namely, the same power applied on the entire group will not equally affect all its members. The following characteristics are singled out as important for determining the level of influenceability on the individual: (Luthans; 1992, 433-434)

1. *Dependency*; the greater the target's dependency on its relationship with the centre of power, the more it is under its influence.
2. *Uncertainty*; studies have shown that people who are not confident in themselves or how well they perform their work are much more likely to fall under influence, even of a rather poor source of power.
3. *Personality*; a number of research studies have tried to explain the relationship between personality characteristics and influenceability. The results have been contradictory in many cases, and so this area is still insufficiently explored to be analyzed.
4. *Intelligence*; there is a very simple connection between intelligence and influenceability. Highly intelligent people will be more willing to listen and pay attention to what is coming from the source of power, but at the same time they will accept only information that they consider important and correct, and thus be less influenced.
5. *Gender*; it is traditionally believed that women are more likely to fall under influence of the source of power because of the way in which they were raised.
6. *Age*; susceptibility to influence increases in children up to the age of 8-9 years, and then, as a rule, decreases.
7. *Culture*; there are great differences in obedience and influenceability in different cultures.

2. POLITICAL STRATEGIES IN THE ORGANIZATION

Politics in organizations relates to those activities undertaken within the organization in order to obtain the development and use of power and other resources to get the preferred results in a situation where there is uncertainty or lack of consensus. (Huczynski & Buchanan; 2001, 823)

Organizational political behaviour are activities that are not required as a part of one's formal role in the organization, but which influence, or attempt to influence the distribution of advantages and disadvantages in the organization. (Robbins & Judge; 2009, 481)

Politically oriented behaviour is often practiced. Under politically oriented behaviour, we mean the following: (Ivancevich & Matterson; 1990, 361)

1. Behaviour that is outside the legitimate system of power

2. Behaviour whose aim is to benefit an individual or small groups, often to the detriment of the organization
3. Behaviour that is deliberately designed to win and retain some form of power.

As a result of existence of such politically oriented behaviour, formal centres of power are often pushed aside or completely blocked.

Many studies have shown that there are almost no organizations in which there is not at least one person that has become skilled in politically oriented behaviour. Many authors call this behaviour a game. This game between managers and non-managers can have several causes: (Ivancevich & Matterson; 1990, 363-366)

1. Resisting authority (insurgency game),
2. Resisting those that resist authority (counter-insurgency game),
3. Creating a new centre of power (sponsorship game and coalition game),
4. Eliminating rivalry,
5. Organizational changes.

Insurgency game – this appears when people resist authority. As an example, a supervisor may receive an order to reprimand an employee for disregarding company policies. The supervisor can give the reprimand without any emotions just to carry out the orders from higher-ups. Such reprimand will probably have no effect. On the other hand, if the employee is reprimanded sternly and aggressively, with him/her not expecting it, the reprimand will be much more effective. Insurgency game is played consciously or unconsciously in almost all organizations, and at all organizational levels.

Sponsorship game – This is a frequent game in which the individual tries to get close to a person in power. A sponsor is usually a manager or a person otherwise hierarchically above the player. This game has several basic rules. First, the player owes loyalty and attachment to the sponsor. Secondly, the player must fulfil demands and orders by the sponsor. Thirdly, the player must remain in the shadows and, if necessary, provide an alibi for the sponsor.

Coalition game – two departments in the organization can be in a position to increase their power through affiliation. Increasing the number of people in the coalition strengthens its power. Emphasis is placed on common goals and they always have the advantage over goals of individual departments. Affiliation of one part of

the organization with a group from outside the organization can also strengthen its power.

Rivalry game – relates to the rivalry between managers and staff advisors. This is a game which pits managers, who are usually older, more experienced and rely more on intuition against experts from the personnel department, who are generally young, educated and more prone to analytical thinking. Such differences result in different ways of perceiving the benefit to the organization.

Whistle-blow game – Whistle-blowing is the disclosure of unjust, unethical and irresponsible behaviours from the company to the media, government bodies or competing companies. Whistle-blowing is often done in secret so that the player would not be subjected to sanctions. Persons who reveal confidential information to the public usually do so with the aim to introduce some changes, whether it is introduction or prohibition of certain procedures.

3. RESEARCH OF THE ROLE OF ORGANIZATIONAL POWER AND POLITICS IN ECONOMIC ENTITIES IN EASTERN CROATIA

In order to confirm the above claims on the importance of organizational power and politics, for this paper we used both secondary and primary data, which means that we conducted a research, notably a survey in four companies in Eastern Croatia that were willing to participate.

The questionnaire was filled in by a total of 146 respondents, who were employees in these four companies. It consisted of six groups of questions, dealing with particular elements of organisational behaviour, and one of those groups included questions on organisational power politics. All the items in the questionnaire were closed-ended questions, with pre-existing response modalities. This paper will focus on the results that are relevant for the topic at hand. The data were processed by means of the SPSS software (Statistical Package for the Social Sciences).

As for the item asking how restrained they feel by the system and control at their place of work, Table 1 shows the breakdown of responses in several demographic segments (gender, age group, level of education, years of service, and type of company ownership), where significance levels indicate significant statistical differences.

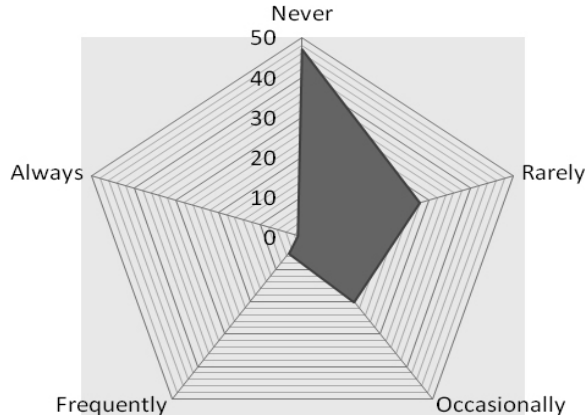
Table 1. Feeling restrained by the system and control at one's place of work

		Do you feel restrained by the system and control at your place of work?						sig.hk
		n	%	Never	Very rarely	Sometimes	Frequently	
Gender		148	100	20.2	33.1	34.4	12.1	0.02
	Male	52	35.1	7.6	44.2	32.6	15.3	
	Female	96	64.8	27	27	35.4	10.4	
Age group		148	100	20.2	33.1	34.4	12.1	0.00
	Up to 30	37	25	10.8	59.4	27	2.7	
	31 - 40	31	20.9	25.8	35.4	19.3	19.3	
	41 - 50	53	35.8	16.9	18.8	43.3	20.7	
	51 - 60	27	18.2	33.3	22.2	44.4	0	
Education level		148	100	20.2	33.1	34.4	12.1	0.00
	No university education	66	44.5	19.6	18.1	50	12.1	
	University education and higher	82	55.4	20.7	45.1	21.9	12.1	
Years of service		146	100	19.1	33.5	34.9	12.3	0.00
	Up to 5 years of service	43	29.4	25.5	48.8	23.2	2.3	
	5 and more years of service	103	70.5	16.5	27.1	39.8	16.5	
Type of company ownership		148	100	20.2	33.1	34.4	12.1	0.02
	Private sector	79	53.3	15.1	29.1	36.7	18.9	
	State-owned	69	46.6	26	37.6	31.8	4.3	

Source: author's research

According to Table 1, almost 34.4% of respondents sometimes feel restrained by the system and control at their place of work, whereas 20.2% never have this feeling. Feelings of constraint are more pronounced in private sector when compared to state-owned companies and institutions.

Graph 1. Demonstrating employees' power

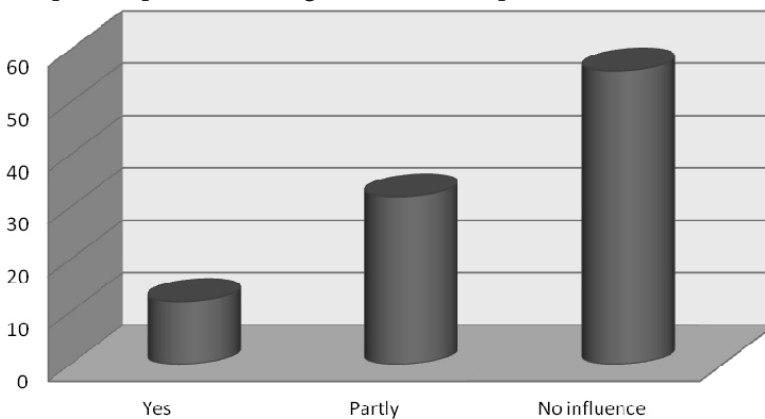


Source: author's research

As can be seen in Graph 1, almost 46% of respondents stated that in conversations with co-workers they never insist on their point of view in order to demonstrate their power, i.e. position within the organization, 20% of respondents do this occasionally, and only 5% of respondents frequently.

As for delegating tasks from their domain of work, 36% of employees do this rarely, and almost never as many as 26% of respondents.

Graph 2. Impact of political change on business operations



Source: author's research

Graph 2 shows the results for the total sample regarding the question: Do political changes have an impact on the changes in your company's operations? Almost

12% of respondents feel that political changes inevitably cause changes within the economic entity they are employed in, whereas 32% of respondents rate this influence as partial. Almost 56% of respondents believe that political changes have no impact on their company's operations.

4. CONCLUSION

It can be concluded that employees use power and politics in order to achieve their own or organizational objectives, and frequently also to strengthen their position within the organization, which was substantiated by our research results. Power is present in all organizations, and employees are best positioned to enhance their personal power if they develop the knowledge and skills required for performing a range of tasks within the economic entity.

A proper use of organizational power and politics as an independent variable of organizational behaviour has a strong positive impact on employee satisfaction. In contrast, inadequate organizational power and politics can represent a threat, which is manifested in decreasing employee satisfaction, growing staff turnover, increasing stress levels and weaker employee performance.

Our research indicates that a large proportion of employees within the surveyed economic entities in Eastern Croatia feel restrained by the system and control at their place of work, whereas a smaller proportion of employees demonstrate power in order to achieve certain goals. Taken together, these results indicate that, partly due to previous experiences, employees perceive organizational power and politics as something negative and detrimental for the company or institution itself. To remove employees' fear and apprehension it would be advisable to provide additional training on the efficient use of organizational power and politics, by showing a variety of positive effects these can have for all the stakeholders.

5. REFERENCES

- Huczynski A., Buchanan D.: *Organizational Behavior*, Pearson Education Limited, Harlow, 2001.
- Ivancevich, J. M., Matterson, M. T.: *Organization behavior and management*, BPI IRWIN, Inc., Boston, 1990.
- Luthans, F.: *Organizational behavior*, 6th ed., McGraw-Hill, Inc., 1992.

Robbins, S. P.: Bitni elementi organizacijskog ponašanja, Mate, Zagreb, 1992.

Robbins, S. P, Judge T.A.:Organizacijsko ponapšanje,12izdanje., MATE, Zagreb, 2009.

(<http://www.vus.hr/Nastavni%20materijali/Osnove%20menadzmenta/osnove%20skripta/Osnove%20menadzmenta.pdf>) Accessed: 14.02.2012.

HUMAN RESOURCE MANAGEMENT IN PORT OF RIJEKA

Marijana Jakopič, B.Sc.¹

¹Polytechnic of Rijeka, Croatia, marijana.jakopic@veleri.hr

ABSTRACT

People, with their professional, specialist and other competencies and working skills, represent basic carriers of all functions in economic and social system, defined in a science as a human resource concept. Basic goal of each economic and social system, as a business-legal entity, is to transform human potentials into the human or intellectual capital, that is, human resource, by virtue of *human potentials' planning method*. This method is used not only by business systems, but also by all important social, state and regional government and self-government units.

The analysis of human resources, as a strategic factor in gaining the satisfying business goals, in any entrepreneurial venture, including Port of Rijeka, puts the strongest emphasis on competence, loyalty and ethics of employees, in line with customers' trust towards providers of certain products and services that are being launched on the market. The main goal in this process is to gain the competitive advantage, which is not an easy task under the influence of supply and demand forces especially when ports of the international public traffic are in question. All characteristics of human resources belong to personalities of all participants, as physical individuals, who are engaged in an especially complex process of planning and realisation of supply and demand of products and services that are subject of competition. The competition isn't disputable, but the real issue refers to acquisition and operative usage, especially since they are manifested within a company, that is, a legal person which functionally integrates many different functions based upon legal norms and informal relationships between employees, as strategic resources upon which Port of Rijeka creates its competitive advantage.

JEL Classification: O15

Keywords: people, human resource planning, economic system, management, Port of Rijeka

1. INTRODUCTION

Development of modern traffic systems led to development of the international public traffic, with ports as key points of concentration and diversification of goods, capital and human flows. Within such circumstances, companies, states and other participants of world goods-, capital- and traffic-processes have been motivated to systematically manage human resources as basic factor of successful functioning for every organisation. In the increasingly complex system of managing the competitiveness, special attention has been given to human potentials' planning, particularly among international public traffic ports and national economies so they could respond to shocks and challenges of the external environment. Thereto, today one can detect systematic management and planning of human resources as the least practiced function in human potentials' management of bigger organisational units, the Port of Rijeka included.

2. FUNCTION OF THE HUMAN RESOURCE MANAGEMENT

Human resource management represents especially complex business, technical, technological, legal, social and strategic function. This is extremely important in ports of the international public traffic, which are, by their function, closely connected to usage of maritime good as good of general interest, for the purpose of production and selling the public traffic-industrial and commercial services to goods and passengers in public traffic. In such ports the intellectual capital directly integrates all participants in complex and stochastic traffic system, such as: shippers, shipping agents, freighters or forwarders, inland navigation, road, railway and posts, banks and insurance companies, numerous state supervisory organs, such as police, customs, phytosanitary and other institutions.

2.1. *Systematic approach to human potentials' management*

The function of human resource management is usually performed by human resource department that occupies an important place in organisational scheme of all public institutions and companies, and especially in traffic companies which are, by their structure and functions, specific and significantly different in comparison to production, industrial and similar companies.

Specificity of traffic companies, from the aspect of people and intellectual capital, is derived from basic logistic function of traffic by which one considers production of ordered traffic services, in contracted quantity and quality, with direct

operative participation of customer in all technological operations. The providers of technological operations should directly satisfy buyers' expectations, in circumstances when traffic service cannot be postponed or improved, but is instantly produced and sold to buyer who, in the process, declares certain remarks, propositions and corrections.

2.2. Evaluation of human resource management's efficiency

Since the services in question refer to basic business operations, then obviously, they can be performed exclusively by professional, competent and courteous cadre. Subsequently, it can be concluded that place and importance of human resource management isn't and shouldn't be at the same level as other departments and/or functions but in a certain superior position. Importance of this specific department can be derived from their main tasks: planning and managing the human potentials, or, to be more precise, conversion of human potentials into the human capital which company uses when entering the world market where it should win "the battle" between supply and demand forces in an opened field. Naturally, the loss of trained human resources represents the biggest loss for every organisational system so it deserves a special attention within human resource management.

Modern approach to human potentials' management, aside from administrative operations, intrudes the human potentials' department with numerous new assignments, such as, better occupational safety, professional improvement, education during the work and alike. In order to visualize differences in modern approaches to human potentials' management, the features of Japanese and American approach to human potentials' management will be used (see table 1).

Table 1: Difference between Japanese and American approach to human potentials' management

CHARACTERISTICS	USA	Japan
Employment	Usually short-term with frequent lay offs	Usually long-term with rare lay offs
Evaluation and promotion of the employees	Quick, employees either get promoted either they leave (up or out politics)	Very slow, greater promotion is a long-term phase
Career path	Very specialised, people stay in one field of interest their complete career	Generally, people rotate among different areas and they meet many associates

Making decisions	Individually	Group
Control and regulation	Very explicit, people exactly know what and how it's being controlled	Very implicit and informal
Responsibility	Delegated on individual basics	Collectively delegated in a group
Care of employees	Only when they work and execute tasks related to work	To extend interest of company to some information fields of interest

Source: Pupavac, D., et al, 2004, p. 255.

It is interesting that the USA had, at the time, a movement which aim was to apply Japanese experiences in management and to create a combined model of management based upon best experiences in American and Japanese business practice. In order to use the best experiences of Japanese and American managers, a new company, named Saturn was established and it united General Motors and Toyota (Janičijević, 1997, p. 17).

3. PLANNING THE HUMAN POTENTIALS

Starting with practical definition of concepts plan and planning, which connote consciously and aimed investment of development capital in human resources and anticipation (projection) of future operative activities, planning the human potentials represents an expression of subjective intellectual will that is purposely directed towards moderation of future through professional and specialist human knowledge. This knowledge becomes a basic capital to all other values in the world. It can also be claimed that human potentials' planning represents a crucial factor in managing the human destinies, so it should be systematically realised on the level of economic system and individual companies, as carriers of the economy.

3.1. *Planning the human potentials on the level of economic system*

Besides long-term anticipation of human potentials, it is very important to plan human potentials in shorter, usually five-year periods, so to determine dynamics of human potentials and undertake appropriate corrective measures. For instance, with almost absolute certainty, one can plan a reproduction of working contingent for the population of a specific country – Republic of Croatia (see table 2)¹.

¹ Planning and development of human resources represents one especially important function and obligation of state as public legal person which systematically directs its public goods as strategic resources for economic system's development.

Table 2: Planning the working contingent of a population

Planning period	2000-2006	2006-2012	2012-2025
Working contingent, $RK = 1+3+6+9$			
Initial status, $S (15-64)$			
Final status, $S' (15-64)$			
Decrease/increase (2 – 1)			
Inflow to working contingent			
Outflow from working contingent			
Decrease/increase (4 – 5)			
Immigration			
Emigration			
Migration balance (7 – 8)			

Source: Adjusted to Pupavac, D.: 2004

Inflow to working contingent is determined by number of younger employees between 10 and 14 who will, in the following five-year period enter the age group between 15 and 19. Outflow from working contingent is determined by number of older people between 60 and 64 years who will, in the following five-year period enter the older age group between 65 and 69. Migration balance, in a certain planned period, is determined as difference between immigration in certain country and emigration from the same. If the number of immigrants is larger than number of emigrants, the country generates positive migration balance and vice versa. Data in table 2 enable calculation of replacement coefficient – (inflow to working contingent/outflow from working contingent) x 100 – as measure of demographic pressure over the employment.

Planning the human potentials on level of national company should prevent stagnation of national economy in future, especially by anticipating new technological changes which should contribute to development of new professions or determination of some old ones. In such a manner, planning of human potentials on level of national economy directly and significantly contributes to prevention of serious structural unemployment. Planning of human potentials on level of national economy should also contribute to preservation of cultural heritage and economic values reflected in traditional crafts (hatters, auctioneers, medicine men...)

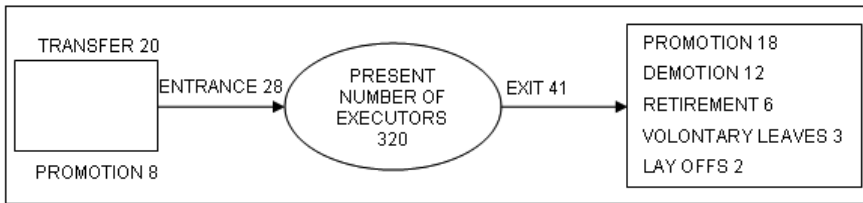
3.2. Planning the human potentials on company's level

Planning the human potentials on company's level represents a crucial subsystem of human resource management, through which, the mission and goals of business

system transfer to human potentials' plan. In the content form, human potentials' plan represents a quantitative and qualitative overview of required people, their practical knowledge, skills, intellectual and psychophysical capabilities, and positions in organisational structure. HR department should specify measures needed for recruitment, training, development, transfer or cancelation of employment. Basic purpose of human potentials' plan is to provide management with insight into assignments that current human potentials can perform. This enables more efficient usage and greater satisfaction of human potentials, reduction of human potentials' costs and avoidance of unnecessary cancelation of employments (see [5]).

Among most frequently used methods of human potentials' planning, Markov analysis can be extracted, which is used for anticipation of employment within a business system in the future period according to present employment. For this purpose specific analysis of each business/work places can be prepared (see Scheme 1).

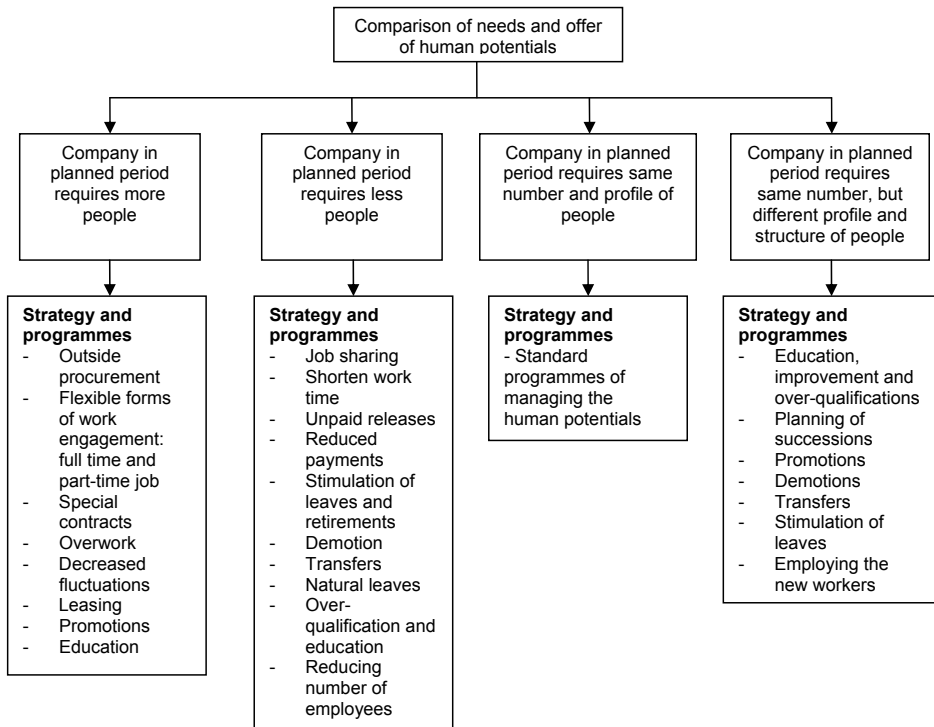
Scheme 1: Anticipated quantitative movement of operational executors (Port of Rijeka)



Source: Port of Rijeka

Data in scheme 1 indicate that inner offer of operational executors for cargo transshipment amounts 307 employees. Upon specified needs for employees, depend strategies and actions that should be undertaken so to provide required number and quality of human potentials (see scheme 2).

Scheme 2: Planned strategy of adjusting the needs and human potentials' offer



Source: Bahtijarević-Šiber, E.: Management of human potentials, Golden Marketing, Zagreb, 1999, p.232

3.2.1. PLANNING BY METHOD OF MARKOV CHAINS

Markov chain is usually applied in analysis of employees of a specific category or working place, though analysed subject can also be categorisation of employees according to other criteria that planners use in analysis and classification of organisation. It demonstrates employees' movement in specific time (*transfer, promotion etc.*), which is especially important for Port of Rijeka which traffic demand, for the upcoming mid- and long-term (to 2025) development period, is being estimated to 4.5 million of containers (TEU) annually, that represents one particularly important resource in pulling the Republic of Croatia out of economic crisis.²

Subsequently, a system which can develop in M conditions can be modularly analysed: $S_1, S_2 \dots S_M$. Probability that system in time period n acts in condition S_j ,

² Present turnover in Port of Rijeka amounts modest 130.000 TEU per year.

could be defined as $p_i(n)$. Probabilities $p_i(n)$ ($i=1,2, \dots, M$) form group of vectors which describe system in any time interval. Vector of condition in time n can be marked as: $P(n) = [p_1(n) \dots p_M(n)]$ (1)

If the argument of time, as inherent to this example, accepts only discrete values, one should consider Markov chain, or, vice versa, Markov process. The assumption is that transfer from one condition to other depends solely of those conditions. To be more specific, it is assumed that one pair of conditions (S_i, S_j) has a probability p_{ij} , according to which, a system is in time period $n + 1$ as condition S_j , whereas in time n it is marked as condition S_i . In case when probabilities $p_i(0)$ $i = 1,2, \dots, M$ (vector of starting condition) are taken as familiar sizes, Markov chain is developed, that can be described by equation

$$p_j(n+1) = \sum_{i=1}^M p_i(n)p_{ij} \quad j = 1,2, \dots, M \quad (2)$$

Or in matrix form as

$$P(n+1) = P(n) \times P \quad (3)$$

Matrix P comprises from elements p_{ij} which satisfy these conditions:

$$\sum_{i=1}^M p_{ij} = 1 \quad p_{ij} \geq 0 \quad i,j = 1,2, \dots, M \quad (4)$$

In similar mode, one can use components of condition's vector $p_j(n)$:

$$P(n) = [p_j(n)] \quad j = 1,2, \dots, M \quad n = 0,1,2,3 \quad (5)$$

For conditions

$$P_j(n) \geq 0 \quad \sum_{j=1}^M p_j(n) = 1 \quad (6)$$

Matrix, with feature (4), is considered stochastic. Its every line represents components of the stochastic vector P_i . Probabilities p_{ij} are named intermediate probabilities, while stochastic matrix is usually named the matrix of intermediate probabilities. Markov chain is defined by matrix of intermediate probabilities P and vector of the basic condition:

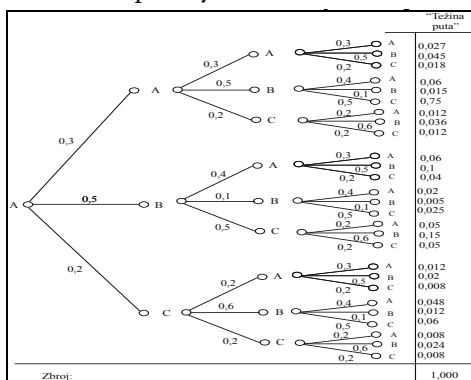
$$P = \begin{vmatrix} 0,3 & 0,5 & 0,2 \\ 0,4 & 0,1 & 0,5 \\ 0,2 & 0,6 & 0,2 \end{vmatrix}$$

Elements p_{ij} that belong to matrix of intermediate probabilities indicate the probability of employee's transfer when changing his working place « i » in time t_p

for working place «j» in the upcoming period t_2 . The assumption that named three working places don't have an alternative leads to: $\sum_{j=1}^n p_{ij} = 1$

Probability that certain employees, after a three-year period, will change working place i with working place j can be calculated in several ways. One of possible modes is by decision tree (see scheme 4), that is, according to "direction" in a tree. Product of probabilities along direction of every branch is called "complexity of direction", i.e., complexity of direction for direction $A \rightarrow B \rightarrow C \rightarrow A = 0.5 \times 0.5 \times 0.2 = 0.05$. Sum «complexity of direction» that corresponds to condition j , such as condition of working place B , represents intermediate probability after n degrees, or probability P^3_{AB} . Sum of all «complexities of directions» again becomes 1.

Scheme 4: Calculation of «complexity of direction»



If the complexities of direction are aggregated in tree A, an intermed probability of P^3_{AA} level can be calculated. Example:

$$P^3_{AA} = 0.027 + 0.06 + 0.012 + 0.06 + 0.02 + 0.05 + 0.012 + 0.048 + 0.008 = 0.297$$

Analogously these values can be calculated

$$P^3_{AB} = 0.045 + 0.015 + 0.036 + 0.1 + 0.005 + 0.15 + 0.02 + 0.012 + 0.024 = 0.407$$

$$P^3_{AC} = 0.018 + 0.075 + 0.012 + 0.04 + 0.025 + 0.05 + 0.008 + 0.06 + 0.008 = 0.296$$

Required probabilities can also be calculated by multiplying the matrixes:

$$P^2 = \begin{bmatrix} 0,3 & 0,5 & 0,2 \\ 0,4 & 0,1 & 0,5 \\ 0,2 & 0,6 & 0,2 \end{bmatrix} \times \begin{bmatrix} 0,3 & 0,5 & 0,2 \\ 0,4 & 0,1 & 0,5 \\ 0,2 & 0,6 & 0,2 \end{bmatrix} = \begin{bmatrix} 0,33 & 0,32 & 0,35 \\ 0,26 & 0,51 & 0,23 \\ 0,34 & 0,28 & 0,38 \end{bmatrix}$$

$$P^3 = P^2 \times P = \begin{bmatrix} 0,33 & 0,32 & 0,35 \\ 0,26 & 0,51 & 0,23 \\ 0,34 & 0,28 & 0,38 \end{bmatrix} \times \begin{bmatrix} 0,3 & 0,5 & 0,2 \\ 0,4 & 0,1 & 0,5 \\ 0,2 & 0,6 & 0,2 \end{bmatrix} = \begin{bmatrix} 0,2970 & 0,4070 & 0,296 \\ 0,3280 & 0,3190 & 0,353 \\ 0,290 & 0,4260 & 0,284 \end{bmatrix}$$

In this example all sums of lines amount 1, since the process that starts in certain (given) condition reaches, after three levels, any level possible. When elements of intermediate probability' matrix are in question, an expression $0 \leq p_{ij}^n \leq 1$ has to be fulfilled.

Given probabilities indicate certainty for employees to keep their working places³. Elements of main diagonal contain probability of "loyalty to working place", which is especially important in Port of Rijeka when making decisions about investing the capital in specialist education of employees.

Since Markov chain is, aside from intermediate probabilities' matrix P , defined also by vector of initial condition, the issue of employees' appropriation for certain working places is being solved by matrix of intermediate probabilities and initial condition's vector. Employees' appropriation for certain of three possible working places is determined by vector of the initial condition:

$$S_0 = [0.55 \quad 0.25 \quad 0.20]$$

According to the given vector of initial condition and formally determined matrix of intermediate probability, the number of employees who choose certain working place after determination of three-year period is being calculated. Without that information it is extremely risky to invest in their education, since they can transfer to competition and cause multiple damages to Port of Rijeka and Republic of Croatia.

Solution: When $t = 1$; $S_1 = S_0 \times P$

$$S_1 = \begin{array}{ccc} & \begin{matrix} 0,3 & 0,5 & 0,2 \end{matrix} \\ \begin{bmatrix} 0,55 & 0,25 & 0,20 \end{bmatrix} & \begin{matrix} 0,4 & 0,1 & 0,5 \end{matrix} & = \begin{bmatrix} 0,305 & 0,42 & 0,275 \end{bmatrix} \\ & \begin{matrix} 0,2 & 0,6 & 0,2 \end{matrix} \end{array}$$

When $t = 2$; $S_2 = S_1 \times P = S_0 \times P^2$

$$S_2 = \begin{array}{ccc} & \begin{matrix} 0,3 & 0,5 & 0,2 \end{matrix} \\ \begin{bmatrix} 0,305 & 0,42 & 0,275 \end{bmatrix} & \begin{matrix} 0,4 & 0,1 & 0,5 \end{matrix} & = \begin{bmatrix} 0,31 & 0,36 & 0,33 \end{bmatrix} \\ & \begin{matrix} 0,2 & 0,6 & 0,2 \end{matrix} \end{array}$$

When $t = 3$; $S_3 = S_2 \times P = S_0 \times P^3$

$$S_3 = \begin{array}{ccc} & \begin{matrix} 0,3 & 0,5 & 0,2 \end{matrix} \\ \begin{bmatrix} 0,31 & 0,36 & 0,33 \end{bmatrix} & \begin{matrix} 0,4 & 0,1 & 0,5 \end{matrix} & = \begin{bmatrix} 0,30 & 0,39 & 0,31 \end{bmatrix} \\ & \begin{matrix} 0,2 & 0,6 & 0,2 \end{matrix} \end{array}$$

³ Organisation system doesn't have an intention to lose skilful employees, since it has invested developing capital in their education, respecting the principle „Best invested capital in the human knowledge“.

Balanced condition is defined by a number of expressions

$$S \times P = S$$

$$\sum_i s_i = 1$$

That is

$$\begin{bmatrix} s_1 & s_2 & s_3 \end{bmatrix} \begin{bmatrix} 0,3 & 0,5 & 0,2 \\ 0,4 & 0,1 & 0,5 \\ 0,2 & 0,6 & 0,2 \end{bmatrix} = \begin{bmatrix} s_1 & s_2 & s_3 \end{bmatrix}$$

With filled following condition

$$s_1 + s_2 + s_3 = 1$$

When such a system of equations is solved, vector of stable condition is determined

$$S = (0,31 \quad 0,38 \quad 0,31)$$

Border matrix then becomes

$$P = \begin{bmatrix} 0,31 & 0,38 & 0,31 \\ 0,31 & 0,38 & 0,31 \\ 0,31 & 0,38 & 0,31 \end{bmatrix}$$

3.2.2. Computer applications of Markov chain in planning the human potentials

Monitoring the inflows/outflows of employees on three working places in a traffic company (Port of Rijeka) for period $(t_i - t_{i+1})$ leads to following data (see table 3).

Table 3: Inflow/outflow of employees in a traffic company (Port of Rijeka)

	WORK PLACES			TOTAL
	M ₁	M ₂	M ₃	
Initial condition t_i	70	80	50	200
Outflow of employees	25	30	10	65
Other employees in same work places	45	50	40	135
Inflow of new employees	15	30	20	65
Final balance of analysed period t_{i+1}	60	80	60	200

Structure of employees' inflow/outflow is given in table 4.

Table 4: Structure of employees' inflow/outflow in a traffic company (Port of Rijeka)

	M_1	M_2	M_3	Total
M_1	-	23	2	25
M_2	12	-	18	30
M_3	3	7	-	10
Total	15	30	20	

Calculated data help to anticipate a number of employees in certain work places after the three-year period. Method for calculation of anticipated movement of employees among three work places, in the analysed traffic company, according to Markov chain, is as follows: to detect an initial vector of condition; to form Markov matrix of intermediate probabilities, to analyse an evolution of internal traffic work market after three-year period and; to determine vector of stabile condition and elements of border matrix.

Method of solving defined problem by budget table is illustrated in table 5.

Table 5: Planning the human potentials supported by budget table

The screenshot shows an Excel spreadsheet with the following content:

A	B	C	D	E	F	G	H	I	J	K	L
1	Kretanje priliva/odliva radnika na tri radna mjesta										
2	u prometnoj tvrtki za razdoblje (t _i - t _{i+1})					Struktura priliva/odliva radnika					
3		M1	M2	M3	Ukupno		M1	M2	M3	Ukupno	
4	t _i	70	80	50	200						
5	Odliv	25	30	10	65		M1	-	23	2	25
6	Ostali	45	50	40	135		M2	12	-	18	30
7	Priliv	15	30	20	65		M3	3	7	-	10
8	t _{i+1}	60	80	60	200		Ukupno:	15	30	20	
10	MARKOVljeVA MATRICA PRIJELAZNIH VJEROJATNOĆA										
11	POČETNI VEKTOR STANJA S ₀					M =					
12	S ₀ =	0,3	0,4	0,3			0,642857	0,328571	0,028571		
13							0,15	0,625	0,225		
14							0,06	0,14	0,8		
15	EVOLUCIJA INTERNOGA PROMETNOGA TRŽIŠTA NAKON TROGODIŠNJEGA RAZDOBLJA										
17	S ₃ = S ₀ * M ³		0,3	0,4	0,3	*	0,368453	0,431529	0,200018		
18							0,221142	0,407042	0,371815		
19							0,142428	0,266604	0,590968		
22	S ₃ =		0,241721	0,372257	0,386022						
24	S ₃	*	200	=							
26	0,24	*	200	=	48						
27	0,37	*	200	=	74						
28	0,39	*	200	=	78						

Initial vector S_0 of a condition is defined by inserting forms $=D9/G9$, $=E9/G9$, $=F9/G$ in the address line $D14:D16$. Markov matrix of intermediate probabilities has been formed by inserting the following forms into the fields of address line $J13:L15$:

$$\begin{aligned}
 &=D7/D5 & =K6/D5 & =L6/D5 \\
 &=J7/E5 & =E7/E5 & =L7/E5 \\
 &=J8/F5 & =K8/F5 & =F7/F5
 \end{aligned}$$

Thereof, human resource management in Port of Rijeka can be evaluated as stabile since it provides good opportunities for ensuring the appropriate human resources, able to accept its new strategic developing cycle as a strategic potential.

4. CONCLUSION

Research results imply that human potentials' planning represents one of the crucial sub-systems in the complex system of human resource management, performed on the level of a complete economy and on the level of a certain company. Planning the human potentials within national frames is more specific in comparison to planning the required number of employees for a certain company. It can also be concluded that planning human potential on national level is directed towards movements of workforce's supply and employment, which are in a long run determined by basic components of population's development, natality/fertility and mortality. Demographic components of workforce and employment have a long-term character, especially in sense of their consequences for circulation of individual age groups so they represent input or cadre source for a business system. In developed socio-economic areas, that is, developed countries, app 100% of workforce is formed by people belonging to working-age group, while in less developed countries, the same value amounts 90%.

LITERATURE:

- [1] Backović, M., Vuleta, J.: *Ekonomsko matematički metodi i modeli*, drugo izdanje, Ekonomski fakultet u Beogradu, Beograd, 2002
- [2] Bahtijarević-Šiber, F.: *Management ljudskih potencijala*, Golden marketing, Zagreb, 1999
- [3] Marušić, S.: *Sustav napredovanja u poduzeću*, Ekonomski pregled, Hrvatsko društvo ekonomista, Zagreb, 2001
- [4] Pupavac, D., Zelenika, R.: *Information Technologies – Basic Factor for Transition into Modern Approach to Management of Human Potential*, 14th International Conference on Information and Intelligent Systems, IIS 2003, Conference Proceedings, Faculty of Organization and Informatics Varaždin, Varaždin, 2003
- [5] Pupavac, D., Zelenika, R.: *Upravljanje ljudskim potencijalima u prometu*, Veleučilište u Rijeci, Rijeka, 2004
- [6] Pupavac, D., Zelenika, R.: *Upravljanje znanjem i zadovoljstvom zaposlenika – čimbenik kompetitivnosti prometnih tvrtki*, Ekonomski pregled, godina 54, Br. 9-10, Hrvatsko društvo ekonomista, Zagreb, 2003, str. 787-808

MANAGEMENT OF FRANCHISE-RELATED COMPANY EXAMPLE VEHICLES TRADE - OPEL CROATIA

ZLATICA KAVIĆ, mag.oec.

Ph.D. Candidate, Doctoral study Management, Faculty of Economics in Osijek, Croatia,
zlatica.kavic@gmail.com

ABSTRACT

Globally speaking, franchising is a growing business sector with vast investment, development and employment potential. Its significance is clearly evident during periods of economic stagnation when the individual franchisee accepting the franchise, can develop into a successful player on the business market with a relatively low financial obligation (depending on the type of business activity). The advantages of franchising in Croatia are still not clearly recognized. The legal aspect, awareness and support on the part of institutions, quality and scope of financial products have not reached a level which would initiate a more significant growth of the franchise sector. One of the more successful franchising models present on the Croatian market is surely the Opel retail network. The complexity of managing the Opel franchise-related company described in this Paper, arises from the complexity of the Franchise Contract which allocates a large scope of responsibility to the franchise recipient (dealer) and requires a high level of competence through delegating into the organizational, planning and managing sectors, as well as into the network resources. It also stipulates individualization of business policy so as to make each of the individual franchisee a direct vehicles importer for their own field of jurisdiction, which poses as a significant distinction in comparison with other brands' retail networks and their structural organization. The dealership rights owner also acts as the company owner and top manager. Considering the fact that the company realizes market share on the territory under its competence surpassing the average Opel retail networks' shares on the European market, it becomes evident that company owners can act as excellent managers as well. The particularity of the franchising contracts between Opel and its retail dealers lies in the synergy with quality management and enables the network to achieve sustain-

able, long-term leading position on the Croatian market in the circumstance of fierce rival pressure of the whole automobile market, especially in competition with brands which have the highest level of market share, so-called „volume brands“, such as Opel and Volkswagen.

JEL Classification: L21

Keywords: Opel franchise agreement, franchise management, legislative adjustment, economic impact

1. INTRODUCTION

Globally speaking franchising is one of the fastest growing sector of economy, with vast investment, development employment and income achievement possibilities. It is related to goods and knowledge transfer from franchise provider to franchise recipient, considering two-way communication and is assumption of dynamic and effective system which provides sustainable development to all interested parties. Franchise department in vehicle sales is the rear one that benefits almost all market potentials in Republic of Croatia. Franchise agreements are foundation of every franchise relation, are very different and make company management to related companies more or less complex business. These agreements vary from management engage in leading business policy and making decisions, respectively autonomy and responsibility level. Franchise agreement which Opel like franchise provider makes with its retail trade representatives - dealers is unique in our state, regarding high engagement franchise recipient in planning, marketing and other aspects of business policy.

Such an agreement was presumption for longtime leadership position of Opel brand on Croatian market.

2. MANAGEMENT OF FRANCHISE - RELATED COMPANY ON EXAMPLE OF VEHICLES TRADE - OPEL CROATIA

Automotive industry is one of the most significant world industry and pioneer of globalization process, and vehicle industry makes yearly income in a billions. In year 2003. in top 100 of the most valuable world brands were 9 vehicle companies and total value of their brands was 91 448 m USD. In year 2010. in top 100 were 11 vehicle brands and their total value was 128 027 m USD, which makes increase

of 40%¹. This shows that future of vehicle industry so far is very perspective, that competition will show enormous growth every year, and finally the biggest benefits will get customers.

2.1 Vehicle trade in Croatia

On many, or almost every, world markets vehicle producers use retail trade representatives or dealers as sales mediators. Dealer network of each producer is organized on the same principle at all markets on which exist. There are some differences from producer to producer, more or less expressed in dealer network organization and rights and obligations of dealers given by agreement for representation made with principal. All these agreements, no matter how we call them in each network, actually are various juveniles, forms and species of franchise agreements.

Croatia has a retail network of about twenty members of various car brands, and each network has a certain number of members. This is franchise business area which is the most representative on Croatian market and where is huge competition which is partly influenced by similar movements on European markets, and partly consequence of Croatian fascination with vehicles like elemental status symbol.

2.2 Opel franchise related company

Opel in Croatia have very effective and widespread network of 18 retail trade representatives - dealers, which covers 27 areas of responsibility. Dealership implies rights and obligations related to sales and marketing of motor vehicles, spare parts and accessories, also and vehicle service. Dealership holder is exclusively natural person who is in 80% also company owner and highest level manager. Example company in this presentation achieves higher market shares in its area of responsibility than Opel achieves in any network Europe wide (10,3% in relation to 6,5%), what denies those who consider that company owner can not be successful manager.

Management of Opel franchise related company is complex area, requiring knowledge and manager competence on all areas - planning, organization and leading to controlling and management resources and all this through prism adjustment interest of principal and dealer as substantive legal entity representative. Opel as franchise provider and retail trade representative in reference complexity have shared target - contribution to retention of existing and attaching new customers

¹ www.interbrand.com (accessed 2012/1/14)

through sales and service efforts. Brand loyalty and loyalty to certain dealer doesn't have to be necessarily related, but in practise relation and dealer attitude in customer awareness actually personify Opel. Therefore loyal Opel customers back to the same dealer in 90% of cases. This identify fact between Opel and dealers are the main reason for making very complex, detailed, financial and operative demanding representative agreement, which defines major part of controlling and bussines. This is franchise agreement category which can not be align neither to agreements of production francsise either to bussines francsise agreements, since it contains characteriscit of both category.

Agreement is made for defined area of responsibility, indeterminate untill contract cancelation consistent agreement terms for motor vehicle sales, spare parts and accesorie sales and motor vehicles service. Area of responsibilty doesn't ensure to delar exclusively rights or territorial protection, according to BER² (Block Exemption Regulation). With BER terms from 2002. (take effects from 2003.) European Commitee liberalise market covered by vertical restrictions to which belongs as well as franchise agreements for vehicle sales, according all interested wholesale and retail subjects can approach to information bases of avaliable products of certain producer like potential buyers. If they want to become part of a distribution network, they should get an approval respectively make a Franchise agreement, what shurely depends on intention of franchise provider.

2 BER terms allows actual delars extra spare parts and other equipments lower price supply on free market, without standards restricitons. BER is constantly update and amend considering in 2013. will take effects total market liberalisation on EU area, meaning every bussines subject assuming all regulates conditions and standards accomplishment, with no speciall appromvements and restrictions can apply at producer and enter system of specify vertical chain. Important is that existing vertical restrictions are less dangerous than horizontal restrictions (between direct competitors), because they are providing specify effectiveness and quality guarantee for ultimate customer.

Based on existing agreements dealer is actively committed on its own cost or from common funds which are casually formed from campaign to campaign for sales and service promotion. Opel is committed ocassionally supply dealer with marketing material, price and quantitiy are defined by Opel. Dealer is independent

²www.eur_lex.europa.eu (accessed 2012/1/15)

in his activities so he is exclusively responsible for success and profit of all business activities. Making agreement dealer bases on his market analysis and on his fact of knowing it. Agreement can make a dealer who guarantee to comply mandatory standards any time and in all his objects. By mandatory standards Opel regulates principles and required specifications regarding infrastructure and dealer activities on a positive and constructive way for Opel brand, Opel network and service users. Mandatory standards are related to dealers business locations, corporate identity, IT structure and technology, capital and dealers stuff.

During making agreement, dealer doesn't pay access fee as well as royalty later in business. Opel makes profit on basic products which are sold to dealer and on additional activities and equipments that dealer needs to take over, build in and resolve. Dealer except base margin, has also right to so called quality margin, which depends on level of fulfilment sales standards, customers, staff and information exchange.

Periodically Opel determine minimal obligations for vehicle and spare parts buyment, and minimal vehicle stock and demonstration vehicles. In agreement are also determine warranty for sold vehicles and spare parts, refund for warranty works, special policies and campaigns. For the purposes of reactions on variable market conditions and for service purpose to customers which are outbalance their expectations in sales and service, Opel is obligate to develop programs which are the key for sales and in which dealer respectively certain stuff categories should be involved.

Also Opel can implement customer satisfaction survey on regular basis for area of responsibility of certain dealer. Collected data are used for dealer valuation purpose to comply or to outmatch customer expectations, as prerequisite for making longterm sustainable competition advantage.

Segments of agreements that provides Opel longtime leader position on Croatian market (2002-2011) besides quality and Opel vehicle design certainly are regulations which makes every dealer also and general representative and distributor for its area of responsibility and direct importer. All other networks operates by principle of one general representative - importer for all country. This regulation puts Opel dealer into a privileged position regarding its own policy, advertising, sales selection etc., but also as presumption which requires high concentration of knowledge and competence.

One of the regulations which makes Opel network different than others is that dealers are included in organization, planning, and business activity management through election their representatives in Franchise board (FB), which is the highest level board, and other boards and work groups that together with Opel brought important decisions and guidance for network. Franchise board is consist of equal number of members selected by Opel and dealer network (5+5). It's purpose is to improve communication between Opel and network and to strong mutual communication quality regarding questions that matters for both side. Principles of functioning FB are based on completely conciliation and finding arrangements acceptable to both parties, respectively completely equal two-way communication. All FB minutes are forward to Opel headquarter of franchise board, and to Euroda³, so it gives major significant to decisions. Basic advantage that brings FB is mutual interaction and opinion exchange about news and principal plannes and also about attitudes and network problems what ensures high adjustment, flexibility and fast reaction on market. Function system according FB on Croatian market is present only at Chevrolet⁴, while all other networks function on princip of prinipal directed bussines, respectively franchise provider. Other boards are: marketing-sales board, aftersales board, IT board, education board etc. Effectively and high competence organization, execution and controlling of overall management process in Opel franchise related companies, like one of the leading vehicle producer, with specificities that provide competitive advantage, allows effective and timely behaviour on market which is dinamic, complex, financially very sensitive and intensive as well as trend susceptible.

The most valuable franchise element certainly is brand, which gives consistent to customer, and partner relationship that developes on relation franchise provider (Opel)- franchise recipient in its definitiveness and mutual interactions results with optimal result for all parties.

2.3. Franchise economic effects

Automotive industry, like one of the main promotor of global process is plastic example franchise implementation on distributive vehicle sales area that arises like corollary disproportion between technologically progress, with respect to enormus increase product capacity and purchasing respectively absorbtion market power. Complex relations between franchise provider and franchise recipient results eco-

³ European association Opel/Vauxhall dealers

⁴ Chevrolet is like Opel, brand owned by General Motors

conomic implications that improves both parties. Franchise recipients by brand quality products and services acquires confidence of large number of customers, and franchise provider expand and build own image and brand.

Because of, generally speaking, raise of life standard, purchasing power, free time, social relations modifications, education level and similiary, customers requires larger quantity and more quality products as well as service that goes beyond their expectations. Franchise of worldwide automobile brand like Opel, ensures quality and rapidly obligations performances to customers, that ensures market leadership. In addition it bears higher income and faster capital turn. Franchise economic effects in narrower sense are reflected in employment increase and accomplished bussines, respectively net income.

In 2010. vehicle sales department in Croatia accomplish net income in amount 26 million HRK. Concerning 2009. vehicle sales achieved decrease of net income for 73,8% (total cca. 97 million HRK), what is direct effect of economic crisis influence on that sales department (Promocija plus data).

2.4 Law regulations

Each country with their law regulations defines conditions and franchise bussines ways, what creates regulation framework that provides law and legislative bussines safety for franchise provider and franchise recipient.

Franchising system appears for the first time in Croatian legislation in Trade Law (NN 102/203). Area is very narrow defined and actually is based on best bussines practise precedents that are regulations and elements of Franchise agreement. Since franchise agreements introduce some elements that implicate certain restrictions and are edgy contradiction with Law on Protection of market competition (NN 122/2003) exactly by this Law is defined that such agreements are not considered illegal respectively quote agreements types that are excluded. However, based on Law article 11. paragraph 4. Croatian Competition Agency ex officio can be initiated valuation procedure of each agreement if effects of this agreement intrude restrictions to entrepreneurs which are not necessary for achieve an objective respectively allows to entrepreneurs excluding from market significant competition part for ware and services that are object of agreement.

Alignment of Croatian legislation with the *acquis communautaire* brought some improvements, however this area is still unsuitable in application and prob-

ably will stay like this until entering EU. In vehicle sales sector comes to big problems in daily working operations and company functioning related to tax and customs authorities of Republic Croatia. Arises difficulties considered professional competence of the administration respectively issues that are still related to arbitrary political conditions, arising personal interpretation and selective application insufficiently developed legal regulations for the purposes of favoring certain brands, respectively companies.

This is particularly evident in capital intensive activities like vehicle sales where there is a huge competition and all that in period of economy crisis and the recession, which is vehicle sales sector particularly exposed to. In periods of prosperity and economic growth policy influence is not able to annul market brand superiority and management that are not having „policy umbrella“, but the conditions of stagnation and falling markets, job insecurity, loans restrictions, when the state becomes most influential customer and it provides an opportunity for those who were not market leaders, but are the leaders of certain political lobbies.

The problem of political interference in free market competition and deficiency of legislation are direct reasons for low interest of global franchise companies for business expansion in Republic of Croatia. It remains to hope that the competent institutions Republic of Croatia will recognize the need of urgent intervention in this economic area, because „companies which today decide to expand their business by becoming franchisors in Croatia are facing a legally unregulated area, insufficiently educated potential franchisees, and a dearth of adequate financing products and services for franchise purchase.“(Alon,2010.,152)

3. CONCLUSION

Franchise business system in Republic of Croatia is still not enough recognized as model for generating workplaces with relatively small financial investments (depending on business activity). Legislation is weak and indefinite, obvious institutional indifference and bureaucracy, with no financial institutions support while influences of political lobbies are on overall levels. It is expected that the qualities made by accepting *acquis communautaire* as a condition of joining that economic and political supranational organization, will result with concrete and effective measures to regulate the real economy on market principles and the establishment of institutional regulatory and financial frameworks necessary for growth and economic development, as well as franchise sector.

Vehicle sales is one of the franchise business category that relatively well used market potentials in Republic of Croatia. It is a capital - intensive activity with great support globally known and valuable brands in the synergy of their relationships creates great opportunities for development and improvement of their own business and socially responsible behaviour. Management of Opel franchise related company is complex area.

This complexity arises from the regulations of franchise agreement made by Opel principal on the way to brings dealer huge responsibility of the individual decision making, respectively leading business policy which in its entirety should be in accordance with the Opel policy. Dealers are included in organisation, planning and network business activities by delegating their representatives in Franchise board and its working groups together with Opel make important decisions and working guidelines.

Each dealer is direct vehicle importer, which enables the speed of reponse and creation an individual approach to every customer, and this is the presumption of creating greater value for the customer. The above factors are the foundations of Opel distinctions related to all other networks in Croatia, and premise for longterm sustainable competitive advantage.

Efficient and highly competent organisation, implementation and management process control in Opel franchise related companies with specificities that brings, provides dealers network high business autonomy and predisposition of an efficient and timely response to the market that is dynamic, complex, highly competitive, financially sensitive and demanding, and subject to trends.

REFERENCES

Alon, I. (2010): Franchising globally: Inovation, Learning and Imitation (accessed 2012/1/20) <http://library.nu/docs/GZJL5FMV2K/Franchising%20Globally%3A%20Innovation%2C%20Learning%20and%20Imitation>

Law on Protection of market competition, Narodne novine 122/2003

Trade Law, Narodne novine 103/2003

„Promocije plus“ data

www.interbrand.com (accessed 2012/1/14)

www.eur_lex.europa.eu (accessed 2012/1/15)

PROGRAM MANGEMENT PROCESSES IN PHARMACEUTICAL INDUSTRY-CASE STUDY

Dražen Kostelac, mag.tech.ing¹

¹JGL d.d. ,Croatia, drazen.kostelac@jgl.hr

ABSTRACT

Today, effective project management requires various skills such as understanding people and the ways in which they interact. This article will address the following aspects: the competitive priorities in project management analyze and evaluate the competitive priorities in program management and explain project management processes. Therefore, the difference between project and program management lies in the fact that, in program management would be managing a set of projects. In pharmaceutical case study program management supports crucial elements. Corporate strategy and business as usual environment. Finally, the role of the project management office is also very important in program management coordination and controlling.

JEL Classification: L21, O32

Keywords: program management, processes, pharmaceutical facility, case study

1. INTRODUCTION

Today, after 21 years on the market, JGL has transformed into an agile, project-oriented pharmaceutical company. According to its own estimate, the company holds 6 % share of the Croatian market and is third indigenous manufacturer in Croatia. The total revenue growth rate for the last eight years of about 30% per annum makes the company one of the fastest growing and one of the most stable in the country.

Project Management is a strategic imperative for companies because argue that it provides managers with a set of tools that their ability to plan, implement and manage activities to accomplish specific organizational objectives.

Effective project management requires various skills such as understanding people and the ways in which they interact, technology, budgets and competency in analyzing results and adjusting the plans to deal with changes. Additionally, the success of a project depends on many factors where a fundamental aspect is to anticipate the majority of the risks so that the project is completed successfully.

This article will address the following aspects:

- The competitive priorities in project and program management
- Analyze and evaluate the competitive priorities in program management
- Explain program management processes

2. PROGRAM MANAGEMENT

Program Management has been defined as follow:

The action of carrying out the coordinated organization, direction and implementation of a dossier of projects and transformation activities (i.e. the program) to achieve outcomes and realize benefits of strategic important to the business.

Therefore, the difference between project management and program management lies in the fact, in program management JGL would be managing a set of projects. Furthermore, IPMA (International Project Management Association) claims that Program Management supports three crucial elements which are:

- Corporate Strategy
- Delivery Mechanisms for change
- Business as usual environment

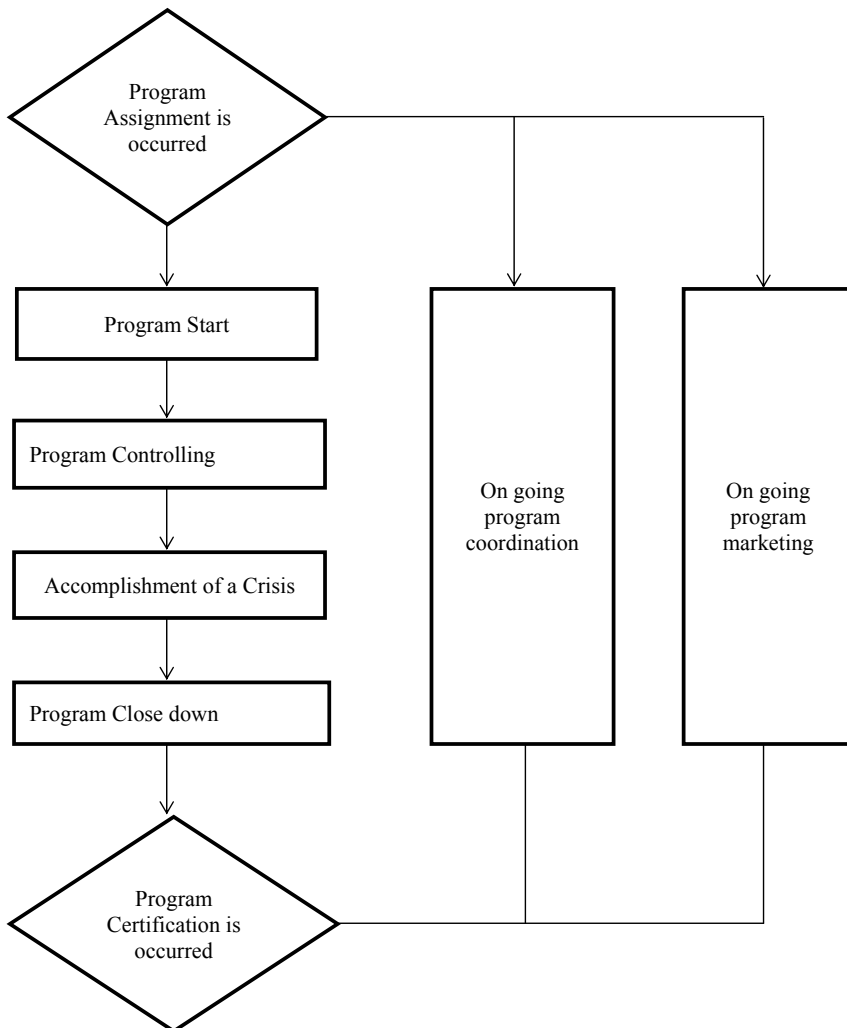
2.1. Program management at JGL

JGL does not have program management structures in place such as program management, program structures, program marketing and a program office. Additionally, even though JGL have the PMO who represents competencies in program management, it appears that the PMO is not yet fully responsible for program management since the company has not yet implanted program management. However, it appears that PMO and the executive board are supporting the implementation of program management since they would like to prepare a solution.

Moreover, the company would like to implement a number of projects such as the building of a warehouse, production facilities and new offices which may be

referred to as a program since they are interrelated and they would all help the company to continue expanding. Therefore, all these projects will help JGL to achieve a common strategic goal. In order to implement program management JGL needs to involve all the departments of the organization and the PMO needs to have a strategic role and strength.

Figure 1: Program Management Processes



Source: made by author

3. PROGRAM MANAGEMENT PROCESSES

In order to implement the program management process JGL has to follow the following steps which are shown in Figure 1.

This is very similar to the project management process. However, the difference between the two processes lies in the fact that in the project management process JGL would be managing one project which is non routine whereas in program management processes the company would be managing a set of independent projects .

3.1 Program assignment

The first step of the program management process is the program assignment. This is where the strategy and the direction of JGL would be decided. For example in order for JGL to continue to sustain its growth of 30 % annually, the company has identified a number of construction projects and the development of the IT and organization infrastructure to support this.

3.2 Program start process

The next stage is the program start process. This is where JGL would need to produce a project plan for each program stating the objectives of the program, the scope, business objectives and the benefits. For example one of the benefits for JGL with the achievement of this program would be that it is going to start exporting to new countries.

Furthermore, JGL would also need to design the program organization, team building activities and communication channels which are required in order to strengthen the program team. Additionally, the company also needs to plan risk management measures which it is going to take, measures how it is going to measure the quality during the program a cost plan for the entire program, Work break down structure, Gantt chart.

3.3 PROGRAM COORDINATION

Additionally, JGL would have to conditionally ensure that the program is going on according to the objectives which have been set in the program start process. Program coordination starts with the program assignment and finishes at the program approval. Program coordination includes the continuous quality checks, con-

tinuous communication between the program manager, the program team members and the program owner. Additionally, continuous program marketing which will be explained below will be carried out.

3.4 Program controlling

The main aim of the program controlling is to analyze the program status, the development of the program organization and the program culture, the change in the program objectives, the creation of progress reports, design of the program context relationships and the carrying out of the program marketing. This is a very important phase and takes place continually throughout the whole program.

During this phase JGL would be managing the program crises, program opportunity. JGL may identify the crises and the opportunities during the program start and the program controlling. The company also needs to identify possible measures with how it is going to deal with these opportunities and threats. This is an essential step in order to overcome the damage of the crises and so as to ensure that the progress of the project is not hindered.

3.5. Program marketing

Program Marketing enhances the attention of management and ascertains that the program results are communicated. Furthermore, program marketing promotes the program organization identification with the program and is a program management task which has to be completed during the sub processes. The program marketing function has to prepare adequate materials (newsletter) in order to get its message across in the most effective way possible. In order to reap the benefits of program management, JGL needs to design the program management process effectively.

3.6 Program close-down process

In this process JGL would be planning and completing the remaining program tasks, the evaluation of the program, and the dissolution of the program team. However, before closing down the program, the program manager has to show to the program board that the benefits which have been projected during the start phase have been realized. Finally, the lessons which have been learnt have to be passed on to the program management office in order to be stored for future reference.

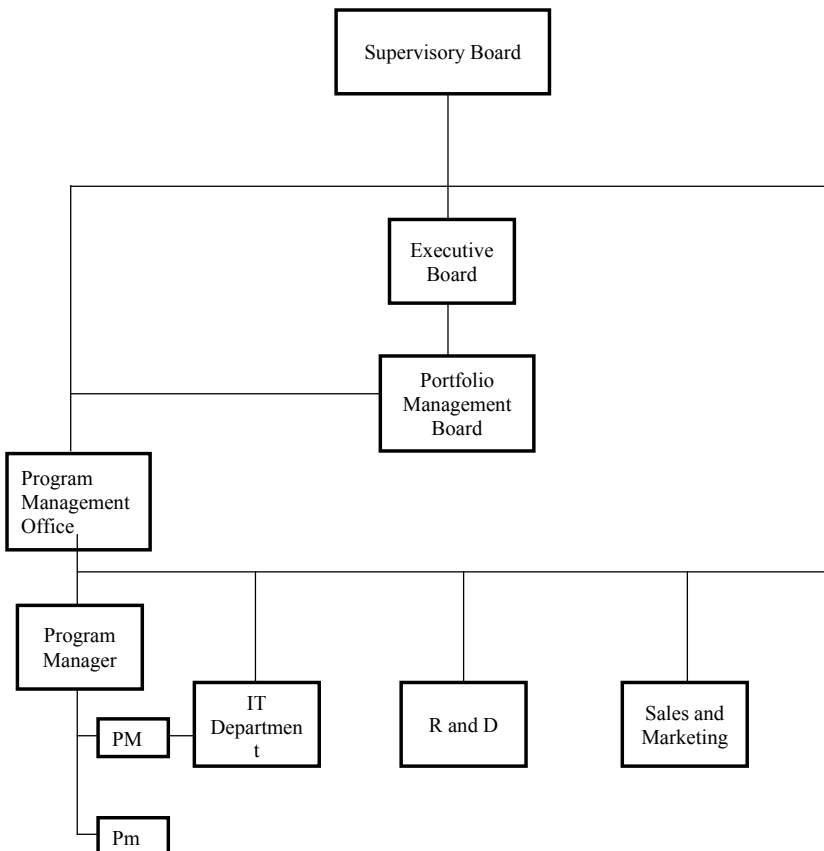
4. DOCUMENTS FOR PROGRAMME MANAGEMENT

In order to implement program Management JGL has to prepare documents for the implementation of Program Management. The document which will be prepared for the organization is an Organizational Breakdown structure.

4.1 Organizational Breakdown Structure

The Figure below shows the sample organizational breakdown structure for the future program organization of JGL. This shows the roles of employees in the program and their reporting lines. The supervisory board is the main reporting board in the structure since it is responsible for the strategy and direction of the company.

Figure 2: Organizational Breakdown Structure (source: made by author)



5. BENEFITS OF IMPLEMENTING PMO; (engl.*Program management Office*)

Apart from the above advantages, JGL will also implement the program management office. Since the company may have different projects, these would compete for the same resources and the PMO would ensure that the resources are adequately allocated and organized. Additionally, the PMO would provide information to the different project managers about the changes which are occurring inside and outside the organization that may affect the project's success.

5.1. Resolving the program crises

During this phase JGL would be managing the program crises, program opportunity.

PMO may identify the crises and the opportunities during the program start and the program controlling. The company also needs to identify possible measures with how it is going to deal with these opportunities and threats. This is an essential step in order to overcome the damage of the crises and so as to ensure that the progress of the project is not hindered.

The PMO decreases the time and costs related to developing the project from scratch since it may use different tools which have already been used for past projects. Furthermore, it provides the company with a consistent measurement for the projects performance. Since the PMO is the channel between the project and the line managers it assists in the escalation of project issues and this makes risks more visible. Furthermore, the PMO helps the projects to be mutually dependent since it acts as a communication hub between projects.

Additionally, the PMO provides project management training, coaching and support to the employees. Furthermore, it serves as a knowledge hub where the knowledge which is gained from the projects remains stored within the organization and people may refer to it. Therefore, this helps to retain employees and knowledge within the organization. The PMO also provides the teams with the tools and resources required. Additionally, it may provide reports to notify teams of the status of the project and potential issues. Therefore, the PMO helps to improve the business performance.

6. CONSLUSION

JGL would have the following benefits if it would implement program management. First of all the company would be selecting the projects that provide the

maximum benefits that are in line with what the organization can deliver. Furthermore, JGL would be selecting the projects that provide the greatest advantages and are directly related to its strategy.

If for example the building of the production facilities and utilities provides the greatest advantages the company would do those first. Additionally, the organization will ensure that all the projects are implemented using similar processes and check points. Moreover, the resources will be assigned to the different projects more effectively whereby the prioritized projects would have the least amount of bottlenecks.

Besides the implementation of program management would allow JGL to respond more effectively to strategic initiatives since it would be bridging the gap between strategy and the achievement of projects and processes. Therefore the business strategy and the projects strategy would not be separate but would be integrated. The company would also be integrating the projects which have a common objective together.

Moreover, the company would also benefit from a better risk management system and it would have a better cost management. Since the management of the program would be centralized.

Finally, the program managers within the program structure will manage the program staff and the project managers and they will provide vision and an overall leadership to their subordinates. Additionally, the program managers will ensure that the whole program is meeting the goals, schedule and the budget.

REFERENCES:

Cooper, R.G., S.J. Edgett, and E.J. Kleinschmidt, *Portfolio management for new products*. 2001: Basic Books.

Kerzner, H., *Project Management. A Systems Approach to Planning, Scheduling and Controlling*. 8 th Edition, 2003.

JGL d.d., Rijeka, Croatia (internal documents)

PMA baseline Wien www.p-m-a.at/ (20.02.2010)

ICB IPMA Competence Baseline Version 3.0 www.ipma.ch (11.01.2010)

Project Management Institute www.pmi.org (01.02.2009.)

THE IMPORTANCE AND ROLE OF MANAGEMENT IN HIGHER EDUCATION

Jozo Krajina¹

¹J. J. Strossmayer University of Osijek, Faculty of Teacher Education in Osijek, Croatia,
jkrajina@ufos.hr

ABSTRACT

One can be present in the market game on a global level only if the continuous acquisition of new knowledge and skills is secured in order to retain the position or open up new possibilities by means of development and the implementing of innovation. Education is a determinant of every national economy. The educational process can be influenced, yet it also influences (has an influence). The decision regarding the implementation of management in education should be based on the insight that countries with a higher level of human capital and better competitiveness within the workforce tend to develop and progress more intensely and rapidly. The goal of this paper is the analysis of importance and role of educational management in the Republic of Croatia. The analysis includes specific indicators which provide insight into and interpretation of the educational system. In order to comprehend them one must employ the systematic approach.

JEL Classification: J24

Keywords: management, educational management, human capital, education

INTRODUCTION

Nowadays the role of higher education in contemporary society is more important and possibly more crucial than ever before. Accordingly, the higher education environment is undergoing very rapid changes. The Lisbon Strategy of the European Union (European Union, 2000) discusses the importance of investing in human capital, which enables the creation of competitive knowledge-based economy. Aside from its positive effects on growth, education is considered a priority of the economic policy, also because of the opportunities regarding social inclusion of marginalised groups, the unemployed and the poor (Babić, 2004., 30.).

The changes are conditioned by the omnipresence of globalisation, informatisation and the growing markets. The European Employment Strategy asserts the importance of investing in lifelong learning and the implementation of National Reform Programmes (Council Decision, Part II of the Europe 2020). In the globalised world the organisation of the education system has a key role in securing economic development, and human resources play the most important part in the process, in other words, the importance of human capital is incomparable to other resources. Therefore, the possibility of adjustment to new conditions brought on by globalisation is unimaginable and unattainable without high quality knowledge comprised of the human capital. Consequently, the role of the education system is of vital importance in creating individual responsibility for professional development.

One can be present in the market game on a global level only if the continuous acquisition of new knowledge and skills is secured in order to retain the position or open up new possibilities by means of development and the implementing of innovation. The characteristics of individuals and organisations whose positions are currently superior clearly suggests that their competence and expertise are a product of lifelong learning. Institutions and organisations are in need of managers in education who have the ability to provide a creative atmosphere of active learning.

GENERAL FEATURES OF MANAGEMENT, FROM MANAGING TO MANAGEMENT IN EDUCATION

The term management is very complex. Management is the process of shaping and sustaining the environment in which individuals, working together in groups, efficiently reach the determined goals (Koontz & Wehrich, 1994, 4). However, in order to get the full impression of management, it is necessary to complement this definition:

1. As managers, people perform managerial functions of planning, organising, staffing, directing and controlling.
2. Management can be applied in any type of organisation.
3. It refers to all managers on all organisational levels.
4. The goal of all managers is identical; to create excess.
5. Management is about productivity; this includes efficiency and efficacy¹.

¹ Ibidem

Essentially, management appeared at the very beginnings of civilisation. Subsequently, the modern perception of the term appeared with the emergence of industrial society. This era produced thinkers such as Frederic W. Taylor (*Scientific management*, also called Taylorism) and Henry Fayol (Operative management, classification of management functions). We might say that since that time management has not lost its importance. On the contrary, one witnesses constant expansion of management into other work sectors (non-profit sector, non-productive sector, the military, sports, culture, education).

One should certainly differentiate between the term "leadership" and the term "management". Leadership and management are two different, yet complementary systems of action. Each is comprised of specific activities. Likewise, in order to succeed in today's business environment, both are required (Kotter, 1998). Leadership is a skill which demands the envisioning of the future and is often grounded in a vision towards which everyone in education directs their work. Thus, it is necessary to have skillful leadership and competent management. Leadership and management are obviously connected. Leadership is one of the internally oriented activities of management which applies to people and social interactions (Bahtijarević Šiber, 1999.). Nowadays leadership and management are increasingly differentiated since each of them has its own peculiarities. However, the topic of this research is not to redefine terminology, and therefore the term management in education will denote the existence of certain skills that leaders possess within the function of management.

During the past 20-30 years educational management (Educational Management, Leadership in Education, School Management) has grown in importance. Educational management unifies the human, physical and financial capital within the educational process with the goal of creating new knowledge and competence in analysing, planning, implementing and evaluating of short term and long term educational activities. The public sector on all its levels (ministries, universities, education agencies, other organisations) needs to base its activities on the knowledge in educational management. In order to understand management in education, it is necessary to understand the environment in which one acts. The Educational Management System needs to be adapted to individual circumstances in order to ensure its efficiency and efficacy. Due to the fact that education is of public interest, higher education institutions have a particular type of responsibility in creating their study programmes. Also, they represent a critical public space which provides

citizens with knowledge, skills and ethical responsibility. One might even say that education is a subsector of economy (McLaren, 2003).

HUMAN CAPITAL AS THE FOUNDATION FOR DEVELOPMENT

It is a well-known fact that the relationship between the level of education (years of schooling) and the public sector funding for education is in very strong correlation with the rate of salary increase per capita (Barro & Sala-i-Martin, 1995). Knowledge is the human capital which is acquired and used during a lifetime. In order to acquire knowledge individuals make their way through systems of formal education². However, due to the development of new technologies in the globalised world, having a formal education is not enough. Being a player in the market game demands personal development and upgrade within the system of lifelong learning³.

The aforementioned facts speak in favour of the claim that educational management is extremely important and that its role cannot be overlooked. The everpresent competition and the laws of the market encompass the educational system as well. Having human capital means having the opportunity to create a fortune. Educational institutions and the level of education within the general population does not only affect the emergence of the human capital, but also the strengthening of the socially beneficial and the weakening of the dysfunctional types of social capital. Education, without a doubt, offers the adjacent non-market effects (e.g. easier access to information, better care of one's own health, more active participation in social life, which encourages responsible democratic behaviour of citizens, the election of a democratic government and the governing state of law). Education should be able to improve the potential for employment, as well as workforce competition (Bejaković, 2006., 402). The decision regarding the implementation of management in education should be based on the insight that countries with a higher level of human capital and better competitiveness within the workforce tend to develop and progress more intensely and rapidly.

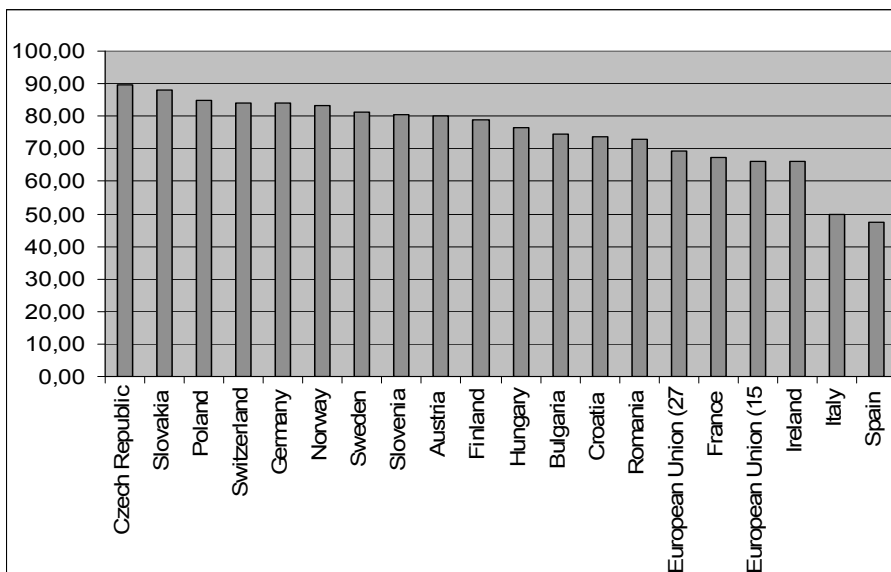
² Formal education presupposes knowledge acquired in educational institutions – schools, vocational studies and academic university studies

³ Lifelong learning is realised in different forms throughout one's lifetime and is one of the most useful types of learning.

RESEARCH METHODOLOGY

The goal of this paper is the analysis of importance and role of educational management in the Republic of Croatia. The analysis includes specific indicators which provide insight into and interpretation of the educational system. In order to comprehend them one must employ the systematic approach. The research will contain the comparison of specific data from the selected countries of the European Union and the Republic of Croatia. The analysis is conducted on the basis of results available in statistical databases. For the purpose of assessing the importance and role of education, the analysis includes the average values for the following indicators over several years: the percentage of the population with at least upper secondary education attainment⁴ (25 to 64 years of age), the percentage of the population taking part in lifelong learning (25 to 64 years of age), the structure of the employed population according to level of education and the structure of the unemployed population according to level of education. The abovementioned indicators were compared, analysed for interconnectedness, and subsequently lead to several conclusions.

Graph 1: Persons with upper secondary or tertiary education attainment by age (%), age from 25 to 64 years (average 2001-2010)



Source: <http://appsso.eurostat.ec.europa.eu/nui/show.do> (25 March 2012)

⁴ In the Republic of Croatia this refers to the completion of secondary school by passing the high-school leaving exam ('matura')

The graph shows that in Croatia in the 2001-2010 period on average 73.69% of the population between 25 and 64 years of age has at least secondary education attainment. This percentage is higher than the average of the European Union as a whole, as well as of certain countries such as, for example, France, Ireland, or Italy. The countries with the highest percentage of population with at least the secondary education attainment are the Czech Republic, Slovakia and Poland. It is, therefore, obvious that the percentage of population with secondary school attainment in the Republic of Croatia is relatively high. However, this information can be deceiving because there are many differences between education systems of individual European countries, such as the duration of compulsory education, the number of school hours, the percentage of pupils and students among the general population, and similar (*Sudać, D. & Fatur Krmpotić, I. 2009., 320.*).

Table 1. Distribution of working age population by educational attainment (persons in employment)

Distribution of working age population by educational attainment	Persons in employment (%)		
	2008.	2009.	2010.
Uncompleted elementary school	3,5	3,3	2,7
Elementary (compulsory) school (8 years)	14,7	14,4	14,7
1 to 3-year vocational secondary school	32,7	31,8	28,7
4-year vocational secondary school	26,6	26,7	28,5
Grammar school	3,1	3,0	3,3
2-year-non-university degree	7,2	7,2	8,0
University and postgraduate degree	12,2	13,6	14,1
Total	100,0	100,0	100,0

Source: <http://www.dzs.hr/>, Statistički ljetopis 2011., (24 March 2012)

Table 1 shows the structure of population in employment. It is visible that the percentage of the employed with upper-secondary or tertiary education ranges from 7.2% to 8.0 % (for a 2-year-non-university degree), and from 12.2% to 14.1% (for University and postgraduate degree). The percentage of the population with completed higher education is the key factor for building the economy of knowledge, which is nowadays the most important competitive asset of each country. Educational management should certainly take this information into account in order to increase the number of persons with a university diploma. What is required in order to realise such goals is the synergy of all participants in the

educational process. In doing so, one must employ the systematic approach, and the emphasis should be placed on programmes of study which should be guided by the workforce demand and not necessarily offer set solutions, in other words merely create the workforce supply. The goal of the National Competitiveness Council was to create a 29% workforce with upper-secondary and tertiary education attainment in the Republic of Croatia. However, in the observed period (from 2008 to 2010) there has not been a significant increase in the percentage of the employed persons with upper-secondary and tertiary education attainment. The possible cause of this is the fact that there is an increase in the number of unemployed persons with completed upper-secondary and tertiary education. The structure of the unemployed population according to the level of education is presented in Table 2. It is visible that the percentage of the unemployed has increased, in particular those with the highest level of expertise. The number of unemployed persons with elementary education has decreased, whereas the negative growth trend starts with the secondary level of education and continues along post-secondary and tertiary education attainment in the period from 2008 to 2010. In this way there is no possibility for incorporating the potential of the unemployed with a diploma in the development of the national economy of knowledge.

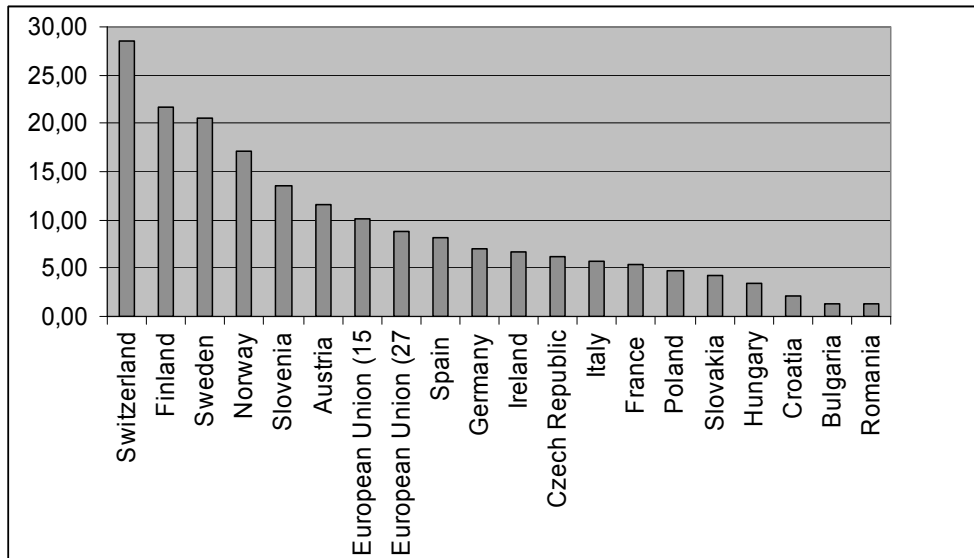
Table 2. Distribution of working age population by educational attainment (unemployed persons)

Distribution of working age population by educational attainment	Unemployed persons (%)		
	2008.	2009.	2010.
Uncompleted elementary school	-	-	2,3
Elementary (compulsory) school (8 years)	18,2	15,9	14,9
1 to 3-year vocational secondary school	37,5	37,8	34
4-year vocational secondary school	27,1	27,9	30,4
Grammar school	4,2	4,7	4,0
2-year-non-university degree	5,1	4,6	5,9
University and postgraduate degree	5,7	7,0	8,5
Total	100,0	100,0	100,0

Source: <http://www.dzs.hr/>, Statistički ljetopis 2011., (24 March 2012)

Education, including lifelong learning, has a crucial importance for the development of the economy and the society as a whole. In order to progressively contribute to the economic and social development in general, it is foremostly necessary to improve its quality and ensure its development in accord with the demands of the modern age and educational innovations (Borozan, Marković, 2010., 39.). Graph 2 displays average values in the period 2001-2010 for population aged 25 to 64 according to the degree of participation in lifelong learning. The list of countries with the highest percentage of participation in lifelong learning is headed by Switzerland, followed by the Scandinavian countries with over 20% of the population involved in various lifelong learning programmes. Unfortunately, the Republic of Croatia displays a very low percentage of participation in higher education, namely only 2.19%. According to these indicators, Croatia is only ahead of Bulgaria and Romania which exhibit less than 2% participation of the population in lifelong learning programmes. It is also noticeable that the Republic of Croatia has almost five times fewer members of the population involved in some of the programmes than, for example, the average of all the EU countries. The countries that underwent a similar process of transition as Croatia, such as Slovenia, the Czech Republic, Slovakia, Poland, or Hungary, exhibit a much higher percentage of participation in lifelong learning programmes. From all the aforementioned results it is evident that it is up to educational management to notice such data, include them in serious analyses and develop programmes which will be socially acceptable. The development of high quality lifelong learning programmes is important because in this manner it is possible to reduce the number of unemployed persons, enable requalification of existing professions, which directly influences the unemployment rate. Students in the Republic of Croatia on average study for a longer period of time and of all the enrolled individuals only 2/3 complete their university studies (Bejaković, 2006.). The aforementioned facts point to the existence of certain issues in the educational system, as well as the broader economic environment. Management of educational institutions should increase the efforts in implementing and the analysis of the existing options, because economic growth is not achievable without investing in knowledge. The economic output of each individual country should include contribution to knowledge, in other words without contributing to knowledge in modern economy there is no long term sustainable economic growth.

Graph 2: Participation in education and training in %, age from 25 to 64 years (average 2001-2010)



Source: <http://appsso.eurostat.ec.europa.eu/nui/show.do> (25 March 2012)

CONCLUSION

Education is a determinant of every national economy. The educational process can be influenced, yet it also influences (has an influence). Management within institutions of higher education must adopt the existing models of corporate management. Furthermore, higher education institutions should develop the principle of competitiveness in order to reduce costs, in other words maximise the profit. Gaining access to knowledge can be realised by means of postgraduate studies programmes (MBA programmes) and/or within obligatory lifelong learning programmes. Programmes of higher education institutions must be oriented towards workforce demand and not simply create, i.e. supply the workforce. Emphasis should be placed on cooperation between business partners (external surroundings) and management of individual universities (faculties).

The research shows that there is a great number of unemployed persons with completed upper-secondary and tertiary education. In order to reduce the number of the unemployed, it is necessary to, by means of various study programmes, develop and enable the emergence of human potential (workforce) which will be

prepared to accept the existing demand for specific professions and jobs. In the event of the opposite scenario, there is a countereffect, as the education system becomes too saturated and its potential remains unused. Longterm studying and a relatively small number of students who enrol and do not finish their university studies also do not contribute to the development, since the individual possibilities remain undiscovered.

For the purpose of envisioning the future which entails the defining of one's role in it, creating a vision in order to redirect one's work and achieving efficiency, it is necessary to have competent management. Study programmes of higher education institutions should enable the attainment of a specific set of knowledge which includes skills and competences in the field of management. In this sense, it is vital to strategically rely on the following concepts:

- think long term
- develop creativity and innovation
- reject bad practice
- develop opportunities for perceiving the external environment
- observe everything as a whole

The paper presents educational management by pointing out the importance of its role in the institutions of higher education. It must be emphasised that specific market principles that are present and characteristic of corporate management in the process of development and implementation of management in all areas of human activity also imminently exhibit some unpopular features (layoffs, salary reductions, cost reductions, increase of profit, etc.). Therefore, commercial values should not be a determinant in higher education. Higher education institutions should be free to proceed with their mission. This particularly refers to the freedom to act, critically assess, and develop society which accepts the values of human labour and democratic principles. Educational management should develop its own programmes which will incorporate the latest achievements and insights. In doing so it should be guided by the fundamental principles of human dignity and a more humane society. It is, therefore, up to educational management to answer the question of how to remain the site of social development in modern society, as well as how to continue promoting values in global surroundings.

REFERENCES

Babić, Z. (2004.) Participacija i ulaganje u obrazovanje u Hrvatskoj, Privredna kretanja i ekonomska politika, Ekonomski institut, Zagreb i Ministarstvo financija Republike Hrvatske, 29-53, ISSN 1330-187X

Bahtijarević, Šiber, F. (1999.) Management ljudskih potencijala, Zagreb, Golden marketing, ISBN 953-6168-77-4.

Barro, J.R. & Sala-i-Martin (1995.) Economic Growth, New York, McGraw-Hill, ISBN: 0070036977.

Bejaković, P. (2006.) Uloga obrazovnog sustava u postizanju zapošljivosti i konkurentnosti radne snage u Hrvatskoj, Društvena istraživanja, 3 (83), 401-425, ISSN 1330-0288

Borožan, Đ. & Marković, R. (2010.) Cjeloživotno obrazovanje nastavnika: u rascjepu između stvarnosti i svijest i o važnosti, Ekonomski vjesnik, 1, 28-43, ISSN 0353-359X.

European Union, 2000, Presidency conclusions, Lisabon European Council, pristup na http://www.europarl.europa.eu/summits/lis1_en.htm (19.03.2012.)

Council Decision on guidelines for the employment policies of the Member States, dostupno http://www.ec.europa.eu/eu2020/pdf/proposition_en.pdf (19.03.2012.)

Koontz H. & Weihrich, H. (1994.) Menedžment, Zagreb, Mate, ISBN 953-6070-08-1

Kotter, J.P. (1998.) What Leaders Really Do, Harvard Business Review of Leadership 37, Harvard business review Paperback, Boston

McLaren, P. (2003.) Critical pedagogy and class struggle in the age of neoliberal globalization: notes from history's underside, Democracy & Nature, 9 (1), 65-90.

Sudać, D. & Fatur Krmpotić, I. (2009.) Vrijednost ljudskog kapitala u Hrvatskoj- usporedba s odabranim europskim zemljama, Ekonomski pregled, 60 (7-8), 315-331, ISSN 0424-7558

www.dzs.hr

www.epp.eurostat.ec.europa.eu

DESTINATION MANAGEMENT AND DESTINATION MANAGING PROBLEMS - EXAMPLE VINICA COUNTY

VALENTINA LADIĆ, mag.oec.

ABSTRACT

Despite the past ten year effort to produce new segments of the supply, the result of this development is the current situation where all destinations offer a lot of similar content and average quality for the guests, which is a very logical response to market demand and its conduct rules. Strategy development or other strategic development plan is necessary for each region, which plans to develop tourism in their area and in accordance with existing infrastructure and tourism potential, to be competitive on the market. The only developed way out of wasted product and mass tourism is the offer diversification in tourist destinations, towards natural and acquired developmental prepositions, and accordingly to that, a rapid development of new products that will seek the market and its target client population. That is why destination management recognizes the diversity of different places, that will result in the formation of new products which have to be competitive in the market and mutually complementary. A series of research and analysis will show the outlines of a new tourism for Vinica county with detailed view of the arboretum Opeka as the main attraction of this part of the country. In Vinica county there are natural, cultural and historic resources that are underused because of the lack of coordination and organization in tourist offer managemet. Development guidelines should encourage the development of tourism and show that there are no quality offerings without the joint work, especially in a small area such as the mentioned locality, and provide a bright example to all destinations with similar preconditions for tourism development. Besides tourism development in mentioned County, destination management plans and strengthens its position in the market, resulting in higher attractiveness for investors, greater productivity, faster economic growth and higher quality of life for local residents.

JEL Classification: L83

Keywords: destination management, destination managing problems, tourism development strategies, rural tourism, Vinica county.

1. INTRODUCTION

Tourism is the fastest growing and one of the most profitable industries in the world, with countless opportunities for economic development in regions. The present time of rapid change requires restraint when it comes to short-term and long-term predictions, especially since a large number of factors affected the tourism developments, so that the real objective is possible only for a very short period of time, although it tends to long-term forecasting and planning. Because of these reasons, development of the destination management is proposed as the most important factor in long-term operations of the county Vinica.

Destination management and its application are represented much longer than its theoretical considerations and definition. The role of destination management is poorly represented, and is often used as separate part of the general management, and it does not recognize its strategic role in the destination management.

Managing a tourist destination at the level of county or wider geographical entities implies a focus on several factors all with the aim of determining the appropriate management strategies and policies that will contribute to achieving the objectives of each specific tourist destination.

The first element of management development plan is the definition of destination tourism development model, which defines the objectives, strategies, restrictions and intensity of the tourism development according to potential opportunities of Vinica county, and the final result is to define the strategy and market positioning of this county. Competitiveness plan should define the way which will build respective destination competitiveness, competing with other similar destinations. Global marketing plan should make specific marketing plans for tourism sectors or groups of services which the destination decided that is best for them. The implementation plan is a document which should be different and more suitable than others. This document will precisely define what should be done and at what pace it should be done. Not only the large subjects will be included but also small entities such as travel agencies, restaurants, bars and shops and all those who in some way involved in the creation of tourist attractions and tourist product.¹

¹ According to Master Plan of Istria, www.istra-istria.hr/masterplan/okvir.htm, the official site of Istria, (4.12.2011.)

Tourist destination is faced with numerous challenges, rapid market changes and increased competition. Some of the major problems in destination management refer to²:

- the growth of overnight stay and increased seasonality,
- the growth of the average consumption,
- the decrease of additional services consumption,
- increasing the quality of accommodation and guests pleasure,
- low quality destination content-entertainment, shopping, culture, beaches, transport organizations,
- undeveloped offer in off-season products,
- a large number of service providers in the various interest groups,
- the different interests and visions of development,
- lack of management systems in tourism destination,
- the public neither private sector can't independently perform all the functions of destination management.

Because of these specified problems and in order to establish guidelines for the development, vision, mission and goal of destination management, business orientation, investment and change is proposed by this strategic tourism plan. The following is destination management plan for development Vinica county with concrete measures for the development and direction of tourism in the area for maximum usability of all natural, cultural, historical and social factors destinations.

2. DESTINATION DEVELOPMENT PLAN OF THE VINICA COUNTY

Varaždin County has the potential to develop tourism throughout the year, although territorially the third smallest county in Croatia, is recorded the highest tourist arrivals in continental Croatia. The main problem is the lack of accommodations so the arrivals are based only on one day trips which are called "rest stop" on their way to other destinations. Because of the prevalence of cultural monuments and their importance in the culture and art, this area can be called monument area and can become represent holder of cultural offer of all country.

² Retrieved from: www.iztzg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

Vinica is located in the northwestern part of the County of Varaždin and abounds in a variety of potential tourism resources sufficiently interesting for the development of excursions, rural, hunting and fishing tourism. The backbone of these resources at the county level makes the Trakošćan complex in the county of Bednja in which are the basic prerequisites for the residential tourism, combined with the mountain-excursion zone Ravna gora and Ivančica, cultural and historical attractions Lepoglava and other surrounding areas making it an interesting rich and whole variety on very small area. Arboretum is a plantation of various domestic and foreign trees and bushes, it serves the scientific, geographical and decorative purposes. Opeka Arboretum was created by the principles of construction of the English landscape parks, today counting more than 800 different species at 64 hectares, so that the Arboretum Opeka is valuable museum where all these kinds manage and develop as in the original habitat. Opeka Castle was built in Baroque style and is located in the middle of an arboretum.

Proposal for a destination management plan of Vinica county consists of five phases³, which includes the following plans dealt with in the sequel: the development model of tourism, competitiveness plan, options and investment needs, marketing plan, implementation plan.

2.1. The development model of tourism in the Vinica county

The natural conditions for tourism development in the wider area of the Vinica county are thermal mineral water, interesting hunting areas with different wild animals, historical monuments, the presence of water streams, reservoirs and areas suitable for fishing and recreation, a number of diverse and attractive forest and hilly areas for sport and recreation, and traffic and transit geographical position of the Varaždin County.

The Vinica county has very rich cultural and historical heritage with a number of very important cultural and historical monuments. In addition to these development opportunities of recreational, hunting and sports tourism, more pronounced is developing religious tourism (churches, mansions, and holidays of local saints). In Varaždin area preconditions for tours, hunting and transit tourism are based on the existence of hunting areas (Zelendvor and other areas around Vinica), fish-

³ By Master Plan of Istria, www.istra-istria.hr/masterplan/okvir.htm, the official site of Istria, 4.12.2011.

ing sites (primarily Drava meanders, backwaters, reservoirs, and ponds), cultural monuments and natural heritage (historic core of the city of Varaždin, Varaždin cemetery, arboretum Opeka, half-rural unit Vinica, Drava park).

Wine-growing regions, especially Vinica and Ivanec Vineyard, provide conditions for developing excursion tourism, and therefore the activation of these areas, and the valorization of the local cuisine and authentic atmosphere (huts, authentic rural houses, hunting lodges, wine roads, and the inclusion of Vindija cave site sites and agate stone Gaveznic).

Tourists often seek experiences associated with a entertainment, learning along the entertainment, escape and aesthetics. With experience entertainment tourists are mostly passive, trying to absorb the experiences presented by the five senses: they want to smell, taste, see, hear and touch. Learning experience along the entertainment actively encourages participation in the proposed experiences. Aesthetic passivity predominates at the event, where tourists want to enter into the event and environment. Tourists who are seeking to escape, experience of excessive activity and involvement, genuine also wish to participate and become part of the event. Travel destinations must put a number of unique values - numerous experiences worth remembering that tourists can take home and share them with friends and family. Experiences are categorized depending on whether the customer is active - passive and mentally or physically overwhelmed involved in experience.

Experiences can be classified into four groups (Cetinski, V., 2009):

- Entertainment - the customer is passive and absorbing experiences, while all efforts do others.
- Education and entertainment - the customer is active and involved in activities. He now wants to discover something new and learn while having fun.
- Aestheticism - is obvious passivity of the guest, but he is still involved in the atmosphere of the event.
- Escapism - customer seeks the maximum activity and involvement in activities and experiences, often physically strenuous activity.

Cultural experience (suggested example in Vinica county)

- Entertainment: ethnic festivals, folklore festivals, events
- Education and entertainment: culinary courses, traditional cuisine, exploring the history of the arboretum Opeka

- Aestheticism: cultural exhibits, seasonal gastronomy
- Escapism: music and art workshops, souvenir workshops.

Family experience (suggested example in Vinica county)

- Entertainment: competitions, school of sport, horse riding school
- Education and entertainment: life in the countryside, exploring the farm animals, educating about plants.
- Aestheticism: tours, wine trails, traditional huts, forest walks, exploring the environment
- Escapism: fishing, production of local souvenirs, themed walks, making pasta.

Gastronomy experience (suggested example in Vinica county)

- Entertainment: festival of traditional cuisine, cooking school
- Education and entertainment: a healthy diet course, the course of preparing local dishes
- Aestheticism: themed restaurants offer, traditional recipes promotion
- Escapism: Preparation of local dishes, picking mushrooms and grapes, wine production, themed walks.

Sports experience (suggested example in Vinica county)

- Entertainment: Competitions in various sports, games, sport events
- Education and entertainment: macrobiotics courses, athletes nutrition
- Aestheticism: low-calorie foods and beverages offer
- Escapism: team sports, gymnastics, team building, cycling, hunting, fishing.

It is necessary to complement, adapt and modify the offer, set priorities for future operations and focus on the target group of potential visitors, offer them additional services. The existing offer must be refreshed with new programs, is important to work on promotion of Vinica county as a whole, and create new interesting features that would attract and retain tourists as long as possible. Great function and the role should take the Tourist Board Vinica and County of Varaždin, promoting its rich history, natural resources and culture, and create a new dimension to the destination and a different view of tourism that is sustainable.

2.2. Competitiveness resource plan of the destination

The competitiveness raising tourism plan for the Vinica county mostly eliminates the identified weaknesses and deficiencies that were indicated by tourism competitiveness analysis. Key projects for the raising of competitiveness in tourism are grouped into four separate fields, according to predefined key strategic objectives for tourism development. These are the following fields: ⁴

- creating supportive social development environment;
- improving the tourist infrastructure and superstructure;
- diversification of tourist experiences, as well as
- establishment of market recognition and desirability.

SWOT Analysis of Vinica county:

STRENGTHS

- A protected natural monument in the ownership of the Republic of Croatia; Declared a natural rarity, and later as a horticultural monument with the highest aesthetic value; Rich history; Favorable climate; Excellent transport accessibility and connectivity: road Varaždin-Maribor; The value of the environment; A monument of park architecture; Valuable species of plants from different countries of the world; Possesses deontological and vegetation diversity; Historical, memorial, aesthetic, artistic, scientific, ecological, educational, cultural and tourist value.

WEAKNESSES

The ruinous state of the castle; Weak financial support; Uninterested local residents; Slow cooperation between tourism operators; Human factors (expertise, creativity, "a state of mind"); Lack of tourist facilities in the County; Insufficient promotion of the castle and arboretum.

OPPORTUNITIES

Investment in natural monument with feedback; Creating new jobs; The possibility of promoting Vinica and Varaždin county; All year round business and income; The possibility of opening supporting facilities to rural tourism (wine roads, traditional vineyard huts ...); The possibility of opening educational centers about plants in the arboretum, and promoting environmental awareness.

⁴ Retrieved from: www.iztzg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

THREATS

Theft (of plants and the values of the castle); The main competitor - the city of Varaždin; Restrictive legal base for the development of tourism in rural households; Competition from other, more developed countries and rural economies (Slovenia, Hungary and Austria); Limited financial resources.

The SWOT analysis shows that Vinica county and Opeka arboretum as a major tourist attraction have strengths and opportunities that are more than adequate for the development of tourism in this area. The great advantage is also reflected in the natural values of the County, which monuments have the highest international level of esthetic value. However, the great obstacle to the weaknesses and threats is also evident, because they are deeper and more serious barriers for the County development. Without the financial support and interest of local residents, this project is hardly feasible, so resolution of these problems is recommend priority.

2.3. Marketing plan of the Vinica county

Marketing objectives are the starting point for designing integrated tourist product of destination Vinica and they must comply with the basic development directions defined with a vision and development concept. Marketing has focused primarily on defining the activities related to identifying market-ready products, and effective communication with the targeted markets. In this context, and considering the current level of tourism development in the Vinica county, marketing objectives should be related to the introduction of the destination on the tourist market, forming market-ready tourism products and establishing the preconditions for successful implementation of these activities. Below are presented suggested products for Vinica, for the rural life and active vacation.

Table 1: The proposal of rural life in Vinica county

PRODUCT	RURAL LIFE*
EXPERIENCE	Discovering, exploring the rural tourism and autochthonous ways of life
THE MAIN PRODUCT	It consists visit to the rural family farms and getting to know rural life, tasting local products, the ability to purchase, tasting facility (wine, cheese, honey, milk, vegetables, pasta), participating in various workshops (manufacture of food products, traditional subjects).

* Retrieved from: www.iztzg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

ENABLING PRODUCT	<ul style="list-style-type: none"> • thematized rural family farms • tasting facilities • the possibility of purchasing • various sports and competitions
READINESS OF MARKET	Not ready
TARGET MARKET	Families with children The older and younger couples Groups of friends Seniors School excursions
SEASONALITY	Spring, Summer, Fall, Winter

Source: www.itztg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

Establishment of a coherent branding system in destination Vinica, and in accordance with the positioning market attributes, will contribute to the progressive transformation for the image of the County, from touristically uninteresting to a modern destination that offers an eventful stay to different market segments. Given the historical and cultural heritage of the Vinica county, the harmonization of traditional lifestyles and cuisine is recommended as well as protected base of supply, arboretum (rural tourism), resulting an unmistakable combination of traditional and modern, sport and recreation and quality of food and education.

2.4. Implementation plan of the Vinica County

The Vinica destination management Implementation plan defines the activities which need implementation for the purpose of realization of its strategic objectives. All though the initial momentum of the tourism development must provide the public sector, a great responsibility lies also on a private and entrepreneurial, without which the sector will not be possible to “touristificate” any of the identified tourism potent localities; as well as on various civic organizations of which is expected that its activities involve the creation of so-called tourism-value-chain, and therefore also involve in the integral tourist product of the County. Vinica would have to take care and maximally activate in the field of: ⁵

⁵ Retrieved from: www.itztg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

- improving transport infrastructure throughout the County (the quality of local roads, bicycle paths, traffic at a standstill, traffic signalization);
- improve the quality of utility infrastructure;
- raising the awareness among local residents about the importance of tourism development (internal marketing), as well as the benefits that tourism development brings to the local population, understanding the potential benefits of tourism development and accepting tourism development as the strategic option, and awareness of socio-cultural changes that tourism development brings;
- Collaboration with the regional tourist board and taking a part in marketing activities.

However, keeping in mind that Vinica County has limited financial and human resources, it is clear that the opening of all these proposals is not advisable to start immediately, because all the activities can not be adequately implemented. In the first year of destination management implementation, its not to be expected any involvement of the private sector. As for the public sector, these following activities are recommended: ⁶

- establishment of tourism investment and development center;
- creating a manual for investors in tourism;
- making a tourist information website;
- building the rural tourism centre “Arboretum Opeka”.

The activities that will start in the first year, and that will end during the next few years of implementation are referred to:

- development of rural tourism;
- development of pedestrian and bicycle paths;
- creating a tourism brand of Vinica county;
- direct marketing and introduction tours.

This plan set out a detailed analysis of the current situation in all relevant factors of tourism development, with special attention to the evaluation of tourist resource attractiveness. It is a “raw material” that has yet to be turn into a well-designed

⁶ Retrieved from: www.iztg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb (15.12.2011.)

tourist experiences and products in the way that will allow continued fulfillment of requirements and needs of clearly identified and targeted consumer segments.

3. CONCLUSION

Development strategies or other strategic development plan is the basic need of each region which is planning to develop tourism in their area, in accordance with the existing infrastructure and tourism potential and to be competitive in the market. The backbone of the tourism products of destination Vinica are natural beauties, cultural heritage and the excellent conditions for developing all year tourism based on destination management.

In Vinica county there are natural, cultural and historic potentials that are underused because of lack of coordination and organization between the authorities that carry the tourism offer. If the municipality wants to seriously engage in tourism, there is also a lack of accommodation of any kind and insufficient development of the rural acts to improve the catering and hotel accommodation in rural households. Development Guidelines should encourage the development of tourism and prove that quality is not possible without a joint work of all people related to tourism, especially in a small area such as the mentioned County. A joint program and performance always result in higher support of government, ministries and counties, for projects are more important and less expensive than to work independently at the local level. Application of a destination management will result in a number of specific benefits: better tourism quality, increased employment and higher salaries, according to development of new services will appear new job positions. Apart from tourism development of mentioned County, it will strengthen its position in the market, resulting in higher attractiveness for investors, greater productivity, faster economic growth and better quality of life of local residents and guests.

Taking all these assumptions and the ultimate goal, it is clear that such a future can not only create private sector, owners and management teams, caterers and agencies. Therefore, the key link in development and implementation of the reconstruction project is cooperation and collaboration between private and public sectors which intertwine and monitored in all segments of the supply - from creation of entertainment, recreation and hobbies, till defining the spatial plans that will follow the tourism needs in mentioned area, and renovation (construction) of quality infrastructure.

4. REFERENCES

Books

Cetinski, V., (2009) New market strategies, course: Management of cultural institutions and Arts, Faculty of Tourism and Hospitality Management, Opatija

Cetinski, V., Perić, M., (2006) Project Management, University of Rijeka, Faculty of Tourism and Hospitality Management, Opatija

Internet

[web.efzg.hr / while // ... // Turistička_destinacija_-_pojam_i_koncept.ppt](http://web.efzg.hr/while//...//Turistička_destinacija_-_pojam_i_koncept.ppt), the official website of the Faculty of Economics in Zagreb

www.istra-istria.hr/masterplan/okvir.htm, the official site of Istria, Master Plan for the County of Istria

www.iztztg.hr, the official website of the Institute for Tourism, Master Plan of Ljubuški, Institute for Tourism, Zagreb, 18.06.2010.

www.vinica.hr, the official website of the Vinica county

TOWARDS A NEW MODEL OF CULTURAL MANAGEMENT – THE EUROPEAN CAPITAL OF CULTURE PROGRAMME

Maja Lamza-Maronić, Ph.D.¹, Jerko Glavaš, univ.spec.oec.², Igor Mavrin³

¹Full professor, Faculty of Economics in Osijek, Croatia, maja@efos.hr

²Assistant, Faculty of Economics in Osijek, Croatia, jglavas@efos.hr

³Ph.D. Candidate, *Ypsilon* Ltd, Croatia, imavrin@gmail.com

ABSTRACT

The European Capital of Culture (ECoC) is a major cultural project of the European Union, with significant implications for the development of cultural management and cultural policies in cities that host this year-long cultural event. Ever since the ECoC program started in 1985, host cities have more or less successfully applied different organizational models in order to implement a range of cultural projects. The basic three models used in ECoC cities are organizational structure within city management, an autonomous organizational structure, and a combination of the former two. Some host cities even founded independent companies of temporary character with a view to efficiently manage the projects within the demanding ECoC program. Over the last decade countries from the former Eastern European block became involved in the ECoC project, gradually adopting a new model of cultural management. This paper will examine the impact of ECoC program on the development of urban cultural policies in Europe, particularly in its South-East, and look into different ECoC models of cultural management.

JEL Classification: Z11, Z18

Keywords: The European Capital of Culture (ECoC), cultural policies, cultural management, ECoC model of cultural management

1. INTRODUCTION

The European Capital of Culture (ECoC) can be seen as the most successful cultural program of the European Union, which has an important economic, social and developmental function in addition to the obvious cultural dimension. What

began as a large festival of culture in Athens in 1985 has in the meantime evolved into a major development project for the host cities. Infrastructure development, both for the cultural sector, but also ancillary (roads, transportation, accommodation...) requires good planning and organization in the cities hosting the ECoC events. Good organisation is important for planning cultural events, and it increasingly takes place not only in the year when a city is hosting the event, but also in the year before and the year after the event.

The need for planning in the field of culture to provide development of the city and the entire region increasingly directs the city authorities toward development of cultural management and development of cultural policies to achieve social and economic prosperity. Dragojević and Dragičević-Šešić (2008:37-38) highlight the basic three models of cultural policies, i.e. activities implemented in the field of culture:

- Cultural diffusion – where the major postulate is “...to create the conditions for cultural creation, and its diffusion and communication, in such a way as to strengthen national cultural identity”;
- Cultural functionalism – the essence of this model is “...the creation of conditions for an even more democratic cultural life by allowing greater participation (in processes of cultural production and public activity) to all groups which constitute the cultural mosaic of a given society, whilst at the same time improving the internal institutional effectiveness and efficiency of the agents of cultural life”;
- Cultural mercantilism – the latest model of cultural policies that can be connected to the term cultural and creative industries, and it reflects the view that “...artistic product is the same as any other product and that its value is measured by its success in the market place”.

2. THE EUROPEAN CAPITAL OF CULTURE AND CULTURAL POLICIES IN THE SEE COUNTRIES

In the 1990-ies, the SEE countries were going through a transition process, in political, economic and cultural sense. Often there were problems related to these changes, and cultural policies themselves were not clearly defined as a whole. The processes of change were not equally successful in some of the countries arising from dissolution of former communist federations of communities (former SFR

Yugoslavia, Czechoslovakia). War damages (Bosnia and Herzegovina, parts of Croatia), autocratic regimes and international isolation (Serbia and Montenegro until 2000), conflicts arising from ethnical and cultural differences (Macedonia, Kosovo), identity-related problems and issues (conflict between Macedonia and Greece over Macedonia's name) – these are some of the problems that many countries had to face with in this part of Europe, and it reflected to cultural policies as well. Some countries went through transition processes without any larger difficulties (Poland, the Czech Republic, Slovakia, Slovenia), whereas some other countries experienced higher level of problems (Bulgaria, Romania). Different dynamics of implementing democratic changes also reflected to the speed at which these countries accessed the European Union as well as the European cultural circle.

Dragičević-Šešić and Stojković (2007:34-38) highlight six basic models of cultural policies, based on practice of many European and world countries:

1. Liberal models of cultural policy (facilitator state);
2. Para-state models of cultural policy (patron state);
3. State (bureaucratic or enlightenment) models of cultural policy (engineer state);
4. State (elitist or enlightenment) models of cultural policy (architect state)
5. Nation-emancipating models of cultural policy – ethnically defined cultural policy;
6. Regionally/linguistically /ethnically defined models of cultural policy

Four different approaches to cultural policies at national as well as city levels can be discussed, considering the attitude of national/regional/local government toward cultural sector:

1. Culture as a burden on the budget – culture is perceived as “necessary evil”, budget item without adequate social, i.e. financial return for the state/region/city; budget funds are allocated non-critically, without criteria of success and influence of cultural institutions, initiatives and projects;
2. Culture in the function of heritage preservation – budget funds are mainly directed at preserved elements of cultural history of a city/region/state, and their preservation as well as presentation to broader public (cultural audience, experts and tourists); emphasis is less on the commercial side of culture and more on its symbolic value;

3. Culture as a profit generator – culture is an element of supply that has its demand, emphasis is put on satisfying the taste of audience through various segments of cultural and creative industries; culture is seen as a product with its symbolic, material and commercial side;
4. Culture as a holder of development – orientation toward cultural (mega) projects that bring economic and social changes, in which all factors are combined (public, private and civil); a mega-event such as the European Capital of Culture is one of the tools for implementing this kind of cultural policy at both urban and regional level.

2. THE EUROPEAN CAPITAL OF CULTURE – ORGANIZATIONAL IMPLICATIONS

Implementation of the mega-project, i.e. mega-event the European Capital of Culture, comprising a range of subprojects of larger and smaller proportions, is an extremely demanding task and requires engagement of an array of professionals. Managers in the field of art and culture, tourism experts, university professors, professional artists, municipal and regional (self)government, representatives of the civil sector and many other – they all have their own, mostly different visions of the ECoC programme. Also, good coordination with a clearly defined vision, mission and goals is required, starting from the idea, over the application, and to the implementation of the project. Therefore good organisation and specific leadership present the key to the success of the ECoC project, where all set demands (cultural and artistic, economic, urbanistic, political and social) will be brought into harmony. Organization of such a project requires foundation of a separate management structure within the city government (as official holder of the project), i.e. a separate company that will bring together experts in various fields, with special emphasis on the sector of culture (and culture management).

The Palmer study from 2004 highlights the three management models for implementation of the European Capital of Culture project (Palmer/Rae; 2004a:52):

- An autonomous structure with legal status as not-for-profit company, trust or foundation;
- Direct administration within an existing local government structure (municipality, mayor's office, etc.);
- Mixed model comprising both above.

Although the model of direct administration within municipality has its advantages – higher possibility of control over the programme, costs, allocation of funds, etc. – it should be avoided and the model of autonomous structure should be applied. Namely, implementation of the programme through a separate office or an existing office within the municipality may result in excessive (but unavoidable) interference of politics in programme realisation. Another reason for avoiding governance structure of the ECoC project within the municipality is also the fact that the European Capital of Culture project involves several years of planning and implementation. As a rule, several years will pass from application, over nomination to implementation of the project (sometimes even a whole decade – for example, the 2010 nomination of Belgrade for the title in the year 2020). In regular and usual democratic processes this implies one, and possibly two election cycles, which can result in changes in the governance structure of a municipality. Change of the municipal authorities can directly or indirectly influence implementation of the ECoC project, if governance structure is embedded within the city council. The fact that it is politics that has to win the ECoC title is irrefutable, and it is almost impossible to avoid political influences during the entire project procedure. However, politics should be prevented from coming into focus in front of cultural/social and economic goals. Therefore the model of a not-for-profit company or other form of organization outside of the city government is the right way to avoid explicit politization of the project.

However, politics should not be entirely avoided, as political parties can initiate application of a city for ECoC title exactly through city government, but also outside of it. For example, the Belgrade 2020 project was initially created by the Liberal Democratic Party (LDP), and later developed and formed into application by the city government, i.e. coalition government led by the Democratic Party (DS). If later political connotations and conflicts caused by potential change of government in democratic elections in the city are successfully avoided, Belgrade might become a positive model and an example for other towns in the region. Example of successful continuation of ECoC after the ECoC year through an office incorporated in the city governance structure is the programme “Lille 3000” (the French city Lille was ECoC in 2004) – “...when ECoC office was closed, many employees were included in the city administration, where a department was established for “Lille 3000”, a great cultural programme that fosters the spirit of ECoC up to now“. (Palmer et.al; 2011:47)

The following roles of the management, i.e. governance structure in ECoC project are highlighted (Palmer/Rae; 2004a:52):

- To take financial decisions and have overall financial control;
- To develop policies and strategies;
- To take decisions about cultural projects;
- To raise funds and sponsorship.

Research conducted for the purpose of realisation of the ECoC project in Maribor 2012 showed that the European Capitals of Culture most often faced problems related to management, strategic direction and control over project management in general. Previous holders of the title faced the following organizational problems:

1. Inadequate organizational structure;
2. Conflicts between the interests of the management and the interests of the operative management team;
3. Domination of political interests over cultural and economic interests;
4. Insufficient representation of cultural interests of artists.

(Kovač; 2009; according to: Round-table discussion on the ECoC; available at: <http://www.maribor2012.info/en/index.php?ptype=3&ntype=1&id=208>; accessed: April 21, 2011)

The Palmer study also reported certain problems with governing structures in the European Capitals of Culture in the period up to 2004 (Palmer/Rae; 2004a:53):

- The Board was dominated by political interests;
- There were some difficulties with relationships between Board members and the operational management team;
- The Board did not fully represent cultural interests;
- The structure was too large.

2.1. Examples of Successful ECoC Governing Structure

The Finnish town Turku, the ECoC for 2011, established a foundation as a project organizational structure (Turku 2011 Foundation), which started working during 2007/2008, and its tasks were "...coordination and partial funding of proj-

ects that will be included in Turku 2011 (...) services include production support, research programmes, digital capital of culture, communication and corporate cooperation”. Functional approach to management of the ECoC project in Turku divided the foundation in two parts – Board of the Turku 2011 Foundation and Delegation of the Turku 2011 Foundation. The Board comprises the chairperson, two vice-chairpersons and 11 members, including the mayor and his deputy; representatives of ministries, regional government, art bodies and independent artists and private entrepreneurs in the creative sector. Delegation is a broader governing body, comprising two chairpersons and two vice-chairpersons (from university and trade union sector), whereas more than forty members include representatives of different artistic profiles and creative sector (musicians, painters, fashion designers, movie directors, ...), representatives of artistic and cultural organisations and institutions, mayors of partner-towns, representatives of higher education, churches, associations of social character and other. (Turku 2011; available at: <http://www.turku2011.fi/en/2011-foundation>; accessed: May 2, 2011)

The governing body of the project Tallinn 2011 (Estonia) is also organized as a foundation. The Council of the Tallinn 2011 Foundation comprises ten members, chaired by the mayor of the Estonian capital. The Council also comprises representatives of development agencies, ministry of culture, institutions of cultural heritage, city council, festival... Creative Council is also part of the Foundation, and it comprises seven representatives of the cultural, creative and scientific sector (an actor, a music producer, a writer/journalist, a rector, a film producer, a museum manager, a representative of the Board of the Tallinn 2011 Foundation). As it was pointed out at the moment of its establishment in 2007, the Tallinn 2011 Foundation is “...a new independent organization with a task of planning the programme of the capital of culture as well as gathering, selecting and applying ideas and requests to ensure an exciting, extraordinary and sophisticated cultural year in Tallinn 2011”. (Tallinn 2011; available at: <http://www.tallinn2011.ee/?id=50>; accessed: May 2, 2011)

Being the first capital of culture from countries – new EU members, the Romanian town Sibiu (2007) (Bulgaria and Romania accessed the EU exactly in 2007) also had its organizational specific qualities. In this town a non-government organization (NGO) was established and entrusted the task of managing the Sibiu 2007 project. The organization had three offices (in the city council, the Luxembourg house and in the centre of the city). The Sibiu CCE 2007 office had the following

tasks (Sibiu 2007; available at: <http://www.sibiu2007.ro/en3/birou.htm>; accessed: May 10, 2011):

- General coordination of the Sibiu 2007 programme, overall insight into goals and artistic concepts of the cultural programme;
- Project selection in the preliminary phase;
- Coordination and consultations with partners from Luxembourg;
- Implementation of the Cultural programme;
- Implementation of the communication and marketing strategy;
- Administrative and financial responsibility for the Programme.

The main office of the Sibiu CCE 2007 project included the following functions: general programme coordinator, programme coordinator, people responsible for the programme, assistant coordinator /event planner, project coordinator, logistics coordinator, technical coordinator, PR and communications, coordinator of volunteering service and secretary. Overview of these functions clearly shows the functional governing structure with the “western” governing model, based on projects and allocated functional responsibilities. The tasks of the organization in charge of project implementation indicate a more modern approach to cultural management, which was not typical of the countries from the former Eastern bloc at earlier times.

3. TOWARD THE ECOC MODEL OF CULTURAL MANAGEMENT

Cultural management evolves and is subjected to constant changes. Old management paradigms are replaced by new ones, so that cultural institutions (and cultural events) could survive in changed market circumstances. The European Capital of Culture is globally unique when talking about cultural (mega)events. There is no counterpart in the world of culture; however, many similar initiatives have been created lately, encouraged by success of the ECoC project. Only some of them will be mentioned here: American Capital of Culture, Arab Capital of Culture, Canadian Capital of Culture, Volga Capital of Culture, UK City of Culture... Actually, in terms of its reach and opportunities for municipalities and regions, the ECoC is best compared with sport (mega)events such as the Olympic games or World Football Championship. Importance of the ECoC and its specific qualities resulted in a brand new form of cultural management that has appeared owing to this EU project. The table below provides comparison among the old, the new and the ECoC model of cultural management.

Table 3: Comparison of characteristics of cultural management models

	Old cultural management model	New cultural management model	ECoC cultural management model
<i>Budgeting</i>	Funded from the state and/or municipal and regional budget	Market financing – sale of tickets, souvenirs...	Combination of public/state financing and market effects of pre-ECoC, ECoC and post-ECoC content
<i>Governance</i>	Strictly hierarchical chain of command, “institution of culture” model	Less formalized, directed at cultural effects	Temporary governance structures; combination of economic, political and cultural sector in the governance structure – synergy effect
<i>Employment stability</i>	Guaranteed stability of labour force, one job for the entire working life	Labour force flexibility and possibilities for promotion	Temporary (project) employment
<i>Strategic planning in culture</i>	Absence or deficit of strategic planning	Strategic planning as a business determinant in cultural sector	Strategic planning aimed at successful project realisation
<i>Public relations and presentation of culture</i>	Cultural content is sufficiently attractive to appeal to visitors; cultural content should be preserved and not presented	Cultural content is a product in market competition and it has to be presented in the best possible way	Cultural content is entertaining and part of a several-month- long festival; citizen participation in content creation is desirable
<i>Cultural effects</i>	Heritage preservation	Financial effects of culture through content sale	Culture as driving force of economic and social changes

Source: Edited by the authors

As it can be seen in the table above, the ECoC model of cultural management is aimed at urban and regional development, both in social and economic terms.

4.CONCLUSION

It is obvious that a new ECoC model of cultural management has emerged. It is characterised by temporariness, primary orientation to development of the creative sector and related sectors, interdisciplinarity (participation of a range of

experts in governing structure), and use of culture as a motivator for economic and social changes. The model itself can be also applied by other municipalities (it is not limited to ECoC hosts and candidates), because, unlike the previous models of governance, this model integrates multidimensional development function.

SOURCES:

- Byrnes, W.J. (2009): *Menadžment i umetnost*; Clio; ISBN: 978-86-7102-371-9
- Dragičević-Šešić, M. & Stojković, B. (2007): *Kultura: menadžment, animacija, marketing*; Clio; ISBN: 978-86-7102-266-8
- Dragojević, S. & Dragičević-Šešić, M. (2008): *Menadžment umjetnosti u turbulentnim vremenima*; Naklada Jesenski i Turk; ISBN: 978-953-222-282-1
- <http://www.begrad2020.com>; Accessed on: 15th of September 2010
- <http://www.ldp.rs>; Accessed on: 15th of September 2010
- <http://www.tallinn2011.ee>; Accessed on: 2nd of May 2011
- <http://www.turku2011.fi>; Accessed on: 2nd of May 2011
- <http://www.sibiu2007.ro>; Accessed on: 10th of May 2011
- Kovač, B. (2009): *Analysis of economic viability and organizational structures; Maribor 2012* (<http://www.maribor2012.info>; accessed on: 21st of April 2011)
- Lamza-Maronić, M., Glavaš, J., Mavrin, I. (2011): *Marketing aspects of the European Capital of Culture Programme; Interdisciplinary Management Research VII*; pp 130-139; Josip Juraj Strossmayer University of Osijek; ISBN: 978-953-253-096-4
- Palmer, R., Richards, G., Dodd, D. (2011): *European Cultural Capital Report 3; Atlas*
- Palmer/Rae Associates (2004): *European Cities and Capitals of Culture (Part I)*; European Commission, EU

PERFORMANCE OF CROATIAN ECONOMY MEASURED WITH KNOWLEDGE-BASED ECONOMY PARAMETERS

Barbara Marušnik, univ. spec. oec.¹, Boris Marjanović, univ. spec. oec.²

¹Lecturer on Polytechnic University of Pula, Croatia, barbara.marusnik@politehnika-pula.hr

²Lecturer on Polytechnic University of Pula, Croatia, boris.marjanovic@politehnika-pula.hr

ABSTRACT

Modern economic systems measure their performance also with knowledge-based economy indicators of basic resource efficiency.

The paper examines the measured results of the Intellectual Capital Efficiency of the Croatian economy that is based on the concept of knowledge-based economy.

The results of performance of the Croatian economy in the year period from 2003 to 2009 are presented and compared in the paper, according to the parameters of the knowledge-based economy and traditional indicators.

JEL Classification: D83, L25

Keywords: efficiency of basic resources, performance, knowledge-based economy, economic system

INTRODUCTION

Every business-production system in order to survive on the market, seeks to better leverage its core resources. Basic resources are people, infrastructure and financial resources. People in business-production system can be conditionally divided into two segments. The physical and the intellectual segment.

For each of these segments there are benchmarks that measure their performance. The physical segment is measured by its productivity, while the intellectual segment is measured by new value creation.

The same concept applies to the economic system as a whole. The economic system as the economic base of society is in constant interaction with the seg-

ment superstructure of society. Functioning and performance of one segment are reflected in another segment of society, where they can create new value, but may at the same time destroy it.

The outcome benchmark of both segments as a whole is the ability to produce GDP. In order to survive, the business-production system must meet the needs of stakeholders in the chain of value creation. But, in order to develop it must have the ability to create new value. It is true, also, for the economic system and society as a whole.

Previous studies of Croatian economy efficiency and the ability to create GDP, indicate the need to review current trends in turbulent business conditions and functioning of these segments and system.

MAIN PERFORMANCE PARAMETERS OF THE KNOWLEDGE BASED ECONOMY

The concept of Intellectual Capital is embodied in the knowledge-based economy. Even though it has been much said about it, there are still very conflicting views about this subject. It is important to explain the concept of Intellectual Capital since the paper examines those indicators of performance that are based on this concept. Considering the fact that not all the money results as capital, neither all knowledge should be considered as Intellectual Capital. A. Pulić defines Intellectual Capital as “only that kind of knowledge which is transformed into a recognizable market value, that provides benefit for the customer” (Pulić; public lecture). Similarly, K. Tominović defines Intellectual Capital as “usable knowledge that creates new value which is confirmed on the market” (Tominović; 2004, 14). Another interesting definition is given by T. Stewart, as “something intangible, but slowly makes you rich” (Jelčić; 2004, 19).

Two basic components of Intellectual Capital are Human and Structural Capital. Human Capital is consisted of the “employees with a full range of individual and collective knowledge, skills, attitudes, capabilities, behaviors, experiences and emotions. It is extremely important to emphasize that employees are not themselves Human Capital for the employer, but they become, only when their knowledge and abilities are transformed into actions (in line with business strategy), which contribute in value creation (tangible or intangible) for the company (profit, new customers, better image, more effective work organization, profitable product)” (Jelčić; 2001, 21).

Structural Capital is “what remains in the company when its employees go home.”

“These are the recipes of knowledge that someone else can use to add value for the benefit of the organization” (Edvinsson; 2002, 35).

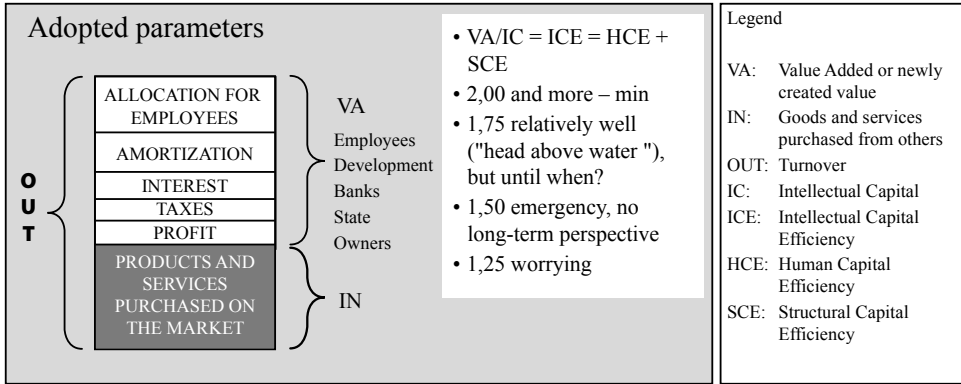
It consists of: organizational structure, working methods, management sub-systems, plans, means of controlling, information and communication systems, value managing systems (finances, investments and accounting), development, human resource management, databases and intellectual property (patents, copyrights, licenses, etc).

The VAIC™ method is developed by A. Pulić and is based on the concept of Intellectual Capital. It is used for measuring Intellectual Capital Efficiency, and by its indicators is possible to determine the performance of the economy at all levels. The measuring efficiency approach is equal when considering a company or a city, a region or an economy as a whole.

This method offers an easier way in finding an answer to the question “where we are” so we can bring decisions in an easier way about where to go and what to do in order to reach the specified goals as a company (region or economy as a whole). Its indicators reveal where in the system value is created or destroyed.

When we talk about value we refer to the added value indicated as VA (Value Added) and is calculated as difference between output and input. Output is referred to total revenue earned on the market, and input, as all that gets from the market into the business. But it's important to notice that in it are not included expenses for employees, amortization, taxes, and dividends, in other words all internal transactions. There is another way of calculating the VA from company financial documents summarizing the operating profit, allocation for employees and amortization. Intellectual Capital Efficiency is another parameter displayed in the context of the Croatian economy performance and is labeled with ICE, and shows how efficient is Intellectual Capital in creating value. It is calculated by the sum of the partial efficiencies of Structural and Human Capital. This simple calculation gives us the indicators of the Croatian economy performance, according to the parameters of knowledge-based economy. Before presenting the results and their interpretations will be given the performance criteria according to the knowledge-based economy. Figure 1 shows the structure of created value and corresponding efficiency indicators from 1.25 to 2.00 and above.

Figure 1 - Structure of Value Added and efficiency indicators



Source: Authors based on multiple sources¹

The indicator shows how much one monetary unit invested in people (Human Capital Efficiency - HCE) and infrastructure (Structural Capital Efficiency - SCE) creates new monetary units. Indicator values from 1.25 to 1.75 do not satisfy the success criterion. The minimum value of the indicator must be 2.00 while the satisfactory value is above 2.00.

The results of the Croatian economy performance obtained through the VA-IC™ method in the year 2009 will be presented below and compared with the conventional economic indicators.

THE RESULTS OF THE CROATIAN ECONOMY PERFORMANCE ACCORDING TO THE INDICATORS OF KNOWLEDGE-BASED ECONOMY

For the purpose of this analysis were used the operation annual reports submitted to the Financial Agency (FINA) by Croatian companies with the exclusion of those who do not operate as a legal entity² as tradesmen, farmers, liberal professions, etc.

¹ HGK, (2004), *Intelektualni kapital: Uspješnost na nacionalnoj, županjskoj i poduzetničkoj razini 1.-6./2004.*, ISSN 1845-6359, Zagreb; Tominović, K. (2000) *Measuring the Efficiency of Intellectual Capital in Fundamental Shipbuilding Processes*, Brodogradnja 48, Zagreb; Tominović, K. (2007) *Value Creation in Sophisticated Object of Marine Technology*, 2nd Conference of Marine Technology-in memoriam of academician Zlatko Winkler, November 28th-29th 2007, Faculty of Engineering University of Rijeka, Rijeka

² Their contribution to the overall performance of the Croatian economy is less than 5%, and they would not have affected the conclusions.

Table 1 - Croatian economy performance from year 2003 to 2009

Year	VA(euro)	VA growth rate (%)	ICE	GNP in mil.(euro)	GNP, real growth rate (%)
2003	13,181,130,787		2.28	30,011	2001 - 2005 period average 4.7
2004	14,574,746,654	9	2.34	32,759	
2005	15,493,439,277	5	2.30	35,725	
2006	17,867,756,052	12	2.37	39,102	4.8
2007	19,631,306,680	9	2.35	42,833	5.6
2008	20,934,776,531	5	2.19	47,370	2.4
2009	18,926,126,890	-9	2.08	45,379	-5.8

Source: Authors calculation according to the annual reports of the Croatian Chamber of Economy (CCE)

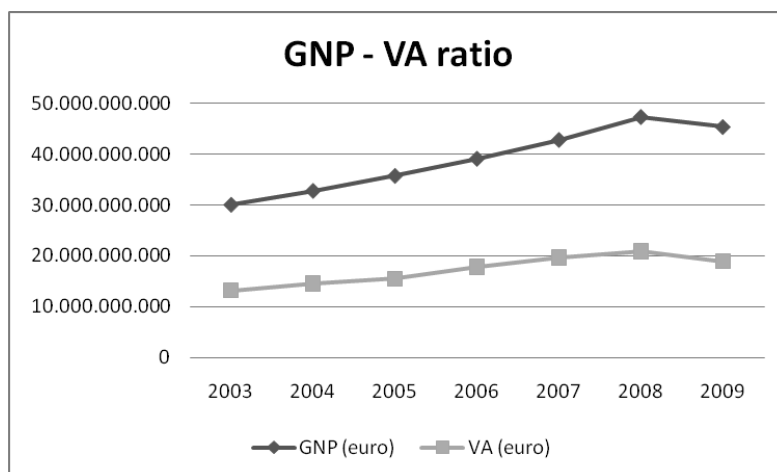
Table 1 shows the results of the Croatian economy performance. Overall performance score of the Croatian economy till the end of 2009 recorded a Value Added (VA) decline of 9% and a Intellectual Capital Efficiency (ICE) decrease of 6%. “So after a long period of steady growth the created value of the economy fell to the level of the year 2006” (Tominović; 2010, 4). In fact, according to the CCE, the Value Added of the Croatian economy amounted to 17,867,756,052 euros in 2006³, 19,631,306,680 euros in 2007⁴ and 20,934,776,531 euros in 2008⁵.

³ <http://hgk.biznet.hr/hgk/tekst.php?a=b&page=tekst&id=1553> (28-01-2011)

⁴ HGK (2008), Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini u 2007, Zagreb: HGK, p.3

⁵ <http://hgk.biznet.hr/hgk/tekst.php?a=b&page=tekst&id=1553> (28-01-2011)

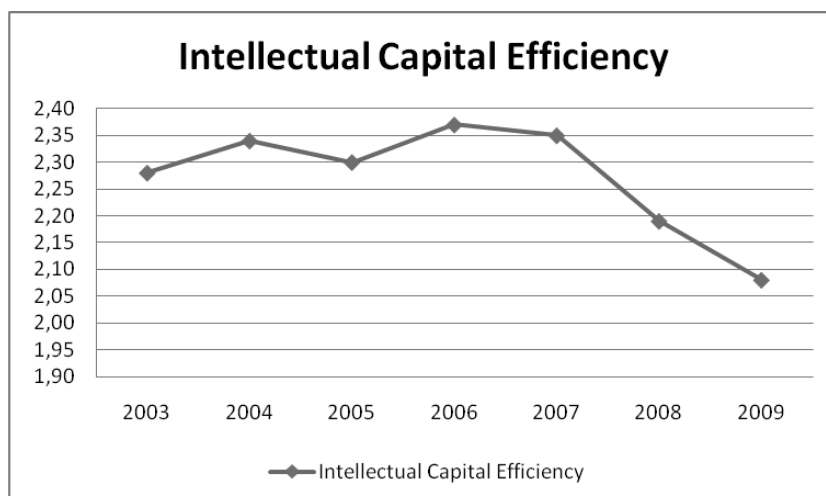
Chart 1 - The Gross National Product and Value Added ratio



Source: Authors

So after a growing trend in 2009, Value Added fell to 18,926,126,890 euros (Table 1). Downward trend is also recorded in the Intellectual Capital Efficiency (Chart 2) that amounted 2.35 in 2007, while 2.08 in 2009.

Chart 2 - The Intellectual Capital Efficiency of the Croatian economy from 2003 to 2009



Source: Authors

Downward trend began since 2007 where, according to the indicators of knowledge-based economy, the Croatian economy constantly declined. Along with the decline of Intellectual Capital Efficiency, productivity has also declined.

Comparing these results with a classical performance indicators shown in Table 1 and Chart 3, reveals that 2008 has shown the consequences of not taking measures to raise the efficiency of the system as a whole, which already could be seen in 2007.

K. Tominović, President of ZUIK⁶, commented this trend as “there were possibilities with timely actions to reduce the impact of the crisis primarily on saving jobs” (Tominović; 2010, 5). In the meantime, we are witnessing the fact that many Croatian companies are in serious difficulties and that many employees lose their jobs. Another fact is added as a contribution to the above mentioned, that “the survey unemployment rate in Croatia in the third quarter of 2010 amounted to 11.5% which is 2.8 percentage points higher rate than the same period in 2009, according to the data from the Labour Force Survey released by the Central Bureau of Statistics”⁷

If we take into account the unemployment rate data according to administrative sources in the same period, we get a more serious condition. It amounts to 16.6%⁸ From the above mentioned there is no need for further explicit conclusions, because the facts speak for themselves.

Table 2 shows the growth rates of GDP and the fundamental factors of influence through the observed period. The export of goods and services was the most represented among the factors, and immediately after this was personal consumption.

The obtained results by analyzing the growth rates of GDP, indicate that the highest recorded growth rate of GDP through the observed period was in 2007. While in the same time, the results of performance shown through the indicators of the Intellectual

⁶ Society for intellectual capital improvement

⁷ [http://www.hrt.hr/index.php?id=48&tx_ttnews\[tt_news\]=102043&tx_ttnews\[backPid\]=23&cHash=8b7335e5c0](http://www.hrt.hr/index.php?id=48&tx_ttnews[tt_news]=102043&tx_ttnews[backPid]=23&cHash=8b7335e5c0), (28-01-2011)

⁸ [http://www.hrt.hr/index.php?id=48&tx_ttnews\[tt_news\]=102043&tx_ttnews\[backPid\]=23&cHash=8b7335e5c0](http://www.hrt.hr/index.php?id=48&tx_ttnews[tt_news]=102043&tx_ttnews[backPid]=23&cHash=8b7335e5c0), (28-01-2011)

Table 2 – The GDP growth rate from 2003 to 2009

Year	GNP, real growth rate (%)	Mostly consequence of:
2001 - 2005	4.7	Export of goods and services and personal consumption
2006	4.8	Investments and export
2007	5.6	Personal consumption due to a fall in unemployment
2008	2.4	Significant drop in demand spurred by higher inflation but also adaptation to the European system*
2009	-5.8	Export of goods and services

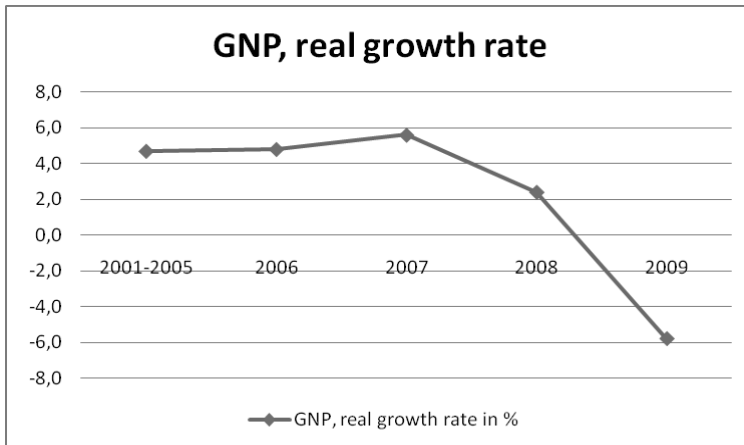
Source: Authors according according to the annual reports of the Croatian Chamber of Economy (CCE)

**The reason for this is “reviewing data on the achieved GDP in order to adapt to the European System of Accounts (ESA95). With this adjustment the GDP, since 1995, was corrected taking in account gray economy, imputed rent and financial intermediation services indirectly measured. This resulted in average annual GDP increase of 15.6% in the period from 1995 to 2007. That’s why the ammount of GDP achieved in 2008 was 342.2 billion Croatian kunas, or 47.4 billion euros, and it was significantly higher which led to the growth of GDP and GDP per capita, which puts Croatia in a better position in the international comparison.”*⁹

Capital Efficiency (Chart 2) and the percentage in Value Added growth rate (Chart 4) indicates the decline of Croatian economy.

⁹ HGK, Centar za makroekonomske analize, (2009) Hrvatsko gospodarstvo 2008. godine, str. 9, available on: <http://www.hgk.hr/wps/portal!/ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D2113%26kid%3D464%26skid%3D2303> (28-01-2011)

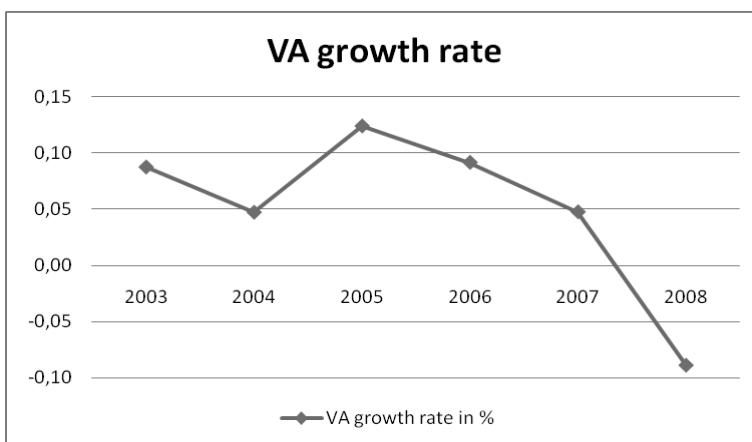
Chart 3 - GDP growth rate from 2003 to 2009



Source: Authors

Furthermore, if the trend of GDP growth rate (Chart 3) and the percentage in Value Added growth rate (Chart 4) from 2003 to 2009 are compared, the conclusion is that the trend is the same and records a fall in 2007. This fall is manifested in the GDP growth rate a year later (2008) in relation to the percentage in Value Added change which indicates the need to review the measuring performance methods.

Chart 4 - Percentage in Value Added change from 2003 to 2009



Source: Authors

The GDP and VA trend (Chart 1) if compared, it shows that they have the same tendency in the same period. So just looking at them as indicators, we come to the conclusion that only the year 2009 was somewhat less successful and we get a completely different picture of the economy.

Based on all the above the question arises: how to measure the performance of the economy so that these results become a relevant basis for making appropriate decisions and necessary changes, at a higher level of system control.

CONCLUSION

The Croatian economy performance from 2003 to 2009 observed through the GDP growth rate shows that the Croatian economy recorded the highest possible decline in the last nine years, where the obtained GDP growth rate was -5.8% in 2009.

However, the performance analysis of our economy through knowledge-based economy indicators, shows that the Intellectual Capital Efficiency and productivity fell already in 2007.

Paradoxically, in the same year the GDP growth rate recorded its highest level of 5.6% in the observed period.

According to the performance criteria in knowledge-based economy, our economy is on the verge of a satisfactory level of value creation (indicator shows above 2.00).

The fact that worries is a significant decrease of the employees ability to create value and thus the economy as a whole, seen from year to year. In other words Value Added has been systematically destroyed.

Researches conducted on this topic indicate the need for policy makers to create a development model whose basic tendency would be a more efficient use of Intellectual Capital, through existing knowledge and experience.

The results indicate the need for monitoring the Croatian economy performance also on knowledge-based economy postulates.

LITERATURE:

Croatiabiz.com, broj 30/31, prosinac 2004.-siječanj 2005., ISSN 1333-8668

Edvinsson, L. (2002), Korporacijska longituda: Navigacija ekonomijom znanja, Differo, ISBN 953-96545-1-3, Zagreb

HGK, (2004), Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini 1.-6./2004., ISSN 1845-6359, Zagreb

HGK, (2006), Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini 2006., ISSN 1845-6359, Zagreb

HGK, (2008), Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini 2007., ISSN 1845-6359, Zagreb

HGK, (2010), Intelektualni kapital: Uspješnost na nacionalnoj, županijskoj i poduzetničkoj razini 2009., ISSN 1845-6359, Zagreb

Jelčić, K. (2001) Priručnik za upravljanje intelektualnim kapitalom u tvrtkama, Hrvatska gospodarska komora, ISBN 953-6207-47-8, Zagreb

Jelčić, K. (2004) Priručnik za upravljanje intelektualnim kapitalom u tvrtkama, Hrvatska gospodarska komora, ISBN 953-6207-47-8, Zagreb

HGK, Centar za makroekonomske analize, (2006) Hrvatsko gospodarstvo u razdoblju od 2001.-2005., dostupno na: <http://www.hgk.hr/wps/portal!/ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D361%26kid%3D464> Pristup: (28-01-2011)

HGK, Centar za makroekonomske analize, (2007) Hrvatsko gospodarstvo u 2006. godini, dostupno na: <http://www.hgk.hr/wps/portal!/ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D361%26kid%3D464> Pristup: (28-01-2011)

HGK, Centar za makroekonomske analize, (2008) Hrvatsko gospodarstvo u 2007. godini, dostupno na: <http://www.hgk.hr/wps/portal!/ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D361%26kid%3D464> Pristup: (28-01-2011)

HGK, Centar za makroekonomske analize, (2009) Hrvatsko gospodarstvo 2008. godine, dostupno na: <http://www.hgk.hr/wps/portal!/ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D361%26kid%3D464> Pristup: (28-01-2011)

HGK, Centar za makroekonomske analize, (2010) Hrvatsko gospodarstvo 2009. godine, dostupno na: <http://www.hgk.hr/wps/portal/!ut/p/.cmd/cl/.l/hr?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D361%26kid%3D464> Pristup: (28-01-2011)

Tominović, K. (2000) Measuring the Efficiency of Intellectual Capital in Fundamental Shipbuilding Processes, Brodogradnja 48, Zagreb

Tominović, K. (2007) Value Creation in Sophisticated Object of Marine Technology, 2nd Conference of Marine Technology-in memoriam of academician Zlatko Winkler, November 28th-29th 2007, Faculty of Engineering University of Rijeka, Rijeka

METHODOLOGICAL PROBLEMS AND APPROACH TO INNOVATING AND BUILDING THE CURRICULUM OF GENERAL MANAGEMENT

Josip Mesarić, Ph.D.¹, Stjepan Rudan, B.Sc.², Joze Kuzic, Ph.D.³

¹Josip Juraj Strossmayer University, Faculty of Economics in Osijek, Croatia, mesaric@efos.hr

²Institute for Public Health of Osijek-Baranja County, Croatia

³Monach University, Melbourne, Australia, Joze.Kuzic@monash.edu

ABSTRACT

The development and / or analysis of the curriculum are based on knowledge of specific areas in which the curriculum is made and model used for its design. There are several different approaches and each has its advantages and disadvantages. The paper analyzes four approaches for the development of general management curriculum innovation. We analyzed few curriculum of American, European, Australian and Croatian studies in general management on bachelor and graduate (master) level. Study of general management at the undergraduate level of American, Australian and some European universities differ significantly from the Croatian Schools in number as well as in the methodological, core and major courses. At higher levels of education (graduate and master) the differences are even more obvious. Based on the performed analysis we tried to estimate the balance of the curriculum in terms of key aspects of the curriculum: the role of managers, the application of pedagogy, the methodological basis, the level of research, process and content and the domains and areas.

JEL Classification: I23, I25

Keywords: Curriculum, general management, undergraduate, graduate

1. INTRODUCTION

In the last ten years a large number of management schools have been opened all over the world, and the Republic of Croatia has not been bypassed by this trend. In many of these schools, the curricula based on which formal management education

is acquired, haven't been built using adequate methodological apparatus, without firm goals, relevant domain knowledge and appropriate pedagogy. Very often (especially in schools which do not have solid managerial tradition in the environment in which they were established), curricula are the result of uncritical copying of content of curricula of world-famous schools and their adaptation to local limited conditions and capabilities. Therefore, from time to time the curricula need to be subjected to critical analysis and adapted to new conditions in the environment, as well as to institutions upon whose foundations educational processes are carried out.

There are several problems that arise in connection with reviewing and innovating curricula:

- Formal problems in changes of up to 20% of content and the repeated procedure of accreditation of the innovated program, which is the case in the Republic of Croatia,
- Change of social conditions for which the managers have been trained, and usability of managerial knowledge,
- Problems related to the obsolescence of the acquired knowledge,
- Problems related to change of management paradigms.

Curricula can be built, developed and analysed based on different approaches and using different methodologies, each of which has its advantages and disadvantages, depending on domain knowledge, volume (scope) of knowledge, and level of goals.

Since achievements based on a curriculum are not only the question of the curriculum concerned, but also of the totality of pedagogical practice and educators' abilities, as well as of learners' perception and abilities, the acquired knowledge cannot be judged solely on the basis of curriculum. What can be assessed, however, is the balance of the curriculum and the potential for integration of knowledge and skills and indirectly acquired knowledge and the desirability of institution through the level of salaries and the positions of graduated students. Since there is no unified curriculum of general management, several schools have been investigated so as to determine the key common content in the function of managerial knowledge. Twenty curricula at the undergraduate and a few less at the graduate and master's level have been selected for research and comparison. Specifically, comparative lists of courses have been created (syllabuses, but not of their content, pedagogical prac-

tice, quality of teachers and students and criteria for goal achievement). Based on comparative analyses, certain guidelines for review, development and innovation of curriculum of any of the analysed curricula can be given.

Below, an overview of the key characteristics of managerial knowledge and suitability of individual methodological approaches for building management curriculum will be presented, after which comparative analyses of groups and individual curricula of general management on selected cases will be performed.

2. CHARACTERISTICS OF MANAGERIAL KNOWLEDGE

Managerial knowledge is very often fuzzy (soft, without clear boundaries) knowledge. Managerial knowledge is paradigmatic for the most part. This means that the attributes of managerial knowledge are the results of the change and the acquisitions of various paradigms within managerial practice and academic community. There are many cases where it can be noticed that curricula do not aspire to become overly scientific (without causal methods, mathematical-statistical apparatus and robust evidence), so that it seems (to paraphrase Ghoshal) that “business could not be treated as a science, and we would have to fall back on the wisdom of common sense that combines information on “what” is with the imagination of “what ought to” to develop both a practical understanding of and some pragmatic prescription for “phenomena of organized complexity” that the issue of corporate governance represents. This too is schooling that yields theory that does pretend to be scientific laws but merely serves as temporary “walking sticks” in Fritz Roethlisberger’s (1977) terms – to aid sense making as long as we go along, to be used only until a better walking stick can be found (cited in Ghoshal, 2005). Besides, these new paradigms which serve to corporate capital and private prestige are often deprived of any moral norms and ethical principles. This raised some concerns among several scholars about the current state of management research and pedagogy (Mintzberg & Gosling, 2002; Donaldson, 2002; Ghoshal, 2005).

3. CREATION AND ANALYSES OF CURRICULUM OF GENERAL MANAGEMENT THROUGH DIFFERENT APPROACHES

In formal education, a curriculum usually means a formal set of knowledge that is offered (and that is expected to be chosen) in a certain educational institution (Webster, 2010). Knowledge is formed into domain sets and shaped into courses and course systems (syllabuses) that have to be realised – transmitted within a

certain time period and according to a certain sequence. Depending on the target group and the area it will cover, a curriculum assumes the characteristics of a recipe (a product) that has to be realised, the characteristics of a process, i.e. the ways of realisation including the participants and their roles, as well as the applied methodology and the characteristics of a practice for the realisation of the products (Kely, 2009). Furthermore, a curriculum is developed or analysed through the formal tools that include semantic classification and categorization like topic maps and ontology, (Dexter & Davies, 2009; Dicheva, 2004; Dicheva, Dichev, 2006). There are also other conceptual approaches through the so-called hexagonal prism (Mesarić, Kuzic, Dovedan, 2011) which shaded curriculum from six different interrelated contexts.

3.1. Curriculum as a body of knowledge – syllabus to be transmitted

This seems to be the most often used method in curriculum creation and it results in the fact that curriculum is often identified with syllabus. Syllabus basically means a concise statement or table of the heads of a discourse, the contents of a treatise, the subjects of a series of lectures (Smith, 2000).

The body of knowledge and the contents of single courses represent trade-offs that are a result of the scope of knowledge and the experience of creators themselves, the time span within which they should be transferred, anticipated knowledge and experience of recipients and desired objectives. Therefore, significant differences among management syllabuses (curricula) can be observed due to general and specific characteristics of managerial knowledge. An approach to curriculum development as content (body of knowledge – syllabus) puts the teacher in focus, who will effectively transfer the planned content. As a rule, the interpretation of the content, but nor the true perception of the adopted content, will be tested using some modality of written or oral examination.

3.2. Management curriculum as a product

In contemporary higher education a curriculum represents a set of knowledge shaped into a university programme – a set of courses that is usually realised through an intensive training within two, three or more years of study. According to this approach, a curriculum can be seen as: “a programme of activities (by teachers and learners) designed so that learners will attain so far as possible certain educational and other schooling ends or objectives” (Grundy, 1987). The logic of this approach

is for the curriculum to be designed outside of the classroom or school. The second problem of this approach is evaluation. In order to measure, things have to be broken down into smaller and smaller units. This is of utmost importance nowadays, when we exceedingly fragmentise but not synthesise, not only managerial knowledge. What we are inclined to measure, such as achievements in any university curriculum, has been more than often reduced to the quality of interpretation. Successful interpreters frequently fail to manipulate their knowledge in real life, which is often the case with managers due to the paradigms acquired over several years of education, when in practice such paradigms tend to change rapidly. The use of the acquired, but no longer relevant paradigms will result in poor performance of managerial knowledge in practice. Smith points to the third problem of this approach, “a real problem when we come to examine what educators actually do in the classroom”. Much of the research concerning teacher thinking and classroom interaction, and curriculum innovation has pointed to the lack of impact on actual pedagogic practice of objectives (Stenhouse 1974), (Cornbleth 1990).

3.3. Management curriculum as a process and development

Curriculum as a process ‘is a way of translating any educational idea into a hypothesis testable in practice. It invites critical testing rather than acceptance’ (Stenhouse, 1975). At first glance, this is an ideal model desired by managers. Nevertheless, at least two problems may occur.

The first problem is the experiment with the socio-economic systems and the nature of realising managerial decisions. A system where an idea, hypothesis or decision can be tested within a reasonable time period and with acceptable consequences simply does not exist, since it is not possible in a certain moment (a phase of a business cycle) or it can trigger unexpected, risky or adverse consequences. The use of mathematical models and simulation techniques or managerial simulation games is more and more becoming a key to these problems. Their shortcoming is that they have to simplify reality and are, as a rule, often directed towards the problems in managerial efficiency, i.e. only certain functions of management. This approach to the theory of curriculum, because it places meaning-making and thinking at its core and treats learners as subjects rather than objects, can lead to very different means being employed in classrooms and a high degree of variety in content. As Stenhouse comments, the process model is essentially a critical model, not a marking model (Stenhouse, 1975).

3.4. Curriculum through a hexagonal prism

According to hexagonal prism, proposed by (Mesarić, Kuzic, Dovedan, 2011 curriculum (of general management) is developed/analysed through integration of six interrelated domains (Figure 1.)

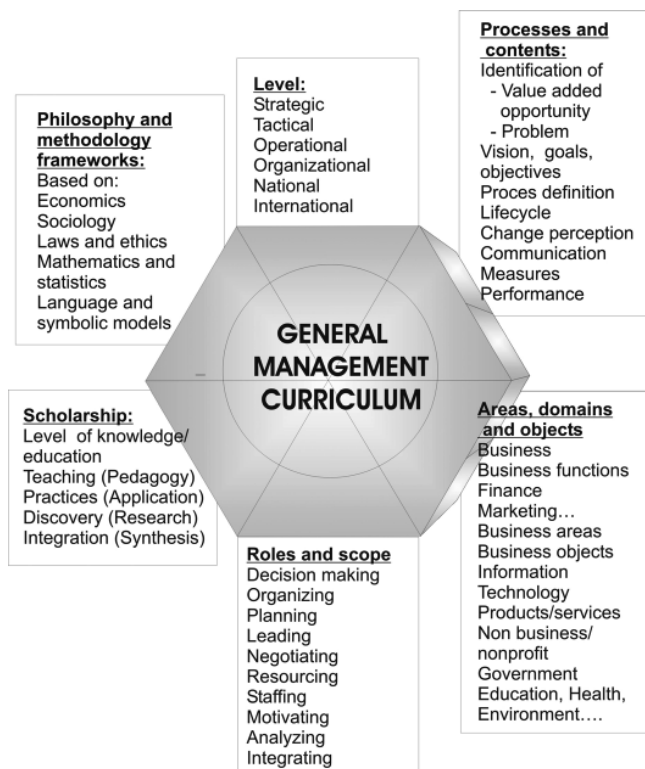


Figure 1. Curriculum domains through hexagonal prism (Source: Mesarić, Kuzic, Dovedan)

Creating and/or revising curriculum can begin from any aspect (elementary prisms), depending on goals and initial assumptions. Thus the starting point in the revision of curriculum of Yale school of Management was the prism of role manager would find himself in the environment. The creation of curriculum of management at management schools in the Republic of Croatia was started from the point of BOK, that is, philosophical–methodological elementary prism (because of which content is overloaded with economies of all kinds, as well as with other content, which typically belongs to higher levels of education).

4. ANALYSIS OF THE SELECTED CURRICULA

In order to establish if there is a general consensus, and what is the minimum core knowledge offered (i.e. required) by general management curriculum at different educational levels, we have analysed 20 general management curricula at bachelor level (8 American, 5 European and 7 Croatian) and 27 MBA or graduate programs (12 American, 8 European, one Australian and 6 Croatian). All the courses were listed (for some universities only core, major or concentration courses, without electives) in a single MS Excel table, and then submitted to data analysis from different aspects. Alphabetical listing and additional key word searches revealed common features in general management curricula at undergraduate and graduate levels respectively.

At undergraduate level all the programs have these core (mandatory) courses: (Introductory) Management, Accounting and Marketing. Most American and European programs (11 out of 13) have also Finance, Corporate Finance or Financial Management, and for the majority (9 out of 13) Business Law and Human Resources Management (HRM) are also core courses. Analysed through hexagonal prism, approaches to curriculum of general management at undergraduate level are significantly different in American, Australian and European studies in relation to Croatian studies of general management.

Analysed through prism, US and European curriculum have starting point in domain and objects – more specifically, the business system and its characteristics and core business functions (Accounting, Business Finance, Marketing). The philosophical aspect is focused on Business Law, and the level on business organisation. Management in its roles and scope primarily relates to those topics. The number of courses is lower than the number of courses at Croatian programmes, the length of studying is generally the same, which means that the depth of studying is more pronounced.

The starting point of study of general management in Croatian studies is the philosophical–methodological aspect, where the study is fraught with economic courses (General Economics, Microeconomics, Macroeconomics, National Economy, International Economics, and Mathematics, Statistics, Informatics and Law). Two business functions are covered: Accounting and Marketing, while Business Finance are rarely studied, but Public Finances and Financial markets are compulsory, which, by nature of things, should be courses of higher levels of education.

At higher tertiary level (graduate and MBA) the similarities (the number of common core/major courses) are significantly decreased, whereas the number of electives is increased. Elective courses are intended to allow students to shape their managerial

knowledge according to their own interests and goals. The courses with the highest common denominator at American, European and Australian programs taken together are Marketing, Leadership, and HRM (10 out of 21 universities). One third of programs offer Higher-level Accounting, Operational and Strategic Management. The remaining courses are quite varied both in titles and the areas they cover.

Graduate and MBA general management programs in the Republic of Croatia have hardly any common features. The courses that might be viewed as common appear at two universities at the most. There are also significant differences in comparison to the analysed universities abroad.

Management study programs are distinctively divergent, encompassing a large number of courses which are different in terms of their subject matter, depth and width of study, object of management, etc. As we analysed the course titles, the word management was found in combination with almost 60 different concepts. In some of those combinations the word management is superfluous, or somehow at odds with the other concept.

Unless the approach taken in designing the general management curriculum is explicitly stated elsewhere, it can be discerned from the list of courses (syllabus). As for Croatian graduate programmes, there are three courses that appear in more than half of syllabuses we investigated: Financial management, Operational management and Strategic management, whereas all other content is highly differentiated, with no common course names. At postgraduate and specialist postgraduate studies it is impossible to find a course that would be common for more than two of the six investigated postgraduate programmes (except for Marketing management occurring twice).

The above-mentioned analyses indicate that management studies at selected management programmes in the USA, Europe and Australia are more firmly founded on managerial practice with an emphasis on leadership as a key managerial function, human resources and operational management, with strategic orientation and internationalisation of business operations. These principles indirectly reveal the dominant forms of schooling. In the first case this is probably the orientation of curriculum towards practice and integration, and in the process and content towards newly-created value and performance of managers.

Looking at curricula in Croatia, schooling is apparently dominated by traditional teaching methods and weak practice orientation. Managerial roles will necessarily be only declarative and the processes covert.

5. CONCLUDING REMARKS

The analysis of numerous general management curricula created by different business schools and schools of management has shown that there is no one common, universally accepted general management curriculum – neither in terms of content or in terms of educational level, regardless of the geographical location of the schools. It seems that European and American business schools agree that undergraduate programs should include general education in management, accompanied by basic knowledge in accounting, marketing, human resources management, business law, and business finances. At universities with a shorter tradition of managerial education, such as Croatian universities, there are other core courses in addition to principles of management, accounting and marketing.

The differences at higher levels of education are of such a scope that it becomes difficult to recognize the common features of general management programs at different graduate and MBA schools.

Management curricula depend on the context and not on some acquired scientific theories nor generally accepted philosophical concepts; general management is not the same in different environments and its contents on the one hand and its realisation on the other hand strongly depend on the institution and its social, economic and cultural environment, as well as strategic objectives and positions of the institution – the school of management.

The fundamental functions and roles of management (planning, organising, leading, coordinating, controlling, staffing, motivating, resourcing) are in some cases designed as separate courses which implicitly emphasises the importance of some aspect of managerial function, but at the same time makes that general management curriculum unbalanced. Revision of managerial curriculum of particular university, although timely consuming, will give best results by using methodology (approach) of hexagonal prism.

REFERENCES

- Cornbleth, C. (1990) *Curriculum in Context*, Basingstoke: Falmer Press.p.27
- Dexter, H., Davies, I. (2009) *An Ontology-Based Curriculum Knowledgebase for Managing Complexity and Change*, Ninth IEEE International Conference on Advanced Learning Technologies, 2009, icalt, pp.136-140.

Dicheva, D. & Dichev, C. (2006). TM4L: Creating and Browsing Educational Topic Maps, *British Journal of Educational Technology* - BJET, 37(3), 391-404. Retrieved March 07, 2010 from <http://compsci.wssu.edu/iis/nsdl/Publications/BJET06-Dicheva-Dichev-Submitted.pdf>

Dicheva, D. et al. (2004) *Ontological Web Portal for Educational Ontologies*, Retrieved February 26, 2010 from <http://www.win.tue.nl/SW-EL/2005/swel05-aied05/proceedings/4-Dicheva-final-full.pdf>

Donaldson, L. (2002). Damned by our own theories: Contradictions between theories and management education, *Academy of Management Review*, 15 (3), 369-381.

Ghoshal, S. (2005). Bad Management Theories Are Destroying Good Management Practice, *Academy of Management Learning & Education*, 2005, 4 (1), 75-91.

Grundy, S. (1987). *Curriculum: product or praxis?* Lewes: Falmer Press.

Kelly, V. (2009). *The Curriculum: Theory and Practice*, Sage Publications Ltd; Sixth Edition edition (February 3, 2009), ISBN-10: 1847872751

Mesarić, J., Kuzic, J., Dovedan, Z. (2011), *Proceedings of INSITE Conference 2011*, Novi Sad, 18-23.06..2011. Publisher Informing Science Institute, Editors: E. Cohen, S. Boyd

Mintzberg, H. & Gosling, J. (2002). Educating managers beyond borders, *Academy of Management Learning and Education* 1 (1), 64-76

Smith, M. K. (1996, 2000), *Curriculum theory and practice. The encyclopaedia of informal education*, Retrieved February 23, 2010 www.infed.org/biblio/b-curric.htm

Stenhouse, L. (1975) *An introduction to Curriculum Research and Development*, London: Heineman

Taba, H. (1962). *Curriculum Development: Theory and practice*, New York: Harcourt Brace and World.

Webster, M. *Webster dictionary*, Retrieved November 27, 2010 from <http://www.merriam-webster.com/dictionary/curriculum>

EMBEDDEDNESS OF MULTINATIONAL COMPANIES IN LOCAL COMMUNITIES: THE COMPLEX CULTURE AND COMMUNICATION RESEARCH PROJECT

Mónika R. Molnár, Ph.D.¹, István András, Ph.D.²

¹College of Dunaújváros, Hungary, molnarmo@mail.duf.hu

²College of Dunaújváros, Hungary, andras@mail.duf.hu

ABSTRACT

It is widely believed that success of the functioning of an enterprise is largely dependent upon the structure of relationships, both within the company, and between the company and its stakeholders. Moreover, regardless of the type of a company, embeddedness¹ in local communities is also essential, while the process of it is frequently accompanied by conflicts. In our paper, we present a project that was initiated by a research team in 2010. The aim of the project was a complex study of the embeddedness conflicts in our city and its region with the emphasis on the management of cultural and communication issues. The Complex Culture and Communication Research Project incorporated four research methodologies, described in detail in the paper. Based on the analysis and interpretation of the data collected a classification of problems and causes of conflicts were elaborated. In our paper, we present this scheme of both internal and external problems and conflicts, and introduce each factor in more detail accordingly.

JEL Classification: F23, L14

Keywords: Embeddedness, Conflict, Culture, Communication, CURE, GLOBE

¹ The concept of “embeddedness” is going to be used throughout this paper for labelling the state of growing into, and adjustment to social environment by actors, arriving from different social, political, and cultural milieu.

THE LOCAL SETTING: DUNAÚJVÁROS – A SHORT OVERVIEW

Dunaújváros is one of the newest cities in Hungary. It was built in the 1950s during the industrialization of the country under Socialist rule. The city is only 60 years old, and its life cannot be described in terms of traditional urbanisation. The city had emerged as an artificial creature, a “human resource” addition to a steel mill upon which it was built, and it had developed into a community with its own myths and traditions (Miskolczi, 1980).

The city and the steel plant were built by people, who were forced to participate in this mammoth construction, or strongly motivated to leave their previous habitat. Many of those, who had built the steel mill, and the city, settled there, and formed foundation of the city’s population creating a highly heterogeneous conglomerate of people. In twenty years the city became a well developed community with rich cultural life, active sports, a dozen of schools, and a college. Well equipped hospital, theatre, impressive parks and rapidly expanding housing made Dunaújváros a perfect socialist city. Community life was also emerging. The steel mill, Dunai Vasmű employees were paid well in comparison to other social groups. In mid-eighties the company had employed about 13,000, i.e. almost all families in the city, and the region had at least one member, who earned handsome wages there. Socialist model seemed to work, and to work well in Dunaújváros.

By the time of transition in the late 1980s Dunaújváros had well developed infrastructure, active social and cultural life, and extensive network of social services. Since then development of the city had shown somewhat controversial picture. A newly built motorway provides excellent connection to Budapest, and Europe. A newly built Danube bridge contributes to the city’s regional prominence. Huge investments created new workplaces, unemployment rate in Dunaújváros region is well below national average: 8.5 vs. 11.5. On the other hand, quality of life of many local residents had markedly declined, social services today are less accessible for many, and crime rate had doubled.

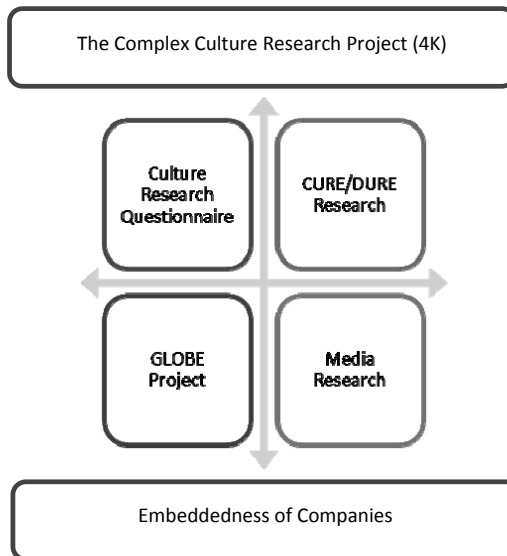
With respect to the economy, the city was designed to serve the metallurgical conglomerate, which for decades had provided not only employment for the residents, but also a wide range of services, including infrastructure, social, cultural, educational services, sport facilities. Dunai Vasmű and the city were fully integrated. However, slowly other enterprises had started to emerge in the city, from other industries (food production, textile factory and a paper mill should be mentioned in the first place) and retail stores to various institutions. Today four companies may be viewed as major actors in Dunaújváros due to the size, production volume,

revenues and number of employees: ISD Dunafer Zrt, Hankook Kft, Hamburger Hungaria Kft., and Ferrobeton Zrt.

THEORY AND METHODS OF EMBEDDEDNESS CONFLICTS STUDY: THE COMPLEX CULTURE RESEARCH PROJECT (4K)

The project discussed in this paper was initiated by a research team of the College of Dunaújváros in 2010. The aim of the project was a complex study of the embeddedness conflicts in Dunaújváros and its region with emphasis on cultural issues and communication (see Figure 1).

Figure 1. Methods of the Complex Culture Research Project (4K)



Source: Authors' own work

1. *Culture Research Questionnaire*

This complex questionnaire explores acceptance of local enterprises and organisations by population of Dunaújváros and its region. It also sets the ground for other methods.

The questionnaire contains simple and well defined items and can be completed in 10 to 20 minutes.

1698 local residents had completed the questionnaire. The sample was not representative, however its size and structure enables a number of generalisations.

The questionnaire contained the following categories of topics:

- Attitudes, preconceptions, prejudices,
- Description and evaluation of the region,
- Communication and information related to the companies, mainly to Dunaferr and Hankook.
- Individual economic status and social dialogue.

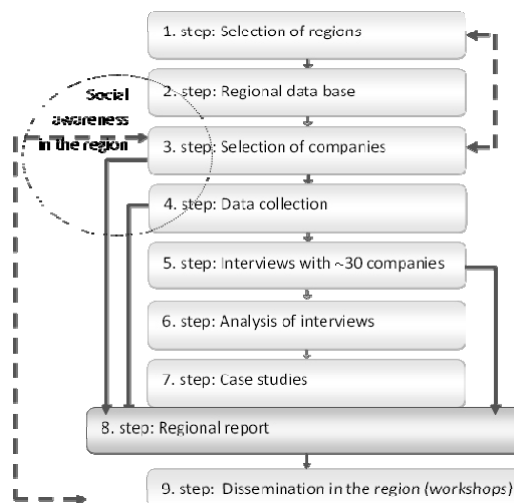
Data collected with the questionnaire served as a basis for description of local attitudes to companies, and patterns of communication. Causes of the attitudes were explored with the following procedure.

2. CURE Structured Interview

This interview is based on the Corporate Culture and Regional Embeddedness (CURE) project's method (see Figure 2).

Accordingly, the data was collected on the region and the companies. Data collection focused on main actors, regional networks, and their members. The following four areas were selected for detailed evaluation: quality of life, innovation, human resources and competencies, commitment to environmental protection and environmental responsibility.

Figure 2. CURE Project Structure



Source: „CURE Research Design to be applied in the 7 Regions.” (2008)

Regarding the study sample, about 30 local companies were selected for the data collection according to various criteria: owner structure, duration of local presence, market orientation, memberships, and knowhow intensity. In total about 30 companies got selected and contacted.

With respect to the interview procedure, first of all, basic data of the companies was collected. It included founding year, profile, size, number of employees, revenue, profit, regional activity, structure of management, mission, and regional social responsibility issues. Questions of the interview were divided into numerous categories, all assessing the extent of commitment along the four studied areas, and determining the degree of integration of the companies into the region.

CEOs or top managers were contacted in each of the about 30 selected companies, and interviewed. Two interviewers were enacted simultaneously; all questions and answers were tape recorded. An interview lasted for 60 – 90 minutes.

Regarding the data processing, transcriptions of all recordings supplemented by observations and comments of the interviewers had served as basis for analysis. Tables and diagrams helped to categorize the answers and to establish their validity.

3. GLOBE Project

The third element of the 4K Project was also a questionnaire, originally used in the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) project.

GLOBE was initiated by R. House in 1991. 62 cultures were explored by the questionnaire, which consists of three components. Component one contains scales of culture and leadership, component two collects data on 9 dimensions of culture and cultural contexts of the theory of implicit leadership. Component three is devoted to leader's behaviour and attitudes, and performance of the subordinates, but also to the mediating role of the culture in performance of organisations.

Cultures were evaluated according to the following 9 dimensions scheme (House and Javidan, 2004): (1) Power distance, (2) Uncertainty avoidance, (3) Human orientation, (4) Individualism vs. collectivism (organisational), (5) Individualism vs. collectivism (in-group), (6) Assertiveness, (7) Gender equality, (8) Future orientation, (9) Performance orientation.

All dimensions are represented by the items, classified into the following four categories:

- social practices (39 items),
- expected/anticipated social values (39 items),
- regular organisational practices (34 items),
- expected/anticipated organisational values (41 item).

Each answer is selected from seven point scale.

GLOBE provides also opportunity for measurement of leadership skills (House et. al., 1997; House & Javidan, 2004; Hanges & Dickson, 2004). The questionnaire was administered to about 150 medium level managers of Dunaújváros companies.

4. Media analysis

Analysis of the Dunaújváros mass media had contributed to drawing of balanced picture of perception of the roles of the companies, attitudes, and communication issues. Reports, articles published in three local media, Dunaújváros Online, Dunaújvárosi Hírlap, and Helyi Téma between 1992 and 2010 were analysed.

Media images of the major four businesses (ISD Dunafer Zrt, Hankook Kft, Hamburger Hungaria Kft., and Ferrobeton Zrt) as well as of other companies were reviewed and analysed. All publications, which had dealt with the companies since their privatisation (in the case of former state owned enterprises), or beginning of their activities were selected for analysis.

All selected articles were divided into three groups according to the main topics:

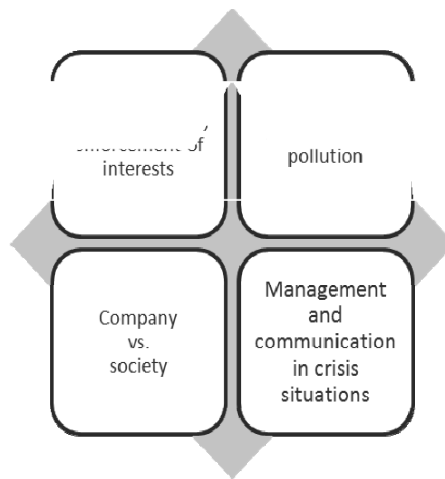
- company life, inside changes, innovations,
- dialogue between the company and community,
- all other papers, which had mentioned any local company.

Contents analysis software was used for data processing. In accordance with the aims of media analysis images and evaluation of the companies were established on the basis of the communication style, willingness to maintain dialogue with communities at large, the unions, local government, and other organisations. Finally, the effect of global crisis on companies was also reviewed.

CONFLICTS OF EMBEDDEDNESS

Analysis and interpretation of the data, collected according to described above procedures, had yielded the following scheme of both internal, and external problems and conflicts. Four components were identified (see Figure 3). It is important to emphasize, that this scheme does not define relative weights of identified problems and causes of the studied companies or various actors of social environment. Accordingly, weights of these factors may vary, and vary considerably.

Figure 3. Classification of problems and causes of conflicts



Source: Authors' own work

In this section we will examine the identified four components of problems and conflicts in more detail. Each component will be illustrated with media images and quotations derived from the media research.

1. Component: Labour relations, enforcement of interests, public affairs

Contradictory interests of the owners, management, and employees could be observed in all types of enterprises, domestic and multinational alike. Enforcement of interests, and quality of social dialogue might be more pronounced. Similar conclusions presented the ISES research group, which had studied the state and the opportunities of further development of the Hungarian labour culture in global environment (Miszlivetz, 2009). A number of factors could be responsible for relative weakness of internal enforcement of interests within a company. The authors believe that one principal reason is lack of the general social contract, which would

regulate many labour conflicts. It is partly related to weaknesses of Hungarian social organisation. It is important to emphasize that some companies are not happy about trade unions, and other organisations, created by the employees. Cultural differences should be viewed as one of the principal factors:

“Are there unions at Hankook facilities?”

“Yes, there are, but there are many problems, related to the differences in cultures, which are not managed well by their Hungarian HR management. Certainly, multinational companies imagine that they are free to do here whatever they want. We protest. Yes, we support foreign investment; it is good that Hankook had started production here. However, Hungarian employees are protected by the Hungarian Labour Code! It is impossible to create Korean environment in Hungary. Our cultural roots are different. Hankook’s Hungarian managers are not doing good job.”²

Cultural differences are closely related to the differences in workplace behaviour and attitudes. The ISES group presented a list of undesirable features, described by the management of multinational companies including poor language competencies, underdeveloped professional skills, lack of mobility, low level motivation, weak commitment, rejection of responsibility, passivity, conflict avoidance, fluctuating self-evaluation, lack of loyalty, short-term thinking, lack of complex perception, lack of stable system of values, lack of cultural interaction and understanding, poorly organised, inefficient team work, lack of trust, poor adjustment, segregation and separation, just to name the most significant ones (Miszlivetz, 2009).

Lack of the desire to know and understand another culture is of special importance in multinational companies. E.g., freshly appointed CEO of Hankook Co. had told the reporter of Dunaújvárosi Hírlap the following:

“We are satisfied with professional skills and competence of the workers, however we are surprised to see how frequently Hungarian workers are absent, including sick leaves. It is entirely unknown in South Korea. ... In the future we are going to recruit employees directly rather than trusting recruitment companies.”³

² Hibát követtek el a vezetők. Beszélgetés a Vegyipari Dolgozók Szakszervezetének alelnökével Hankookról, szervezetségről. 7 December 2007. Dunaújvárosi Hírlap [Dunaújváros Times].

³ Kötődni a céghez. Vegyészből lett gépész-szakértő a Hankook új ügyvezetője. 8 May 2008. Dunaújvárosi Hírlap [Dunaújváros Times].

2. Component: Environmental pollution

Main target of a company is profit. For long time all other facets of work were neglected. Today environmental protection is of primary importance. While all economic actors agree with this declaration, its implementation is frequently compromised. Collected data show that environmental pollution is still frequent, with quality of air being the weakest element. While the companies frequently declare their commitment to environmental protection, reality may be different. Environmental issues are frequent reasons for conflicts between industrial companies and communities.

3. Component: Company vs. society

Businesses are parts of the society. The concept of Corporate Social Responsibility (CSR) became one of the most important elements of evaluation and interpretation of relations between companies and society. Corporate social responsibility can be defined as the “economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time” (Carroll & Buchholtz, 2003, p.36). The concept of corporate social responsibility means that organizations have moral, ethical, and philanthropic responsibilities in addition to their responsibilities to earn a fair return for investors and comply with the law. A traditional view of the corporation suggests that its primary, if not sole, responsibility is to its owners, or stockholders. However, CSR requires organizations to adopt a broader view of its responsibilities that includes not only stockholders, but many other constituencies as well (e.g. employees, suppliers, customers, the local community, local, state, and federal governments, environmental groups, and other special interest groups).

The data shows that the only company in Dunaújváros, which does more than declaration of social responsibility, is ISD Dunafer. It seems that other multinational companies do not consider development of stronger ties with local community important. In the beginning of transition period it was widely believed that foreign investment into Hungary is motivated by well trained workers and engineers, developed infrastructure, stable political and legal environment. And – last, but not least, lower wages, which are paid to Hungarian employees. Two decades of experience had shown that the only real motivation for foreign investors is low wages. In the beginning of the nineties many Hungarian employees were looking for opportunities at multinational companies. Today the majority prefer companies, which are owned and managed by Hungarians.

It is worthwhile to mention however that some multinationals express growing interest in integration, embeddedness into Hungarian social environment.

4. Component: Management and communication in crisis situation

While global crises require appropriate responses, most of critical situations a company faces emerge within company or in its local neighbourhood. A few examples: changes in top management, redundancy issues, production problems. All of these events may occur any time, sometimes without any warning signs. A successful company must be prepared to deal with such situations, i.e. a list of steps to be taken at crisis must be ready at all times.

Perception, evaluation, interpretation and response to global crisis were assessed with details by the 4K project. There was very little dissent in the Dunaújváros community in perception of the crisis, overwhelming majority believes that the crisis have had strong and deep effect on local businesses, and the region. Most respondents however considered actions, taken by the companies, messages to community, communication inefficient, clearly unsatisfactory. Our analysis had shown that most companies were not prepared to treat this extraordinary situation. Very few had developed conflict management schemes, and almost none had plans for concrete realisation. One of the consequences of the crisis is gradual recognition of importance of appropriate management of extraordinary situations which are in fact elements of “normal” business life.

CONCLUDING REMARKS

Appearance of major multinational companies in Dunaújváros brought not only jobs to residents, but also social and cultural challenges. Conflicts which emerge in the process of embeddedness may be at least partly prevented, and successfully managed if conflicting sides are prepared, and motivated to act. One concrete proposal is design and application of adjustment programs for businesses, which are planning to enter Hungarian social space. Such a program aims at both sides, promotes dialogue, understanding, cultural tolerance. An alternative is spontaneous understanding of the importance of good quality intercultural relations, stimulated and reinforced by the imperative to improve relations within company, and between a company and host social community, what in turn contributes to more efficient functioning of the company itself.

REFERENCES

- Carroll, A.B. & Buchholtz, A.K. (2003). *Business and Society: Ethics and Stakeholder Management*. 5th ed. Thomson South-Western, Australia.
- „CURE Research Design to be applied in the 7 Regions.” Institute for Work and Technology. 2008. February.
- Hanges, P.J. & Dickson, M.W. (2004). The Development and Validation of the GLOBE Culture and Leadership Scales. In: House et. al.: *Leadership, Culture, and Organizations – The GLOBE Study of 62 Societies*. Sage Publication, London.
- House, R.J. & Javidan, M. (2004). Overview of GLOBE. In: House et.al. (eds.): *Leadership, Culture, and Organizations – The GLOBE Study of 62 Societies*. Sage Publication, London.
- House, R.J. & Wright, N.S. & Aditya, R.N. (1997). Cross-Cultural Research on Organizational Leadership. A Critical Analysis and Proposed Theory. In: Early, P.C. & Erez, M.: *New Perspectives on International Industrial/Organizational Psychology*. The New Lexington Press, San Francisco.
- Miskolczi, M. (1980). *Város lesz csakazértis....* Szépirodalmi Könyvkiadó, Budapest.
- Miszlivetz, F. (2009). *A magyar munkakultúra állapota és alakításának lehetőségei globális környezetben*. ISES kutatócsoport, Savaria University Press, Szombathely.

BUSINESS IMPROVEMENT USING CLOUD COMPUTING IN COMPANIES IN THE REPUBLIC OF CROATIA

Ninoslav Novak, Ph.D.¹, Mirko Cobović, B.Sc.²

¹Faculty of Economics in Osijek, Croatia, nnovak@efos.hr

²Polytechnic in Slavonski Brod, Croatia, mcobovic@vusb.hr

ABSTRACT

Information and Communication Technologies are extremely important for the successful operation in institutions and companies. Constant aspiration to reduce costs and increase efficiency results with fact that own Information and Communication Infrastructure is very expensive. It required a solution which would avoid investments into the purchase and rehabilitation of such infrastructure.

According to the previously mentioned requirements there was created the autonomous remote system where the user does not need to invest in infrastructure and administration or to take the risk of losing information. A system that includes these features is called Cloud Computing.

Cloud Computing is an emerging new computing paradigm for delivering computing services. It provides computation, software, data access and storage resources without requiring cloud users to know the location and other details of the computing infrastructure. Within limits, cloud users can consume any amount of these resources without need to ensure servers or other computing equipment. Cloud Computing is built on the foundations of Grid Systems on which were added new key technologies such as SaaS (software as a service), PaaS (Platform as a service), IAAS (infrastructure as a service), virtualization and more.

The authors of this article represent what is Cloud Computing and explore its features and improvements in the business. Furthermore the article shows the current status of Information and Communication Technologies in companies in the Republic of Croatia. The survey was based on several institutions and companies involved in education, manufacturing, sales, etc. Based on the research and current

costs in the IT sector, there are presented possibilities of the optimization and cost savings by using Cloud Computing.

JEL Classification: M15

Keywords: Information and Communication Technologies, Cloud computing; Companies, Optimization, Management, Costs.

1. INTRODUCTION

ICT systems are extremely important for successful operation of institutions and companies. By constant desire to reduce costs and increase efficiency, it was learned that owing their own ICT infrastructure is very challenging and expensive. The solution was required, which would avoid investment in aquisition and in later reconstruction of this infrastructure. According to the above mentioned requirements the Cloud Computing system was created.

Cloud Computing is a set of online booking aimed at providing a variety of computer services (Brumec, S; 2011., p. 25).

The providing of these services have distinguished features:

- Self-service and on-demand self-service
- Network access
- Resource virtualisation
- Rapid elasticity and scalability
- Payment according to consumption (pay as you go)

In the following chapters are shown business savings opportunities by using Cloud Computing through the comparison of cost in their current ICT infrastructure (taking into account work on server and applications on the server) and in case of using Cloud Computing.

2. CLOUD COMPUTING

The implementation of Cloud Computing in business is changing the habits of using ICT. Computing power, storage space and applications needed for bussines are used as a service. In this way, ICT is more accessible to businesses and consumers. Also, Cloud Computing is used in other business and scientific sectors such as marketing, organization of conferences, the sharing of biomedical materials, etc.

According to the US National Institute for Standards and Technology, Cloud Computing can be defined such as “Model for enabling convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.”

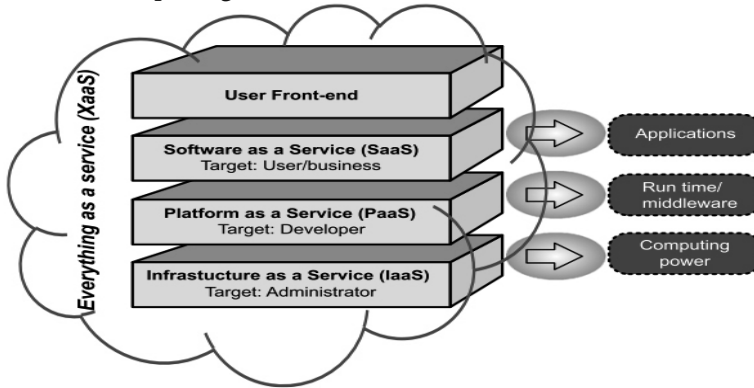
2.1. Cloud Computing models

Cloud Computing consists of three models: SaaS (software as a service), PaaS (Platform as a service), IAAS (infrastructure as a service). Services are available through standard interfaces such as web browsers, service-oriented architecture(SOA) or REpresentational State Transfer (REST) services.

Software as a Service is sometimes called Application as a Service (AaaS), and in such a multi-user version it provides with the interface and ready-made software. The application can be offered to one or more users simultaneously. SaaS is a good foundation for the Application Service Provider (ASP) models. The systems on which this model is applied are Selesforce Customer Reaktionships Manager (CRM) system, NetSuite and Google Office Productivity applications. The main characteristic of SaaS is effective integration with other applications, which are especially scalability and performance, and true multi-user and configurability.

The second model of service is the Platform as a Service. PaaS enables customers systems and programmes where they can develop their applications. Service is covered by a cycle of development, testing, implementation, hosting sophisticated web applications. The examples for PaaS systems are Facebook F8, Salesforce App Exchange, Google AppEngine, Bunzee connect and Amazon EC2.

Figure 1 Cloud Computing Service model



Source: www.elsevier.com/locate/rcim (25.02.2012.)

Infrastructure-as-a-Service is also called Hardware as aService (HaaS). IaaS uses usage-based payment scheme, which means that the service of using the hardware is paid by the time of use. This type of service is very useful for business users, because it eliminates the need for purchasing and servicing their own hardware. Also, the advantage is in constant usage of their newest emerging applications, with no additional cost. The examples of applications which are on the market and are goal oriented to IaaS model are GoGrid, Mosso/Rackspace, MSP On Demand, and masterIT

2.2. Types of Cloud Computing

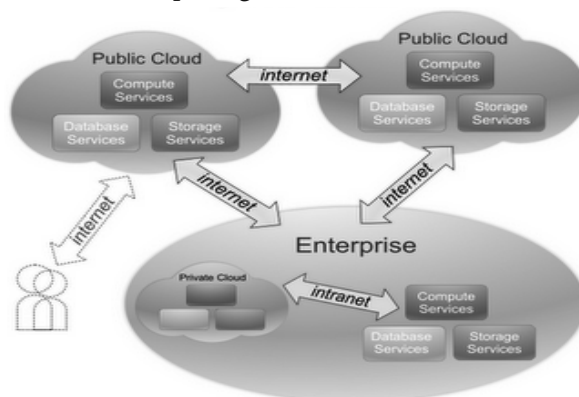
Cloud Computing are categorized according to access: Public Clouds, Private Clouds, Hybrid Clouds, and the Academic Clouds.

Public Clouds are based on a specific Cloud platforms supported with the development and placement applications, Internet access, data storage and other options. Under Public Clouds we understand that resources are placed in a large vendor. Public Clouds offer SaaS to PaaS and IaaS. The main economic feature of public cloud is a payment by usage - pay as you go.

Private Clouds are Clouds of data (data centers) owned by one company or institution, intended for personal use, and are based on similar topologies and Public Clouds. Private Clouds are used to balance the needs of the department of computer facilities, and avoidance of multiple computing resources. In the Private Cloud computing resources are aligned with the current peak load, and assign them to the department that at that time needs it the most.

Hybrid Clouds are a combination of Public and Private Clouds and as such are widely used. Hybrid Clouds are formed due to certain security concerns about accommodation of information and user aspirations for their own applications on their own computers. The reason for the use of Hybrid or occasionally to use Public Clouds is that it sometimes takes more resources than can be covered from its own resources.

Figure 2. Types of Cloud Computing



Source: <http://www.cloudave.com/tag/hybrid-clouds/> (01.03.2012).

Academic Clouds are used in universities and are often carried out in collaboration with the private sector. The main purpose of such systems is to serve the research purposes for possible results application in the economy and to support activities in the classroom. According to the technical characteristics the academic clouds are similar to public clouds. The aim is to save as much or as little as possible with the resources to get larger and more uniform utilization.

Utilization of computers is an essential factor in the profitability and viability of Cloud Computing.

3. THE ECONOMIC ADVANTAGES OF RENTING COMPUTING RESOURCES

Computing Clouds are the means which provide computing resources to users in the form of services such as the offer of electricity, water, gas, telecommunications, or services of lending. The advantages of using computer systems are expressed with the definition itself and by use of the service paradigm. The main two advantages of using Cloud Computing are the elasticity and the optimal procurement.

The suspension means the precise use of computer resources, by involvement of individual computers. Most computers in general, private or business, have a total utilization of between 5% and 20%, but the applications that run on these computers sometimes also require the maximum that a computer can achieve. When purchasing hardware, one must take in account precisely these maximums that applications require. According to the above, one faces a situation that in most of the time purchased hardware is not fully exploited, but it is necessary to obtain it due to the specific job characteristics. The costs of operations then become higher because most of the time expensive hardware is not used.

Optimal procurement can be defined as the engagement of computing resources according to payment for its use, without large capital investments in their own, not enough used resources. The flexibility needed in planning and management of computing resources is virtually impossible in terms of purchasing of equipment for only one organization, because the purchased hardware should also cover the short-term peak loads, it should be put into operation in a very short time and have an incredibly active market of used hardware.

3.1. The costs of ICT infrastructure

The costs of ICT resources greatly impact business. To get the total cost it is required to examine the 7 categories of infrastructure costs. The categories of costs are:

- *Cost of hardware* is representing a total value of the hardware that is planning to acquire and amortize through the anticipated useful life of 4 years.
- *Electricity costs for operation and cooling costs* are the electricity consumption for operational computing infrastructure for its cooling and air conditioning.
- *Cost of purchasing and preparing a cost of servers* are working hours required for training servers to work.
- *The costs of administering servers* represent all costs associated with the management server.
- *Software development costs* represent the cost of a license for the use of software and support. Depreciation is in time of two years.
- *Excluded costs* are some of the costs that are individually small in comparison with other cost categories, and as such do not greatly affect the overall cost.
- *Rental expenses* represent costs of software rental, hardware and other services

For research purposes, data were obtained from small and medium businesses and educational institutions on the territory of the Republic of Croatia. According to data, system of three servers is selected, that are commonly used, i.e. a system that covers the needs of the business of 100 employees, or up to 20 users. All prices are without VAT and are prone to change.

The average price per server is KN 30.000,00, while the main characteristics are two quad processors, disk space of 1 TB in RAID and 4GB of RAM. The average electricity price is KN 0.50/ kWh, and the actual consumption (the server and cooling) 1.1 kWh. The purchasing costs and the server preparation are counted on 20 hours of an administrator work, and an administrator price-hour average is approximately KN 250,00. The software development costs are calculated on the basis of the operating system from KN 6.500.00 and the necessary applications of KN 10,000.00 per server. The excluded costs, according to research are predicting the KN 2.100,00 per server. The time consideration is four years by the depreciation of server. The costs are shown in Table 1

Table 1 The costs of ICT infrastructure

The costs	Year 1 (kn)	Year 2 (kn)	Year 3 (kn)	Year 4 (kn)
Written off cost of hardware	22.500,00	22.500,00	22.500,00	22.500,00
Electricity costs	14.454,00	14.454,00	14.454,00	14.454,00
Costs of purchasing and preparing servers	15.000,00	0,00	0,00	0,00
Cost of software	24.750,00	24.750,00	0,00	0,00
Excluded costs	6.300,00	6.300,00	6.300,00	6.300,00
Rental costs	0,00	0,00	0,00	0,00
The total cost	83.004,00	68.004,00	43.254,00	43.254,00

Source: Made by authors (based on our own research)

The total cost of ICT infrastructure in four years amounted for these conditions is KN 237.516,00.

3.2. The Costs of Cloud Computing

The costs of Cloud Computing infrastructures are resilient, which is a big advantage in business. The service is not required to be paid in that time when it is not in use. The survey data were downloaded from the official sites of Amazon and Azura. Azure and Amazon offer cloud-public service, and models of SaaS, PaaS and IaaS.

On the Amazon site were selected the highest combination of resources. These resources meet most of the tasks currently carried out on its own servers. Technical features include: 6 Compute Instance, 1690 GB of local instance storage, 40 GB Storage Database. The Microsoft operating systems and applications need for work. The price is KN 3956.02/ month.

On the Azure website prices are expressed in months, and the resources with the following features were selected: 6 Compute instance, Database Storage 40GB, Blob Storage 1625 GB Bandwidth 1000 GB, the Microsoft operating systems and applications need for work. The price is KN 3802.42/ month.

Table 2 shows the maximum prices for services for companies and / or institutions with 20 users. Costs are made by assumption that 20 users will use the services 8 hours per day all working days of the year.

Table 2 Maximum costs of Cloud Computing through 4 years (the other 6 categories of costs are not reported because the amount is KN 0.00)

Rental costs	Year 1 (kn)	Year 2 (kn)	Year 3 (kn)	Year 4 (kn)
Amazon	47.472,24	47.472,24	47.472,24	47.472,24
Azur	45.629,04	45.629,04	45.629,04	45.629,04
Avarage	46.550,64	46.550,64	46.550,64	46.550,64

Source: Made by authors (based on our own research)

3.3. Comparison Results

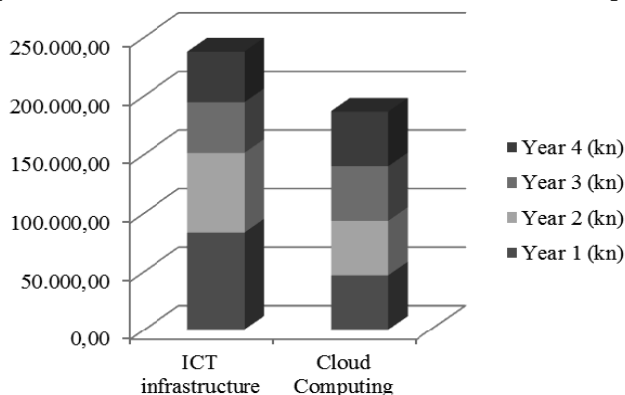
According to the data in Tables 1 and 2, Table 3 was made, the cost of using their own infrastructure and Cloud Computing.

Table 3 Comparison of own ICT infrastructure and Cloud Computing usage

	Year 1 (kn)	Year 2 (kn)	Year 3 (kn)	Year 4 (kn)	Total Cost
ICT infrastructure	83.004,00	68.004,00	43.254,00	43.254,00	237.516,00
Cloud Computing	46.550,64	46.550,64	46.550,64	46.550,64	186.202,56

Source: Made by authors (based on our own research)

Graph 1 Comparison of own ICT infrastructure and Cloud Computing usage



Source: Made by authors (based on our own research)

According to data provided in Table 3 and shown in Graph 1 it can be concluded that by usage of Cloud Computing technology in the first four years costs would reduce in the business for KN 51313.44, and achieve savings of 21.6% over four years. It can also be seen that the greatest savings is made through the first two years, while another two years savings disappear. Thus one could conclude that by the further usage of Cloud Computing there will be no savings. However, one must take into account that the computing infrastructure after four years is out-dated and needs to be replaced and rebuilt, which would require new investments.

This example shows only part of the services offered on the market. Furthermore, there are other vendors with services for word processing, Grid computing, Web design and so on. Such service offers Google Apps with special benefits for educational institutions.

4. CONCLUSION

Business without ICT in today world is unthinkable. The goal of any business is to make as much profit with as little of cost. This research has shown that it is possible to reduce these costs. The study was conducted on companies and scientific institutions on the territory of the Republic of Croatia, and was based on the current situation in the company. Data were collected on current and potential future costs. Based on this, the cost of acquisition and maintenance of server equipment for four years were calculated. Parallel to those costs is made cost projections for four years in case of using Cloud Computing. According to the data retrieved it can be concluded that in four years, with the usage of Cloud Computing and by

replacing servers, can achieve savings of 21.6%. The assumption is that the savings could increase by the use of Cloud Computing on all areas of business.

Educational institutions are being offered special discounts from various vendors. For example, like a Google Apps. It is possible to achieve up to 25 GB of storage, applications, word processing, spreadsheet, web page and so on.

Croatian National Grid Infrastructure in 2012 April, is planning to launch the Cloud Computing for the academic community in which they could exploit the resources intended for scientific work and research.

The Cloud Computing, in particular in public cloud, proved to be a good solution for small and medium businesses and educational institutions. However, companies are still reluctant to Cloud Computing because there is great fear of loss and data theft.

REFERENCES

- Misra, S. & Mondal, A. (2011.): Identification of a company's suitability for the adoption of cloud computing and modelling its corresponding Return on Investment, *Mathematical and Computer Modelling*, Volume 53, Issues 3–4, 504-521
- Sultan, N.A. (2011): Reaching for the "cloud": How SMEs can manage, *International Journal of Information Management*, Volume 31, Issue 3, Pages 272-278
- Volf, M. - Upravljanje znanjem u samoprilagodljivim cloud sustavima – diplomski rad, Fakultet elektrotehnike, strojarstva i brodogradnje, Split 2010.
- Xu, X. (2012.): From cloud computing to cloud manufacturing, *Robotics and Computer-Integrated Manufacturing*, Volume 28, Issue 1, 75-86
<http://aws.amazon.com/ec2/> 01.03.2012.
<http://brumec.com.hr> 25.02.2012.
http://economics.fundamentalfinance.com/micro_atc_mc.php 20.02.2012.
<http://www.cloudave.com/tag/hybrid-clouds/> 01.03.2012.
<http://www.cro-ngi.hr/> 01.3.2012.
<http://www.elsevier.com/locate/rcim> 25.02.2012.
<http://www.google.com/apps/intl/en/edu/> 01.03.2012.
<http://www.vjestak-informatika.com/files/Ekonomski-Ucinci-Primjene-Softvera-Za-Virtualizaciju.pdf> 25.02.2012.
<http://www.windowsazure.com/en-us/pricing/purchase-options/?campaign=vw-calc> 01.03.2012.

COMMERCIALIZATION OF HIGHER EDUCATION AND CHANGES IN THE MANAGEMENT OF PUBLIC EDUCATION INSTITUTIONS: EXAMPLES AND LESSONS FROM ANGLO-AMERICAN UNIVERSITIES

Rajko Odobaša, Ph.D.¹

¹Associate professor, Faculty of Law in Osijek,
Department of Economic Sciences, Croatia rodobasa@pravos.hr

ABSTRACT

The notion of commercialization of higher education implies introduction and consolidation of market logic in activities of education institutions. Commercialization has a number of aspects and consequences: decrease in state funding and higher education regulation, public education sector privatization, individual education financing, promoting competitiveness among individuals and institutions, cost reduction and non-profitable education programs elimination, precariousness of academic profession etc. These listed and interrelated aspects of commercialization of higher education present a neoliberal reform reply to real or exaggerated crisis of Anglo-American system of public higher education. The system that was built in time of the Golden Age of Economy, according to neoliberal critics, has resulted in decrease in higher education quality, students' competences reduction, wastefulness related to tax payers' money, injustice towards members of the lower classes, lack of discipline within universities and political destabilization of the society. Since the 1980ies along with an increased global impact of neoliberal ideology the number of neoliberally inspired and established higher education reforms has increased worldwide. In wider perspective, commercialization of higher education takes place together with reduction, privatization and commercialization of all other segments of public sector. Such processes are in accordance with the neoliberal concept of state retreat from education, health and social sectors and with setting different goals before the new public administration. At the same time with reduction of public financing, education services have been selling more both at private and public universities. The result of this is that both university

types are seen as profit enterprises that should be run in managerial and marketing terms. This change in management has been more difficult for public universities that have numerous negative cognitive-educational, organizational, social and cultural consequences. Some of these are: prevailing of economy logic and goals as focus and goals of education process, simulation of knowledge and competences, neglecting scientific-research qualities, an increase in tuition fees and education services prices, social differentiation and elitism of the well-off, corruption and nepotism development, reduction in number of fulltime and top-quality teachers, separating management from academic environment etc. Broadly speaking, corporate business management of higher education institutions speeds up and deepens the processes that with the purpose of economic progress of the society and individual neglect/abandon the concept of higher education as the key area for integral personal development and cultural emancipation of the society. Based on analysis results by recent critical research the paper aims at abstracting, presenting and elaborating on the most negative consequences of uncritical application of corporate-managerial model of managing Anglo-American public universities. The purpose of this research is to theoretically set rational limits to corporate pattern of public higher education institution management. Furthermore, the most efficient concrete means and mechanisms have been suggested that help traditional European and Croatian public universities to prevent or moderate dysfunctional consequences of higher education commercialization.

JEL Classification:I23

Keywords: neoliberal educational reforms, commercialization of higher education, corporate model of university management

1. INTRODUCTION

This paper researches the causes and effects of commercialization of the Anglo-American higher-education system, especially the changes that commercialization has brought to managing public and private universities. Commercialization implies introduction and consolidation of market-based logic in organization and activities of higher-education institutions. In addition to public educational sector privatization, commercialization of higher education has other aspects such as decrease in state funding, state regulation and state management of higher education and promotion of private initiative in the area of higher education, introduction of tuition-fees as well as acquisition of other university profit from market-based

activities, promoting competitiveness among individuals and public and private institutions, education cost cuts and non-profitable education programs elimination, academic profession precarization, etc. Commercialization of higher education is parallel and simultaneous to the privatization and commercialization of other public sector segments.

An increased commercialization of Anglo-American higher education takes place at the beginning of 1980s of the last century, after the neoliberal and neoconservative ideological and political transformation of American and British society. Commercialization of American higher education system implies a return of this system to the market profit organization principles prevailing in the period which preceded the *New Deal*. In other parts of the world commercialization enters and encompasses higher education systems in accordance with the spread and effectiveness of the neoliberal paradigm. The second part of this paper relates to the analysis of the rhetorical and theoretical deconstruction of public education.

The third part of the paper describes and explains the most important aspects of commercialization of higher education and the influence of market-based logic penetration on the organization and management of Anglo-American public and private universities. It also explains the reasons why the management of public universities necessarily adopts the hierarchical structure of private universities, which because of their complete vulnerability to the market subject the numerous education products to business results. These cases are analyzed in depth based on the results of the research of the Californian, merely nominally public University of *Berkeley*.

The fourth part of research lists and criticizes negative consequences of managerial-marketing models of managing higher-education institutions, which especially comprise increase in education services cost, over-emphasis on marketing activities, separation of managerial structures from the academy, development of corruption, simulation of knowledge and competences both of teachers and the students, neglecting important science and research areas and attracting wealthy users of education services.

In the concluding part, the main thesis of this research is once more proved, according to which a non-selective application of corporate models of higher-education management deepens processes which abandon the concept of higher education as the most important field for a wholesome personal development and cultural emancipation of the society. Thus for the purpose of economic progress

the idea of a person's wholesome development is sacrificed and he is reduced to a private owner of well-trained workforce for the market. In order to stop a further development of dysfunctional societal effects of commercialization and privatization of education, the end part of this research calls for a return of regulative and control mechanisms of the society into the higher education system, as well as auto-referential analyses to question and balance the relation between theoretical knowledge and practical knowledge or competences.

2. NEOLIBERAL CRITICISM OF THE ANGLO-AMERICAN SYSTEM OF PUBLIC HIGHER EDUCATION

From the end of World War II until the beginning of 1980s the US, Europe and other capitalist countries throughout the world were guided by the social democratic paradigm upon which a wide and inclusive social state was based. The state funded profusely the higher education and made it available to all social classes of the rather equal western society. This was the main reason why the number of universities in the seventies of the previous century more than doubled. (Hobsbawm, 2009, 257). New universities were being opened not due to irrational wastefulness of the state but as an adequate reaction to the needs of modern industry for a greater number of highly qualified professionals of various profiles. This explosive increase in number of universities was also favorably affected by a spreading private and public opinion which perceived a quality and long-term education as a key factor of swift and powerful individual and societal progress. Appreciation of education's influence itself in building a person that is profound, aware and moral in the period that came after the horrors of the war showed hope in future avoidance of destruction and human tragedies. It was believed that making opportunities for higher education available to wider areas of population could decrease the number of malcontents, consolidate social cohesion and promote economic initiative and innovation. Until the period of momentous ideological, political and economic change during the 1980s public universities, in addition to their right to public funding, enjoyed some other traditional rights such as the right to science and research autonomy and organizational self-management. Throughout this period education and science were hailed as a common good, and in accordance with such perception secondary level students adopted "something like the right of secondary school graduates to move towards higher levels (of education)" (Hobsbawm, 2009, 257).

Aside from the USA, Japan and some other countries, universities were still predominantly state-owned. The *welfare state* started funding scientific research and generating new jobs in science ever more abundantly. Thus the United States government started funding in 1970s two thirds of maintenance costs of research and employing around a million scientists and engineers. The annual budget cost allocated to this purpose was five billion dollars, and this amount was higher than the amount given in all the world's countries put together. (Hobsbawm, 2009, 463). Enormous amounts of money which poured into scientific and development programs were channeled through the universities, which made this an extraordinary model designed and implemented only within the United States. State funding of fundamental research was incredibly effective and thanks to it the Internet, laser, satellite, magnetic resonance imaging, DNA sequencing and hundreds of other technologies could be developed. Various state-provided measures generated probably the best state-owned education system in the world, to whose lecture rooms and laboratories hundreds of thousands of the best teachers and scientists from the whole world immediately flocked (Zakaria, 2009).

Still, not everyone had a favorable opinion of the American system and similar other systems of public higher education and scientific research. These critics were, however, not too loud or influential until the end of the *Golden Age of Economy* started approaching. In the opinion of Milton Friedman and other neoliberal critics of public higher education, this system has over time become cumbersome, petrified and inefficient in the sense of teaching quality and student competence development, very expensive and wasteful with the financial resources of the state, iniquitous towards the members of the poorer classes and most directly responsible for the *revolutionary sixties*, i.e. the lack of discipline within the universities and political destabilization of American society. It was said that the most responsibility for such a state was in the hands of the *welfare state* with its socialization and bureaucratization of higher education, which also led to a buoyant increase within the education sector of social parasitism, economic development decrease and endangerment of political rights and freedoms. The suggestions of neoliberal/neoconservative reform measures sought to change such a state and consequentially raise the quality of university level teaching, reinforce student competences and their social responsibility and reduce public costs and taxes of lower classes (who are not studying). The most anticipated measure was introducing tuition fees for students as a means of individualizing the costs of higher education. Through paying for their studies student were supposed to become more serious, more work

motivated and politically pacified. At the same time it was also expected of them as consumers to influence positively through their demands a better quality of teaching and of the personnel. Concomitant and complementary measures demanded a financial, regulative and managing withdrawal of the state from the system of higher education, and a reorientation of the university towards commercial acquisition of profit through collecting tuition and entrance fees, commercial research production, opening foundations and collecting donations.

Generally speaking the neoliberal criticism of the Anglo-American system of public higher education advocated its delegitimization as a place of knowledge produced to serve as a legitimating framework for the political and social order of that time which was suspected and accused of *left-wing shift*, moreover its complete privatization and opening towards market and profit interest as well as the removal of any critical awareness or (left-wing) reform potential. Advocates of neoliberal criticism and reformist response to a partially existent but in fact overly exaggerated crisis of the system of public higher education could probably not predict that thirty years later at the time of the “illusory reign of cognitive capitalism” a contemporary critic of the heritage of neoliberal university and higher education transformation would assert that “the university has become a money-making factory which functions on the principle of legalized robbery” (Valentić, 2009).

3. COMMERCIALIZATION OF HIGHER EDUCATION AS AN INTRODUCTION AND CONSOLIDATION OF MARKET-BASED LOGIC IN THE ORGANIZATION AND MANAGEMENT OF HIGHER EDUCATION INSTITUTIONS

Since its first ideological and institutional victories in Britain and the United States at the end of 1970s neoliberalism as an ideology, political theory and doctrine has not given up on its ideologeme according to which the state is a bad owner, and an even worse entrepreneur. The repercussions of this ideological phrase have led to a gradual subjection of the area of higher education to ever stronger commercialization processes, which is most widely perceived as introduction and consolidation of market-based logic into the organization and activities of higher education institutions. Commercialization can be understood as one of the aspects of neoliberal paradigm implementation within education (Doolan, 2009) or as a common term for a general context and all processes of introducing market-based logic into the work of higher education institutions (Harvie, 2011). If one understands it in the letter way, the aspects of commercialization are as follows: commoditization of knowledge, marketization, rationalization, flexibilization, precar-

ization and proletarianization of the academy sphere, and the most interesting to us, managerization of educational institutions. Commercialization is not an isolated social phenomenon; it is parallel to reductions, privatization and commercialization of other parts of the public sector (healthcare, social services, energetics, transport and other types of infrastructure, natural resources, etc.).

Under the patronage of newly-built state models (*good governance*) and public administration (*new public administration*) (Kregar, 2009, 193) that promote private initiatives in the area of high education, the dominant perception that education is a private investment and the pressure of financial and regulative retreat of the state from the system of public education, public universities in the United States in 1980s and in Great Britain in 1990s start introducing tuition fees which earlier had not existed or had symbolic amounts. As a consequence of increasing fiscal problems of the states mentioned (due to tax cuts for the wealthiest) and the consequential reduction of public education funding, public universities have over time and with state approval increased the amount of tuition fees. Under the pressure of unfavorable financial and changed social circumstances they started developing and spreading their commercial activities – they diversify and sell education services (seminars, courses, conferences, education tourism, etc.), forge ties with the private business and military sector and perform research for them, rent out place at university for advertising and various concessions, sell eminent university positions to members of the plutocracy, etc.

Simultaneous to public funding reductions are admission quota reductions, and due to this a great number of students are forced to enroll into profitable universities. However, private universities have for decades used this situation for a constant increase of student entry fees, which also enables the only nominally public universities to raise their tuition fees. This situation is best illustrated by a recent decision of the British Parliament to increase the limit on higher education tuition fees from 3,290 pounds to 9,000 pounds. What is more, at the same time the state decided to cut by half its own higher education funding by the end of 2012 (Sućeska, 2011).

In order to realize high profit and survive in the market game both the public and the private universities are forced to constantly spread and reinforce their commercial activities. An increase in the degree of market profits and a more prominent valorization of the university according to their business results changes priorities within university organization and activity, whereby the managing structure and

decision on material and financial resources become the most important components. Under such a regime of priorities public universities take and private ones consolidate the corporate-business model of *management*, regardless of its numerous and destructive negative consequences: epistemological and educational (neglecting quality of teaching and student knowledge, cutting unprofitable and demanding programs, departments and research – mostly humanist and social sciences), organization and personnel (precarization of the academic profession, separation of the managing structure) financial (overindebtedness of students and long-term *debt bondage*), social (disintegration and elimination of the poor from high quality and expensive programs) societal (suppression of critical awareness and the disappearance of reform potentials of the university and university educated citizens). All these consequences are inevitable when actual relationships within the university (and the society as a whole) have become subjected to the logic of profit and market competition (Žitko, 2011).

4. STRUCTURE AND EFFECTS OF CORPORATE BUSINESS MODEL OF UNIVERSITY MANAGEMENT

In the current global and social constellation those who stay without higher education inevitably end up as social outsiders (although it is debatable whether a graduate diploma does today give an advantage at the work market), and due to this fact universities have ensured a high demand and high profits from commercialization of their own activities.. Best ranking Anglo-American universities today are, so to say, rolling in money, and their *top-management* is in charge of not letting such a financial situation be worse. *Harvard, Yale, Stanford, Princeton* and other American elite higher education institutions today have at their disposal funds in the amount of twenty to twenty five billion dollars. Total profit of British universities (both the private and the public) amounted to 23 billion pounds in 2010, and in total they contributed 55 billion pounds to British economy. In the year 2007/08 this contribution was 33.4 billion pounds and it totaled 2.3 percent of GDP (which was at that time more than the contribution of the pharmaceutical industry) (Milat, 2010). Since the amounts of these contributions surpass by far public funding of higher education, it can be stated that the British sector of higher education has grown into a powerful branch of industry (whose profit is, it would seem, also the object of special care of global university ranking agencies).

A rather illustrative example for the state of things in the United States is the case of the well-known Californian public university *Berkeley*, a university which

always appears at global ranking lists in the first ten academic environments in the world. On this example, Chris Hedges, an eminent nonfiction writer who is knowledgeable of the situation in the American system of higher education, in his book *Empire of Illusion: The End of Literacy and the Triumph of Spectacle* (2009) shows the reach and the consequences of commercialization of public as well as private higher education institutions. Although in accordance with its own statute tuition fees at *Berkeley* should not even exist, they have over decades experienced a constant growth whereas state funding has almost completely gone. At the end of 1970s the tuition fee at *Berkeley* totaled 500 dollars per year, in 2005 it totaled 6,312 dollars, and it currently totals 13,218 dollars. The university president has recently proposed to raise tuition fees by an additional 81 percent (!) over the next four years, so that by the academic year 2015/2016 they should total 23,000 dollars (Brown, 2011). Hence the fact that today two thirds of American students in their fourth year of college have student loans, including 62 percent of graduates at public universities. The average debt of undergraduates totals 52,000 dollars, and there are an increased number of graduates whose debt is closer to the amount of 100,000 dollars (Levine, 2011). Since the growing amounts of tuition fees also attracted the banking sector with their system of student loans, by the end of 2010 American students were indebted with approximately 850 billion dollars. This amount surpasses the total debt of American citizens in credit cards, and some analysts argue that the student loan bubble could be the cause of the next financial crisis. The managing structure of *Berkeley* aims to increase the profit from tuition fees with numerous commercial activities. Lucrativeness of those activities is such that university management is today appointed (just in case), although in accordance with law it should be elected and comprise various academic groups. Essentially, the entire university management together with the faculty have taken to acquiring a fortune and neglecting and destroying the spirit and mission of public service, social responsibility and democratic ideals. Business moves made by the *management of Berkeley* present a paradigmatic example of corporate interests penetration into higher education. The management has, e.g. sold the right to monopole in selling food and beverages at the university to the *Coca-Cola Company*, and it also made a 500 million dollar agreement with *British Petroleum* (BP). In accordance with this agreement BP has unlimited access to research and technological facilities of the university, which were previously developed with the help of public funding and public investment. Moreover, BP was awarded intellectual property rights over scientific results and discoveries from which it has benefited enormous profit.

University funds are also being filled with donations from the well-off whose children are at college, as well as honorary degrees and places in managing boards for corporate and Wall Street CEOs. *Berkeley* has also established strong ties with the military sector and through this cooperation enormous amounts of money from the state budget are pouring into the university.

Adoption of business model of organization has also left its mark on the university's personnel policy, both towards the administrative and towards the teaching personnel. The pursuit of profit has influenced an increased number of employments in administrative services and university management where in the period between 1993 and 2007, the number of personnel has increased by 259 percent. In this same period the teaching personnel has increased by a mere one percent (Hedges, 2011, 115). Although most employees at *Berkeley* earn more than 100.000 dollars a year, the person who earns the most is the football coach with an income of three million dollars.

Whereas the profit of the university and its personnel increases alongside the students' tuition fees (and debts), the amount spent by the university per student on teaching is decreasing (Brown, 2011). It is therefore no surprise that every more objective assessment of teaching quality and students' competences leads to the conclusion that the graduates are (in most cases) persons without more profound cognitive and critical competences, or intellectual curiosity, only with developed specific specialist and elitist knowledge. The education they received makes these students into a special type of persons – with no self-criticism, inhuman, spoilt, deeply frustrated, obsessed with money and careers, and with no abilities to recognize even the most basic moral, political and cultural issues.

5. CONCLUSION

Although similarities are more and more prominent, in the case of Anglo-American universities it has not yet come to a complete congruity in models of managing public and private higher education institutions. The surviving differences are still visible in public universities - although they are only nominally public - having a more complex managing structure than the private ones, they still maintain a modicum of relations to the state, they communicate more with students and teaching personnel, approve more non-commercial research and publications, implement wider and more serious quality controls, etc. However, all these differences are now being questioned because within the dominant neoliberal social-economic con-

text a greater number of Anglo-American universities simply want to look more like business corporations. The same situation is taking place in wider, i.e. world surroundings. Universities everywhere are under the pressure of market changes, although it seems that commercialization of higher education has flourished the most in the analyzed Anglo-Saxon countries.

Introduction of the business model of managing as one of the aspects of commercialization of higher education inevitably accelerates and deepens processes, which are being legitimized with the purpose of economic progress of the individual and the society, which neglect (in the case of European universities), i.e. completely abandon (Anglo-American universities) the *Humboldtian* concept of higher education as a key area that enables and realizes a wholesome development of an individual and the cultural emancipation of the society. The business model of management approaches knowledge as a market commodity, and the education process as a production of specialized, directed and concrete knowledge devoid of any wholesome or critical relationship towards reality and of the ideals of humanist culture. In this way commercialization of education created a *decultivated* society and responds to its needs by reducing knowledge to its economic dimension, i.e. pragmatism- Due to pressures of highly developed and strong types of commercialization universities have been suffering numerous negative epistemological-educational, organizational, social, political and cultural consequences. By their catastrophic effects in the area of education, the academic environment and social relations in general the ones that stand out are: tyranny of economic logic and profit motives as the purpose and goal of education processes, simulation of knowledge and competences, neglecting important social and humanist research and science research quality, *managerization* of academic profession, development of corruption, nepotism and pseudo-elitism, social differentiation and elitism of well-off students, suppression of critical awareness and activity of the teachers, reduction in numbers of full-time employment and quality professors, separating managing structure of the university from the academic environment and their *deification*, etc.

All of these destructive consequences have been affected by gradual introduction and domination of neoliberal ideas, goals, and measures in the area of higher education. It could never have happened had the neoliberal world-view and political-economic program not been imposed on the ground of previous ideological and political victories within the most important social and state institutions. Not even under this condition could the degradation and devastation of higher educa-

tion have taken place to the current degree, had the universities and the academic environment not given in to the siren call of financial gain. Logically, but at the expense of their own fundamental values, cultural mission, social significance and intellectual authority. When knowledge is turned into a market commodity and the university into a factory organized and managed according to the principles of a business corporation, it must be expected that intellectuals and universities will cease to be the moral conscience of the society and the culture (Paić, 2011, 30).

Still, the worst effects of commercialization can be alleviated or even prevented by maintaining or increasing state funding, regulation and control, at least in those parts of higher education for which the profitable education sector does not show any special interest. In this way the state could provide a solid protection for social and humanist sciences and scientists, faculties and departments, but also show that as the umbrella organization it has recognized and valorized their critical and reformist character and potential. It is this which is the most valuable that science can give to the society in an age for which many claim that it is not marked the most by the economic crisis, but most of all a political, cultural and/ or moral crisis.

LITERATURE:

Brown, N. (2011), Pet teza o privatizaciji i borbi na Sveučilištu u Kaliforniji, dostupno na <http://www.slobodnifilozofski.com/2011/12/nathan-brown-pet-teza-o-privatizaciji-i.html>, pristup: (2-1-2012)

Doolan, K., (2009), O neoliberalizmu, Bolonjskom procesu, njegovoj socijalnoj dimenziji i studentskim prosvjedima, dostupno na <http://www.iro.hr/hr/javne-politike-visokog-obrazovanja/kolumna/o-neoliberalizmu/>, pristup: (10-1-2012)

Friedman, M. & R. (1996), Sloboda izbora, Global book, ISBN 86-02-00025-1, Novi Sad

Harvie, D. (2011), Zajednička dobra i zajednice na sveučilištu (I), dostupno na <http://www.slobodnifilozofski.com/2011/01/david-harvie-zajednicka-dobra-i.html>, pristup: (20-12-2011)

Hedges, C. (2011), Carstvo opsjena: kraj pismenosti i trijumf spektakla, Algoritam, ISBN 978-953-316-204-1, Zagreb

Kregar, J. (2009), Komercijalizacija i privatizacija visokog obrazovanja, Revija za socijalnu politiku 16/2, str. 193-195, dostupno na

<http://www.rsp.hr/ojs2/index.php/rsp/article/viewFile/868/771>, pristup: (12-1-2012)

Levine, B.E. (2011), Osam načina za zatiranje pobune među mladim Amerikanima, *Zarez*, br. 320

Milat, A. (2010), Visoko obrazovanje u Velikoj Britaniji, *Zarez*, br. 295

Mishan, E. J. (1975), Recept za gušenje pobuna: povećati šolarine i uvesti studentske zajmove, *Ekonomska čitanka*, Samuelson, P. A. (ur.), str. 476-483, Nakladni zavod Matice Hrvatske, Zagreb

Paić, Ž. (2011), Levijatan od porculana – Pitanje Europe danas ili *Missing-link* identiteta bez moći, *Europski glasnik*, br. 16, str. 13-40, ISSN 1331-0232

Sučeska, A. (2011), Dijalektika nasilja, *Zarez*, br. 299-300

Zakaria, F. (2009), Is America Losing Its Mojo?, *Newsweek*, November 13/2009, dostupno na <http://www.thedailybeast.com/newsweek/2009/11/13/is-america-losing-its-mojo.html>, pristup: (6-1-2011)

Žitko, M. (2011), Kućanstva snose najveći teret krize, *Novosti*, 612/2011, dostupno na <http://www.novosti.com/2011/09/kucanstva-snose-najveci-teret-krize/>, pristup: (9-11-2011)

CRISIS AS A CHANCE TO REORGANIZE THE GROWTH AND DEVELOPMENT

Mirko Pešić, M. Econ.¹

¹J. J. Strossmayer University of Osijek, Department of Cultural Studies, Croatia, mpesic@unios.hr

ABSTRACT

During the recession in all sectors of work and activities of economic entities, there is a need for changes aimed at maintaining the same level of activity and improving operating results and activities in certain segments of the economy.

Faced with Recessionary crisis in the past 2-3 years the new changes in the market companies are faced with the need for introducing changes aimed at maintaining the level of action and reorganizing the aim of further growth and development.

Company management, which in times of crisis and the recession still has the greatest responsibility for the first and main task of survival in the market has to work on reorganizing of the existing systems within the company adapting to new market conditions.

Company management should engage experts, who would adapt the existing company to new conditions and business processes, with the final aim to enable growth and development.

JEL Classification: H12

Key words: management, manager, crisis, crisis management

1 INTRODUCTION

Economic history shows that the economy never grows balanced, without any falls or economic take-off. Recession usually occurs after a period of expansion and progress, but when it comes to its bottom recovery and expansion begin. Recovery may be slow or rapid, incomplete or complete, and can significantly increase the standard of living (Benić, 2002: 13).

Production, employment, prices, rents, interest rates, profits, the amount of money in circulation usually decline during recession phase, and grow in the expansion phase.

Recession (recession) starts at the top and ends at the bottom. Consumption grows more slowly and begins to decline. Inventories of enterprise grow, there is reduced investment, and decrease of real GDP. Labour demand is being reduced, the unemployment increased. Lower demand and rising unemployment typically reduce inflationary pressure, reduce state income taxes and increase government spending for unemployment benefits (Benić, 2002: 14).

Numerous bankruptcies of enterprises, as well as their expected growth, makes it necessary to deepen the knowledge of business crisis, its characteristics and resources, as well as the appropriate instrument to master the crisis.

More intense competitiveness as well as mistakes in corporate governance, lead even successful companies to a crisis, their suppliers and customers too.

Almost every company can get into a situation that threatens its survival. Business crisis is not just an issue for business consultants and advisors, but the point of discussion for each company. Every company is forced to pay due attention to the characteristics of crisis and to develop tools for effective business crisis management and use. This means to primarily incorporate instruments of preventive action, as well as instruments to identify and to overcome the crisis. It is important to recognize the early stages of crisis development, to overcome the crisis and move towards a new success (Osmanagić Bedenik, 2003).

This paper deals with management and leadership style in the time of crisis, in situation when the company is in crisis. There are plenty of opportunities in crisis management in which they have to act; the results of which can be observed in success or failure, depending on the image and the ability of management to act and to take steps considered extremely important for the survival and development of a company.

Very determined and capable managers are needed, those who can create the way and a basis for reorganization and “survival” of crisis situation.

2 THE CRISIS AS A GUIDELINE FOR SUCCESS

Management actions are determined by the depth of crisis. There are three basic stages of action in crisis:

- 1) The transformation of a company occurs when a company is relatively healthy, trying to answer the following questions: What are we doing wrong? What could we do better?
- 2) The turning point occurs when a company with significant business problems has sufficient time and resources to find a solution;
- 3) Managing a crisis happens when it comes to the very existence of the company (Sučević, 2010:13).

External causes of the crisis

Many external events can be predicted, but also many can not. It is important to make difference between the two categories of external influences. The first refers to political, economic or regulatory characteristics of the market, that can not be controlled by the management and which substantially limit its actions. These are given conditions or restrictions which should be accepted as such, one should simply operate within them.

Second category of external influence is more significant from a managing point of view and makes their tasks even more difficult. These are changes in surroundings for which the manager must have known or could have predicted the changes so that the company had to be ready. These changes range from normal business risks to the unfortunate combination of events that any one company is not protected. Unfortunate set of circumstances can befall any company, but it is rarely the only reason to be blamed for the collapse of the mature company (Sučević, 2010:15).

The internal causes of the crisis

While external causes of the crisis may take different forms, almost all internal causes are result of action or inaction of management. All experts agree that in most cases the cause of the crisis is internal being under the control of a manager. According to various studies the percentage of direct or indirect management fault is always about 80%. According to D. Bibeault, management has a direct or indirect cause of the crisis in eight out of ten cases. Full understanding of this problem can only be achieved by answering the two key questions: Why there is bad management? and What are the visible symptoms of bad management?

Bad managers are the result of someone's wrong thinking in the nomination procedure, as it is about a very responsible position.

Changes in the market are inevitable feature of almost every industry. Changes in technology, size and growth of market segments, product life cycle, structure and actions of competitors, the structure and actions of suppliers, production costs, as they affect business performance in the short or long period. Even the best managers miss the opportunity and fall into the trap of changes. Good managers are still able to offset the negative effects and quickly adapt their business enterprises. Control mechanisms that help managers to react to the changes are: the system of market monitoring, comparison with other companies and even development of all functions. Control mechanisms are very often ignored in companies that are in crisis. It is not clear whether they are ignored during crisis or the company is being hit by crisis because the control mechanisms were ignored (Sučević, 2010: 29-30).

Analysis of the causes of the crisis was the subject of numerous scientific studies (Meyer, 2001; Serwa, 2008; Hagen, 2004; Friedman & Thomas, 2007;).

Finally, both success and failure of a company arises solely from the ability of management (Presber & Stengert, 2002: 118).

3 THE PROCESS OF CRISIS MANAGEMENT

Crisis management in a broader sense encompasses a wide range of business activities focused on the cross of preventive action before the crisis, to crisis management in the narrower sense, to learn new ways of thinking and action in the crisis. Activities related to the action during the crisis are considered crisis management in the narrower sense or mastering of the crisis (Osmanagić Bedenik, 2003: 18-19).

Before the crisis occurs, it is necessary to take preventive actions, to focus on a prospective study.

The basis for preventive action scenarios are scenarios of possible future actions. The focus is not only on avoiding the crisis, but also on preparing for its inevitable concurrence. The key point is creation of a crisis plan that includes all activities for mastering the crisis in case of its occurrence.

Once the crisis has occurred, supposing that it could not have been avoided, the emphasis is on mastering the crisis. Mastering the crisis includes actions to mitigate the crisis and limit the damage. Learning in crisis includes learning about the real

facts and phenomena of the crisis itself. Key issues refer to the identification of the crisis, its force and its effects. That part of the process of crisis management is often referred to as crisis management in a narrower sense.

The last step in crisis management in a broader sense is reactive crisis management. The key question is: What to do next? The emphasis is on learning from the crisis and shaping the future directions in company development. Due to lack of preventive crisis management, improvisation and acting on symptoms, the real causes of the crisis are often ignored, which causes multiplier and accelerating effects that enhance and accelerate the crisis.

The starting point in understanding and mastering the crisis is a specific starting position of a company. It is characterized by the market and by the customers, ie the target groups of the company, as well as by the products and market effects offered by the company, and finally by the key competencies of the company, particularly related to research, development, positioning of the company and its identity (Osmanagić Bedenik, 2003: 39).

It is not very likely that the company will be drawn from crisis by the existing management.

There are two reasons for this: firstly, the existing management of the company brought the company into crisis and thus proved that it is not a top management, and to overcome the crisis top managers are needed; secondly, the existing management is often limited by emotions and is unable to apply all necessary measures such as lay-offs, closure or sale of departments or product lines which they are proud of, considering them as their own deeds.

The primary cause of the crisis plays an important role in choosing either the old or new management. In crisis caused by external causes the companies kept existing management in 90% of cases. In contrast, when the internal causes are considered more important, the company changed management in 90% of cases.

In crisis caused by both external and internal causes, the company changed its management in 70% of cases (Sučević, 2010: 63-64).

Table 1 shows the actions and methods available to implement in given situations of crisis. Management decides which methods or “tools” should be chosen to rescue the company in crisis and establish stability in a company or enterprise, it can also serve as an overview of possible outcomes in crisis management operations.

Table 1

Action	Transformation	Turnaround	Crisis
Sale of parts or departments	*		
Reengineering business processes	*		
TQM (Total Quality Management) program	*		
Restoring production program	*		
Analysis of product and stop production of certain products	*	*	
Alignment with workforce needs	*	*	
Determining the actual cost of each product	*	*	
Changing pricing policy	*	*	*
Change in method of wages and benefits	*	*	*
Reducing the scope of business		*	*
Restructuring of liabilities		*	*
Dismissal		*	*
Improving working capital management		*	*
Extension of debt		*	*
Negotiations on the partial payments of creditors			*
Bankruptcy			*
Starting liquidation			*

Source: Platt (1998: 5)

There are many obstacles in the implementation of restructuring and those arising from its characteristics that confirm that the restructuring process requires: a lot of time, a very high level of professionalism, expertise, high amount of financial resources and a broad analysis of the situation in a respective sector or a company (Ferizović, 2002: 37).

A type of process is more important than its quantity. Reengineering of many subordinate processes does necessarily lead to achievement of effects on the balance line of a company.

One or two central processes can be chosen, those that are considered essential to achieve business goals and great results (Hammer & Champy: 2001).

4 STYLES OF CRISIS MANAGERS AND REHABILITATION OF COMPANIES

Effective management of the organization is not an easy task, however, it is not likely that someone offers a permanent competitive advantage (Domazet, 2007: 367). In the management and human resource management theory it is generally accepted that autocratic management has a devastating effect on the organizational climate and long-term results as it restricts development of employees and of new ideas.

However, in the early stages of exiting a business crisis the autocratic type of management shows the best results. Decisions which allow survival of enterprises must be made very quickly, without seeking consensus with the staff or management team and with full responsibility. This mode can even bring relief to workers if they observed previous management as weak and soft, or if there is a high degree of concern about the uncertainty caused by the crisis. The autocratic way of management in the short term period gives the impression of power and transmits a sense of security within the company (Sučević, 2010: 64).

Although styles may vary considerably, desirable characteristics of leaders in crisis managers are as follows: (Slatter, Lowett & Barlow, 2006: 9).

- Quickly determine the clear short-term priorities and objectives
- Visible display of authority
- Set expectations and standards
- Decisiveness and quick implementation of decisions
- Continuous communication with all parties involved in business enterprises
- Building confidence and trust through transparency and honesty.

Remediation companies is often associated with a change of structure, encouraged by owners and by management. Escape from the market is the only situation where it is desirable to avoid changing the structure and as painlessly as possible withdraw from the market. In any other case structural changes are inevitable. They are related to the change in the structure: capital, organizations, associates (management, quality and number of employees), technologies, markets / products, innovation with the basic idea that the old structures cannot heal the enterprise (Osmanagić Bedenik, 2003: 194).

5. WHEN THE CRISIS IS OVER?

The company should never get out of the crisis. Management should generate and intensify the crisis. It is clear that in companies with such business culture a crisis is never over.

On the other hand, many managers will argue that their company springs from one crisis to another and that the business is in crisis is observed as normal way of doing business. Whatever agreed, we must take into account that not all crises are equally important and dangerous. Index of despair is defined as the number of days to bankruptcy, it may be a measure of the significance of the crisis. Using this

criteria the majority of normal business crises, such as the cancellation of an important contract, unable to pay claims, dismissal of individual employees and the like, are not considered significant. Of course, each of these crises can be extremely important in certain circumstances: if the customer cancels the contract with which it performs 80% of the work, if you are unsuccessful due to debt collection fall into the lock or if the employee is the key person in the company and exceed the competition (Sučević, 2010: 153).

The real managers of the crisis should be seen as a challenge to overcome obstacles to the smooth continued operation and be ready for action with the emergence of the crisis in order to troubleshoot problems as quickly as possible to ensure smooth follow-up, and then allow the company to further grow and to develop.

6. LITERATURE:

Benić, Đ., (2002), Poslovni ciklusi, Fakultet za turizam i vanjsku trgovinu, Dubrovnik.

Domazet., T.: (2007), Ekonomika – politika kako dalje? Ekonomski fakultet Zagreb.

Ferizović, M., (2002), Vlasničko restrukturiranje u funkciji izgradnje financijskog tržišta, Ekonomski fakultet Univerziteta u Sarajevu, Sarajevo.

Hammer, M. & Champy, J. (2001), Reinženjering tvrtke, Mate d.o.o. Zagreb.

Osmanagić Bedenik, N., (2003), Kriza kao šansa; Školska knjiga, Zagreb,.

Presber, R., Stengert, U., Kreditrating, Schaffer (2002), Poeschel, Stuttgart.

Slatter, S., Lowett, D. & Barlow, I., (2006), Leading Corporate Turnaround Jossey – Bass.

Sučević, D., (2010), Krizni menadžment – Vodič za planiranje, prevenciju i oporavak, Lider press d.d.

Hagen, J.& Tai-kuang Ho. (2004), Money market pressure and the determinants of banking crises

Serwa, D. (2008) Larger crises cost more: impact of banking sector instability on output growth

Friedman J. & Thomas D. (2007) Psychological health before, during, and after an economic crisis: results from Indonesia, 1993 – 2000

Meyer H. (2011) Five ways to solve the eurozone crisis

RESISTANCE TO CHANGE IN EDUCATIONAL PROCESS ADAPTATION

Milan Puvača, B.Sc.¹, Ivica Zdrilić, M.Sc.²

¹Ofir Ltd., Croatia, milan@ofir.hr

²Adriatic Security Ltd., Croatia, ivica.zdrilic@adriatic-security.com

ABSTRACT

Using realistic understanding of competitive environment and ever present changes in the market relations, in the last few years it becomes clear that lifelong learning is the only key by which an individual can maintain their competence. Global impact on everyday life makes all facts learned today, replaceable or “already seen” in just couple of days. Business processes are the best indicators of this situation, and as always, the first who recognize the opportunity, has the advantage. Constant flow and sustainability of education had never had these challenges before.

Comparing students twenty years ago, there is a large deflection at the side of today's as they are more demanding, more active, but also very critical. Universities, more or less successfully meet the set standards, teachers understand the impact of information and communication technologies in career guidance of young people, and the entire educational process is adapting constantly.

On the other hand, companies faced with the economic crisis, have also turned to the additional education of their employees. Investing in education is trying to create an additional profit, and certainly, greater competitive advantage. Workshops, courses and continuous professional development are no longer a dead letter in the entrepreneur's balance sheet.

The paper is trying to unite and identify problems and obstacles which stand in the path of the educational process IT evolution, in academia, at the University of J.J. Strossmayer in Osijek and in regional businesses. Research will show whether there are common resistances in modernization, as well as is there a specific reason for the rejection or obstructing the introduction of new solutions to education.

Reducing the University and the business environment in the mutual denominator, we would conclude the similarities and differences within, actually much related fields. Through analysis, we would define the opportunities for early identification and elimination of that kind resistance among young people, with the aim of better preparation for demanding business world.

JEL Classification: I21

Keywords: resistance to change, educational process modernization, modern business, ICT in education, lifelong learning.

PRELIMINARIES

Continuous training and lifelong learning concepts are terms frequently encountered in everyday life. Raising the level of own learning, formal, as well as informal for the purpose of personal competitive advantage in the labor market, has become synonymous for successful young people. Even high school students and especially faculty students are becoming more curious, more demanding in terms of acquiring new knowledge. Within the global development trends, information availability and in short, quicker life, such environment perception of youth, is not surprising.

On the other hand, businesses in the struggle with the crisis and the recession for several consecutive years, all seek ways to improve operations, stay competitive, or at least stable. Already mentioned globalization inevitably affects them. Availability and price of labor are positive components, but larger and stronger foreign entities in all industries are major threat to the market share of the domicile company. Almost overnight, education parallel with business has become imperative for most modern businesses. There is crystallized condition which for employee, regardless of the formal education level just empirical knowledge, is not enough. Safety of those who thought that education ends in the last year of school became strained.

We can conclude that communities, academia and business, are changing thorough modern trends, globalization, imperatives of stability and through the need for continuous learning. The foundation and support are IT solutions which are daily used and improved as they seek the path to the end user. Common category of youth, or rather, young knowledge workers (Drucker, 1959) as well as employees are constant learning.

It is a great pressure on the insurance of enormous theoretical and practical knowledge in the ownership of a company and especially on the way of transferring it more efficiently to other employees, regardless of age and seniority. Likewise, teacher faces the challenge of presentation materials quality that should provide a stable foundation for further progress of his student. The importance of what is transferred to students has been clear for a long time. Currently, more and more attention is paid to the manner of transmission. Previously mentioned, available information and communication technology plays a key role here.

RESISTANCE TO CHANGE

Any change usually leads to resistance. Regardless of whether there are educational institutions, enterprises, associations or even family relations, the most common response to change from existing, learned situation, is denial or avoidance. There are a lot of (depending on many influences) options to minimize, mitigate or completely eliminate the resistance (ex. Gilley et al., 2009, 4). Closely defining type(s) of resistance is important first step in dealing with it.

One of the each organization goals is the flexibility and change (Bahtijarević - Šiber, 1999. 20), and “mechanism”, Human Resource Management is responsible to design and tackle employee’s resistance to it. According to the author (SP Robbins, 1996. 721st), there are four possible options for change within the organization. We can distinguish changes in organizational structure, technology, physical settings (ex. workplace layout) and the possibility of change within human relationships. Table 1 shows the possible types and reasons for resistance to change on an individual or organizational level.

Table 1. Change resistance types and sources

Resistance to change			
Type	Organizational	Source	Individual
Overt	Structural inertia		Habit
Implicit	Limited focus of change		Safety
Immediate	Group inertia		Economic factors
Deferred	Threat to expertise		Fear of the unknown
	Threat to established power relationships		Selective information processing
	Threat to established resource allocations		

Source: S.P. Robbins, 1996. 723. - 726.

In the past decade technological innovations in organizations are the most numerous and most often. Theorists in this area agree that with such changes there is mostly implicit and delayed resistance, regardless of organizational or individual level. The reason probably lies in the fact that the majority of employees, staff, students or associates are aware that the technology will facilitate and accelerate the business processes. However, as they do not tend to change because of various reasons, they prefer to provide conscious “silent” resistance which is greatly difficult to uncover and minimize.

TECHNOLOGY IN TEACHER’S ROLE

Using sometimes perhaps too optimistic assumption about the percentage of new technologies used within so called Internet generation, educational institutions, especially abroad, rushed to the implementation of different versions of e-learning systems. Regardless of whether it is an open source, such as Moodle¹ or completely personalized system for e-learning (ex. Toledo² at Leuven University in the Netherlands); it is an inevitable emphasis on the complete computerization. Students are expected not only to use actively, but also to participate and develop improvement of teaching. Teachers, on the other hand, invest some effort in making “new” electronic materials for teaching, but the time saved, which comes after the initial challenges, results with additional investment in students, teaching or new projects.

After resources investment in the IT modernization, business turned to digital education of employees. It is believed that the e-learning software value just for business sector will reach about 25.5 billion dollars³ by 2013. Responding to market demands and the need for constant mobility of employees, the company is developing knowledge databases, which allows employees to learn when and how they want. Similarly, the training moved into the online world, thus enriched by new technologies, becomes more efficient, flexible and cheaper. Tracking the progress of employees in terms of education, not only business success, has become a guiding principle for all human resource managers. The implementation of individual systems for learning and assessment⁴ are equally represented as well as up-

¹ Available on <http://moodle.org/>, 01.03.2012.

² Available on <http://toledo.kuleuven.be/english/>, 03.03.2012.

³ Available on <http://tinyurl.com/imr2012>, 27.02.2012.

⁴ Ex. <http://www.gmacademy.com/>, 03.03.2012.

grading existing solutions with fresh modules for training, education or testing (ex. IBM - Lotus, SAP or similar).

PROBLEMS, CHALLENGES AND ITS RESOLVING

1. Corporate environment

For purposes of this paper, the authors have conducted several interviews in companies in the region that have introduced or are on their way towards the introduction of information technology in business, with emphasis on training the employees this way. Because the company did not want to publicly disclose their plans, nor the current phase of implementation of such systems, the responses are just summarized below. The interview was conducted with the directors of the company or the main person responsible for implementing the process of computerization.

Ten interviews showed that each company, depending on the current possibility, has adjusted the pace and type of e-business/learning system. Larger entities, determined person responsible for the supervision and participation in the implementation as well as the subsequent implementation of the new system, while the smaller companies (up to ten employees) performed such function by manager or owner. Interviewed companies which have already introduced e-learning (30%), again depending on complexity and computer platforms, stated that time of system introduction is from three weeks to three months. However, regardless of the company type or size there is good illustration of the similarities in the use of electronic learning. Especially in the initial period of use there is strongest "silent" resistance to the new mode. For example, employees have several times lost user data (username and password) which must be used to connect to the system. Furthermore, only the slightest problem, which did not necessarily have to be a failure of a computer program, but the user himself, resulted in giving up on further work. The company experience put an accent on the use of customer support as an important component since there was certain percentage of employees who managed to overcome the obstacle after the demonstration and explanation. This procedure has proven to be very important in order to increase the confidence of employees (especially the elder ones), and the complete profiling of e-learning as stable and safe system to operate. Organization of user support is again dependent on firm strength. Some smaller subjects educated a person who was an assistant to others

and larger companies have hired consultants or outsource companies which helped in solving challenges.

There are only a few instances of open resistance (for example, even tears when learning about using new system in one larger company in Osijek). With time and additional hours of training it has been proved that particularly employees who had a “using technology” fear, managed to overcome it and accepted the change very successfully. Understandable fear of individuals that they will be under increased monitoring while learning has been removed by means of individual and group interviews that helped clarify the vision and benefits of new way of education and business.

2. Academic environment

According to a survey of available materials and web content, for Faculty of Economics in Osijek on University of J.J. Strossmayer we can say that the use of technology in education has occupied a special place in both teaching staff and students. Mostly used is the system for e-learning Moodle⁵, primarily set as a place for storage of digital teaching materials and implementation of short tests for conducting surveys or different knowledge checks. Other e-learning elements, such as multimedia conferencing or transmission of video content (video streaming) are also in common use.

Since the students are adapted to such e-mode of studies from beginning, we can see that by the end of the semesters, resistance (if existed) is totally eliminated. Starting uncertainty or superficiality (ex. not reading and understanding the given instructions, forgetting the user data for access) in the use of new technology was quickly replaced with successful results in its subsequent use in the higher years. Finally, we are often having students fully and actively participating in the learning process, in terms of preparation of additional facilities, improvements or other proposed models of interactive learning. The largest percentage of students is willing to use new technologies and opportunities during the study.

On the other hand, especially with the assistants support, teachers have recognized the use of available technology as a tool for the efficient teaching preparation. In this way, resistance is found only in a negligible number of cases. Managing endless tables of different records now is almost completely digitized and available

⁵ Available on <http://www.efos.hr/moodle>, 10.03.2012.

at all times. Although the process is time consuming and requires large amounts of energy of all involved parties, benefit generated by the additional time surely is a major advantage. In addition, there is a noticeable improvement of communication between teachers and students by using various tools such as Skype or “older” email.

Other components of the University of J.J. Strossmayer also harder to digitize teaching process with the support of CARNet (Croatian Academy Network Research). Absent, but is currently preparing, a clearly defined strategy for the structured introduction of e-learning and ICT enhanced way which will connect academic with other educational institutions (ex. postgraduate studies or high schools) as well as businesses.

INSTEAD OF CONCLUSION

Regardless of whether the businesses or educational institutions, the fact is that users are generally aware of the benefits and inevitability of using information and communication technologies in everyday business and lifelong learning.

The importance of young people early awareness and their preparation for career guidance using modern technological tools is imperative for their better response to the labor market. Better connection between educational institutions and business sector and the feeling of “real” world would generate additional value especially for students of a final faculty years.

In the business world, there is also a specific need for constant reminders and emphasizing the importance of continuous education, training and progress. The use of e-learning is the only “tool” that will facilitate already surveyed theoretical facts or empirical findings to colleagues. Employees who are not willing to adapt to inevitable changes in business, very quickly could be replaced by younger and more conscious knowledge workers, regardless of their previous work experience.

If we define the university as a “production facility” for knowledge workers, we expect that the final “product” is adapted to real needs, trends and govern with large theoretical knowledge range. The assumption is that modern student will dispose with, at least, basic IT knowledge that will be used only as basis for further work. Such qualified person should definitely be interested in lifelong learning which will be further stimulated by the competitive atmosphere in the company.

We conclude that the introduction of tools for e-learning in education is a positive step, not only because of the quality and transparency of the teaching process, but also because of the elimination of resistance to change among young people. Similar systems for learning and will follow them throughout their career, so it is important to their early adoption.

Further research can be done by exploring the possibilities of cooperation between businesses and academic communities through ICT. Even better prepared students and insight into the choice of their skills will be invaluable opportunity to raise the competitiveness of domestic enterprises in the European context.

REFERENCES

- Bahtijarević - Šiber, F. (1999). *Management ljudskih potencijala*, Golden Marketing, Zagreb
- Drucker, P. (1957). *Landmarks of Tommorrow*, Harper & Row, New York
- Gilley, A., Godek, M., Gilley, J.W. (2009). *The University Immune System: Overcoming Resistance to Change*, *Contemporary Issues In Education Research* 3-2009, 2/31, ISSN 1941-756X
- <http://moodle.org> (01.03.2012.)
- <http://toledo.kuleuven.be/english> (03.03.2012.)
- <http://tinyurl.com/imr2012> (27.02.2012.)
- <http://www.gmacademy.com> (03.03.2012.)
- Internal materials of client IT system implementation (2012). Ofir Ltd.
- Parker, Raymond A (2008). *Human Resource Handbook*, Russell R. Mueller Retail Hardware Research Foundation, Indianapolis, Indiana, SAD
- Pfeffer, Jeffrey (1992). *Understanding power in organizations*, *California Management Review*, 34-2, ABI/INFORM Global
- Robbins, S.P. (1996). *Organizational behavior*, Prentice Hall International, ISBN 7-302-02471-S/E, China

COMPETITIVENESS OF CONSTRUCTION FIRMS: CASE STUDY OF „GRADNJA Ltd“ OSIJEK

Ivana Šandrak Nukić, M.Sc.¹

¹J.J. Strossmayer University of Osijek, Faculty of Civil engineering, Croatia,
isandrknukic@gfos.hr

ABSTRACT

Appreciation of competitiveness should serve as the basis for making policy/business decisions and directing strategic change. This article pays special attention to the importance of construction companies' competitiveness and its drivers, because this industry in Croatia has been severely hit by economic crisis while in the same time it heads toward further competitiveness challenge when joining the EU.

This paper analyses competitiveness using the top-down model: from the macro level to the very companies' competitiveness. Furthermore, it critically reviews traditional, as well as newly formed holistic measures of competitiveness. In the end, the paper sets out the case study of „Gradnja Ltd“ Osijek, construction company chosen to demonstrate applicability of researched competitiveness indicators.

JEL Classification: L12, O22

Keywords: economy, competitiveness, project management, construction industry

INTRODUCTION

The concept of competitiveness has been largely discussed over the last decades, as an ability „to compete, to win and to retain position in the market and profitability, thus, being commercially successful“ (Annoni & Kozovska; 2010, 1). An important aspect of those discussions is the level at which the concept of competitiveness is defined. This paper aims to research competitiveness through different levels, to analyze its drivers at the firm level, ultimately proving the findings with the evidence from „Gradnja Ltd“ Osijek (further *Gradnja*).

LEVELS OF COMPETITIVENESS

In most cases micro and macroeconomic level are considered, analyzing the competitiveness at the firm and the country level. For the country competitiveness, the main reference framework is given by the World Economic Forum (WEF) through the annual publication of *Global Competitiveness Index* (GCI). GCI is the most internationally recognized and acclaimed index in the field of competitiveness, and it defines competitiveness as „the set of institutions, policies and factors that determine the level of productivity of a country” (Schwab; 2010, 4). Another relevant source of macroeconomic competitiveness analysis is the *World Competitiveness Yearbook* by the International Institute for Management Development (IMD).

A link between micro and macroeconomic level of competitiveness is straightforward: a stable context at the macro level improves the opportunity to produce wealth but does not create the wealth by itself. Wealth is created by utilizing at best human, capital and natural resources to produce goods and services, i.e. ‘productivity’. But productivity depends on the microeconomic capability of the economy which ultimately resides in the quality and efficiency of the firms (Schwab; 2010).

Late dr. Meyer Stammer from German Development Institute in Berlin said: „We can define (systemic) competitiveness of a territory as the ability of a locality or region to generate high and rising incomes and improve livelihoods of the people living there.“ (Meyer Stammer; 2008, 7)

Among others, such an approach has been appreciated by the Croatian National Competitiveness Council and the Croatian Chamber of Economy for creation of the first *Regional Competitiveness Index of Croatia 2007*, and continued with *Regional Competitiveness Index of Croatia 2010*.

The report is aimed to provide insight into the national competitiveness of Croatia, but in respect to medial level competitiveness of its NUTS 2 regions. Analysis itself is based on the methodologies of the WEF and the IMD and the underlying assumption of analysis is that wealth is primarily generated at the enterprise level and that the environment in which the enterprise operates can either support or disturb its ability to compete.

Consequently, the report defines competitiveness „as a group of elements, development policies and institutions which, by their correlation, influence the general level of productivity and the quality of the business sector and business environ-

ment“ (Alpeza et al.; 2011, 15). Therefore, the report focuses on the measurement of the business aspect of competitiveness, evaluating the quality of the business sector and business environment. Evaluation was carried out through several major categories of indicators (competitiveness pillars), shown in Table 1.

Table 1. Major categories of competitiveness indicators

Competitiveness pillars			
1. Demographics, health and culture	Business Environment	Statistical indicators (2/3)	Regional Competitiveness Index
2. Education			
3. Basic infrastructure and public sector			
4. Business infrastructure			
5. Investments and entrepreneurial trends	Business Sector		
6. Level of entrepreneurship development			
7. Economic results – level			
8. Economic results - trends			
1. Location Advantages	Business Environment	Perceptive indicators (1/3)	
2. Local Government			
3. Infrastructure			
4. Rule of Law			
5. Education			
6. Financial market and local competition			
7. Technology and Innovations	Business Sector		
8. Clusters			
9. Marketing and management			

Source: Alpeza, M. & Delić, A. & Jurlin, K. & Perić, J. & Oberman Peterka, S. & Singer, S. & Vučković, V. (2011). Regional Competitiveness Index of Croatia 2010, p. 15

The research of Croatian regional competitiveness showed that the most competitive regions are also the most developed ones – City of Zagreb and Zagreb county, Istria county, Varaždin county, Zadar county, Međimurje county. This fact takes us to the very foundation of competitiveness analysis – to the level of firm competitiveness. Namely, such a result can be interpreted in the manner of prof. Christensen, professor of Business Administration at the Harvard Business School, who argues that “nations/regions can compete only if their firms compete” (as per

Ambastha & Momaya; 2004, 48). Even Michael Porter says: „it is the firms, not nations, which compete in international markets” (Porter; 1990, 33). Obviously, definitions of competitiveness orientate themselves around the challenge for nations, regions, industries and/or firms to succeed in meeting the test of market and to maintain and expand the real income of people / employees.

COMPETITIVENESS OF CONSTRUCTION INDUSTRY

This paper presented a few definitions of competitiveness, yet, it is not an unambiguous concept. Competitiveness is „... like beauty: the definition, measurement and understanding of competitiveness belongs to the eye of the beholder.“ (Henricsson & Ericsson; 2005, 4). As briefly reviewed in this paper, both scientists and management institutions have tried to prevail such a characteristic of competitiveness by developing indices and commonly accepted criteria for competitiveness measurement at different levels. However, some scholars and researchers (Momaya & Selby, 1998; Ofori, 2003) suggested that no appropriate framework exists for analyzing the competitiveness of a construction industry.

In order to prevail that, Ambastha and Momaya categorized relevant studies of competitiveness into an Asset-Process framework, as shown in Table 2.

Table 2. Relevant studies of competitiveness

Assets	Human resources, Firm structure, Firm culture	Chaston,1997; Horne,1992; Johnson,1992; Patterns,1991; Bambarger,1989;Stoner,1987	common
	Technology	Shee,2001; Khalil,2000; Mehra,1998	
	Resource based view (RBV)	Barney,2001,1991; Peng,2001; Peteraf,1993; Amit,1993; Grant,1991; Teece,1991	
Processes	Strategic management processes competency	Sushil,1997; Nelson,1992; Grant,1991; Prahalad, 1990	WCY, 2002; DC, 2001;
	competitive strategy	Porter,1999,1990;Grupp,1997; Papadakis,1994; Ghemawat,1990	Momaya, 2000;
	flexibility and adaptability	Sushil,2000; O'Farell,1992, 1989,1988	Sushil, 1997;
	Human resources processes design and deploy talents	Smith, 1995	Hofer, 1997;
	Technological processes innovation	Khalil,2000; Grupp,1997; Bartlett,1989; Hamel,1989,1988; Doz, 1987	Prahalad, 1996;
	systems	Johnson,1992	Barkham, 1994;
	IT	Ross,1996	Box, 1994;
	Operational processes Manufacturing	Kanter,1993; Dertousos, 1989; Hays, 1983	Heron, 1993;
	Design	O'Farell, 1992, 1989, 1988	Dyke, 1992;
	Quality	Dou, 1998; Swann, 1994	Hamel, 1989, 1990;
	Marketing processes		Bartlett, 1989;
	Marketing	Dou,1998; Corbett,1993; Hammer,1993	Berkely, 1988;
	Managing relationships	Porter, 2001	Keats, 1988;
	Persuading power	Chaharbaghi,1994	Man, 1988;
Performance	Productivity	McKee,1989; Francis,1989; Baumol,1985	Doz, 1987;
	Finance	Mehra,1998	Ibrahim, 1968;
	Market share	Ramasamy,1995; Buckley,1991; Schwalbach, 1989	
	Differentiation	Porter, 1990	
	Profitability	Pace,1996; Scott,1989	
	Price	Dou, 1998	
	Cost	Porter, 1990	
	Variety, product range	Dou, 1998	
	Efficiency	Porter, 1990	
	Value creation	Porter,1990	
	Customer satisfaction	Hammer, 1993	
	New product development	Man, 1998	

Source: Ambastha, A. & Momaya, K. (2004). Competitiveness of Firms: Review of theory, frameworks and models, Singapore Management Review, vol.26, no.1; 2004 p.54

Looking at the Table 2, important conclusion can be derived even without going into the details of each and every study named in it. Primarily, it shows that in today's turbulent business environment, dynamic capabilities of a company, its inner resources and processes have become the most important source of its competitiveness and performance.

Furthermore, there are many authors whose research shows that, profitability and productivity, traditionally defined as the most appropriate measures of competitiveness, must be fulfilled with other, mostly intangible measures. They find a need to measure competitiveness from all stakeholders' perspective, not just from the perspective of financial result. In the context of construction industry competitiveness analysis, Momaya and Selby included the views of investors, employees and clients as needed competitiveness measure, while Henricsson and Ericsson added the perspective of overall society.

Finally, if one agrees that performance results directly from the firm's competitiveness, and if one also agrees that performance variables (productivity, profitability, efficiency, market share, value creation, customer satisfaction...) are in fact business goals, then the above said brings us to another conclusion, and that is that project management is at the core of the success or failure of construction firms.

Why? Well, since project management is considered the discipline of planning, organizing, securing, and managing resources to achieve specific goals, than we come to the very point of this paper saying that project management is a basic tool for achieving firm competitiveness, especially in construction business.

EVOLUTION OF PROJECT MANAGEMENT

Project management has been the object of a systematic evolution process since 1960s, when several important project management institutions were founded (International Project Management Association, Project Management Institute etc.). In that time, project management was perceived as a process that might be nice to have, but not the one that is crucial for survival or success of a company.

As competitive pressure has been growing, by the mid-1990s this mentality began to change, of course primarily in North America and west European countries. Businesses were being forced to create quality products/services in a shorter period of time and eventually, this change resulted in achieving excellence in project management. Project management was no longer considered as entirely internal and

marginal system, but it became respected as the „...use of knowledge, skills, tools and techniques in order to manage project tasks and fulfill project goals.“ (Vodič kroz znanje o upravljanju projektima; 2011, 6). From that new aspect, project management could really be defined „...as the planning, scheduling and controlling of a series of integrated tasks such that the objectives of the project are achieved successfully and in the best interest of the project’s stakeholders.“ (Kerzner; 2004, 2).

Today, many successful companies view project management as a competitive weapon. In construction, difference between winning or losing a new contract is most often based on a company’s history of project management successes and failures. When two or more companies compete for the same work, assuming that they all fulfill listed qualification and technical criteria, contract is being awarded based upon the previous project management performance.

THE CASE OF „GRADNJA Ltd“ OSIJEK

Gradnja is a construction company that is categorized as a big company, based on the number of employees as well as on the revenues. *Gradnja* is considered a technological leader of the east-Croatian region because of their 65 years old tradition, know-how of their employees, state-of-the-art technical resources and, of course, their references. Even in times of the recent economic crisis, *Gradnja* has managed to realize continuous growth of their business activities and final result, in average by 10%.

Analysis of financial reports shows that *Gradnja* is very careful in maintaining its liquidity and solvency position, resulting in sustainable coefficients. If competitiveness is to be judged only upon traditional measures of profitability and productivity, *Gradnja* is a competitive subject, but with suppressed ability to perform even better.

Turnover of its assets correlates with industry’s average, only profitability ratios are somewhat lower. When analyzing position of *Gradnja* related to other construction companies of its size in Croatia, *Gradnja* is rated as 7th according to its total revenue, but according to EBIT, it is rated as 21st.

Taking into account that only around 20% of their contracts is won in public procurement procedures (while others are achieved through direct contracting and other legal options), such disproportion of profit and revenues should not be the result of a low prices/margins strategy.

Cost-income ratio is satisfactory, but obviously, at the same level of revenues, cost side of the profitability balance could be managed more effectively in order to achieve more competitive result. Since average monthly costs per employee are even lower than in other construction companies, such a high cost level could be explained with continuous investments in technical resources, but according to analysis of organizational factors, it could be concluded that higher costs are generated also through business methods used.

Table 3. Summary of financial results of *Gradnja*

Indicator	2008	2009	2010
Number of employees	650	640	640
Total revenue, mil. EUR	42,5	52,8	58,9
Total costs, mil. EUR	41,5	51,7	57,6
EBIT, mil. EUR	1,6	1,8	1,8
Net income, mil. EUR	0,8	0,9	1,0
Newly created value, mil. EUR	8,5	8,9	8,4
Productivity, 000 EUR	13,0	13,9	13,1
Market share based on total revenue			2,10%
Current liquidity ratio	1,32	1,23	1,46
Grade of indebtedness	72,72%	60,03%	63,76%
Net income per employee, 000 EUR	1,16	1,33	1,57
Average monthly wages per employee, EUR	566	588	546

Source: www.poslovna.hr

Bringing into competitiveness analysis other criteria beside the financial indicators, it must be noted that even as a big organization of more than 600 employees, conducting business at different locations of the whole north Croatia, *Gradnja* still has a typical functional organizational structure. Together with the fact that none of the chief engineers or other management members doesn't have a project management or similar certificate, this means a significant backlash of all business activities and procedures, efficiency gap that is a key generator of higher costs.

In the same time, most of the leaders of the same construction industry category (based on EBIT realized in 2010) do not have employees with PMI certificate, as well. This fact could be the „profitability niche“ for *Gradnja*, an opportunity to attain competitive advantage with its current resources, just through more efficient

organization and project management. Especially in big, complex projects such as recently finished Portanova Osijek, savings achieved through better project management could be used both for owners satisfaction (through higher profits) and employees motivation (through possibly higher wage level).

It must be added that there are no recorded objections on *Gradnja's* performance by investors, clients and overall society who are the three important competitiveness indicator categories (Momaya & Selby;1998, 642; Henricsson & Ericsson; 2005, 8). In the same time, although it may be seen as unthankful in times of high unemployment rate, employees from *Gradnja* complaint about their wages but also about the applied style of conducting business. Since, according to the above mentioned authors, employees are the 4th and the last important category of competitiveness indicators, this silent discontentment actually shows what financial indicators foreboded: that better human resources management and more sophisticated project management implementation are the necessity for securing additional value for all stakeholders, thus creating superior results and sustainable competitive advantage at the firm's level.

CONCLUSION

With the reference to the discussion above, it can be concluded that in today's business environment competitiveness can not be developed by itself, but rather a result of systemic efforts to develop, implement and monitor it.

Traditionally, competitiveness has been quantified using either profitability or productivity measures, but this paper presented also more holistic measures of competitiveness. Therefore it attempted to assess competitiveness of *Gradnja* using such a framework. Using available statistics and interviews, a number of observations have been highlighted:

- upon all presented findings, organizational structure and resulting organization of business processes as well as human resources management can be graded as backward, being the key source for strategic changes
- financial indicators correlate with the industry's average and are carefully maintained to represent scholastic example of satisfactory ratios, but nothing more than that – they should be seen as an area for significant improvements
- project management must be implemented as a tool for generation of competitive advantage, resulting in superior organizational and financial results.

Since *Gradnja* is a proper representative of construction industry in Croatia, ultimately these conclusions can be used as guidelines for competitiveness assessment of other construction companies and the industry in whole. Additionally, approach presented in the analysis of *Gradnja* could be used for comparison of construction company's competitiveness in domestic and international context.

LITERATURE

Alpeza, M. & Delić, A. & Jurlin, K. & Perić, J. & Oberman Peterka, S. & Singer, S. & Vučković, V. (2011). Regional Competitiveness Index of Croatia 2010, National Competitiveness Council & United Nations Development Programme Croatia

Accessibility: <http://www.undp.hr/>

Access: (09.12.2011.)

Ambastha, A. & Momaya, K. (2004). Competitiveness of Firms: Review of theory, frameworks and models, Singapore Management Review, vol.26, no.1, p.45-61, Accessibility: <http://una.co.in/>

Access: (09.12.2011.)

Annoni, P. & Kozovska, K. (2010). EU Regional Competitiveness Index 2010, ISBN 978-92-79-15693-9, European Commission, Joint Research Centre, Luxembourg

Accessibility: <http://easu.jrc.ec.europa.eu/>

Access: (09.12.2011.)

Buckley, P. & Pass, C. & Prescott, K. (1988). Measures of international competitiveness: A critical survey, Journal of Marketing Management Volume 4, Issue 2, p.175-200

Accessibility: <http://content.ebscohost.com/>

Access: (09.12.2011.)

Henricsson, P. & Ericsson, S. (2005). Measuring Construction Industry Competitiveness: a holistic approach, Conference Proceedings from The Queensland University of Technology Research Week International Conference, editor A.C.Sidwell, ISBN 1-74107-101-1, 4-8 July 2005, Brisbane, Australia, published by Queensland University of Technology

Accessibility: <http://www.rics.org/>

Access: (09.12.2011.)

Kaplan, R. & Norton, D. (2007). Using the Balanced Scorecard as a Strategic Management System, Harvard Business Review, July-August 2007

Accessibility: <http://veraxia.com/>

Access: (09.12.2011.)

Kerzner, H. (2004). Advanced project management: best practices on implementation, John Wiley & Sons, New Jersey

Accessibility: <http://books.google.hr/>

Access: (16.01.2012.)

Love, P. & Holt, G. (2000). Construction business performance measurement: the SPM alternative, Business Process Management Journal, vol.6, no.5, p.408-416,

Accessibility: <http://www.emeraldinsight.com/>

Access: (09.12.2011.)

Meyer-Stamer, J. (2008). Systemic Competitiveness and Local Economic Development

Accessibility: <http://www.meyer-stamer.de/2008/>

Access: 16.12.2011.

Momaya, K. & Selby, K. (1998). International competitiveness of the Canadian construction industry: a comparison with Japan and the United States, Canadian Journal of civil engineering, 25, p.640-652

Ofori, G. (2003). Frameworks for analysing international construction, Construction Management and Economics, Volume 21, Issue 4, p. 379-391

Accessibility: <http://content.ebscohost.com/>

Access (16.12.2011.)

PMI (2011). Vodič kroz znanje o upravljanje projektima, Mate, Zagreb

Porter, M. (1990). The competitive advantage of nations, Free Press, New York

Schwab, K. (2010). The Global Competitiveness Report 2010-2011, World Economic Forum

Accessibility: <http://www3.weforum.org>

Access: (09.12.2011.)

www.poslovna.hr

Access: (December 2011)

THE POSSIBILITIES OF USING ENGLISH LANGUAGE TEACHING FOR DEVELOPING PROJECT MANAGEMENT COMPETENCES

Ana Skledar Matijević, Ph.D.¹, Zlatko Barilović, univ.spec.oec.², Igor Vrečko, Ph.D.³

¹"Baltazar Adam Krčelić" Accredited College of Business and Management, Croatia,
a.skledar-matijevic@vspu.hr

²"Baltazar Adam Krčelić" Accredited College of Business and Management, Croatia,
zlatko.barilovic@vspu.hr

³University of Maribor, Faculty of Economics and Business,
Institute for Project Management, Slovenia,
igor.vrecko@uni-mb.si

ABSTRACT

Modern business systems are continually trying to find new solutions which would enable them to keep the existing or to create new competitive advantages. Having in mind the fast and constant changes which are the main characteristic of the current times, it is not possible to create a competitive advantage only through continuous business. It is also necessary to use the processes which are unique, time limited, target oriented and bring something new, namely projects. If we want to manage projects successfully we must constantly work on developing project competences, not only of the project leaders but also of all those in any way involved in any of the project stages. The current educational system in the Republic of Croatia is still primarily oriented towards developing professional skills, while project competences development is often neglected. It is, however, possible to develop project competences through the existing educational system in several ways, and one is the use of so-called project-based learning. Some methods for developing project competences are being used in the Specialist graduate professional study of Project Management at the "B. A. Krčelić" Accredited College of Business and Management in Zaprešić. Project competences have so far been developed mostly within professional courses while in general courses, such as foreign languages, this has not been the case. This is why the authors will use this paper to present the possibilities of using foreign languages classes (in this particular case English language teaching) to develop project competences.

JEL Classification: O22

Keywords: project management, project competences development, project-based learning, interdisciplinary teaching, English language teaching

1. INTRODUCTION

The scope of work on projects of various sizes and purposes has rapidly been increasing over the last two decades (according to the World Bank (2008) 21% of the world's GDP comes from investment projects). Therefore, the questions about developing appropriate project competences attract more and more attention. To ensure a successful implementation of projects, the individuals who participate in various roles in the development and implementation of projects must meet several conditions. On one hand, they should develop an appropriate personal culture and attitude towards the project work, and on the other they should have quality project management knowledge and experience (Hauc et al, 2011). Knowledge and experience here do not refer only to the knowledge and experience from the field which is the subject of the project, but also to the knowledge and experience connected with the project implementation processes, namely the field of project management. Lately, questions about the required competences of project managers and project team members have been receiving considerable attention. At the same time we can detect an increased supply of mainly short-term training seminars on the topic of project management, which are usually not conducted by formal educational institutions such as schools and institutions of higher education. Besides that, we can identify an increase of the number of undergraduate and graduate education programmes focusing right on the field of project management. On the other hand, most educational programs, specialized in different disciplines, did not integrate project management related subjects in their programmes, despite the fact that project work is intensely increasing in all sectors. As the authors of the paper have many years of experience with training in project management in the undergraduate and postgraduate programmes, a model for including informal project management training in the curriculum subjects that are not directly related with project management was developed. The testing of this model was conducted in the *English language* classes. During the implementation of the model quite a few challenges occurred and had to be resolved. Some of them were relatively manageable, while the authors also encountered some (currently) insurmountable obstacles, at least in a relatively short period of time. Therefore, the second model was designed

to develop project management competences through subjects not directly linked with project management content.

2. PROJECT COMPETENCES AND THE POSSIBILITY OF ACQUIRING THEM THROUGH THE CURRENT EDUCATIONAL SYSTEM IN CROATIA

Before describing the project management competences the term competence should be defined. Since there is no unique definition, but a number of different definitions given by various authors, we shall try to succinctly present some of them.

According to Jurina (2009: 98) competences include all the skills, knowledge, attitudes, personal qualities and organizational behaviour important for working successfully. The same author considers that the competence model consists of those competences that all the employees should have and specific competences for an actual job or function. A competent person is considered to be someone qualified to perform a job (Huić et al 2010).

Since all jobs require certain competences, the importance of developing specific project management competences for working on projects has been recognized by many authors, such as Keegan and Turner (2003), Crawford (2003), Gareis and Huemann (2003), Omazić and Baljkas (2005), Hauc (2007), Vrečko and Barilović (2009 and 2010), Hauc et al (2011).

The International Project Management Association (IPMA) and the Project Management Institute (PMI) as leading project management organizations describe in their basic documents the competences all individuals included in the project management process should possess. These competences are precisely what their certification programmes are based upon, which are used to confirm that someone has enough knowledge and experience necessary for efficiently participating in a project in a certain role.

IPMA recognizes three different ranges of competences needed in project management: the technical competence range, the behavioural competence range and the contextual competence range. Each range consists of a number of corresponding elements, described in great detail in the basic IPMA document, the *IPMA Competence Baseline Version 3.0 (ICB)*. These ranges are described in the ICB (IPMA, 2006: 9) as follows:

- The *technical competence range* – to describe the fundamental project management competence elements. This range covers the project management content, sometimes referred to as the solid elements. The ICB contains 20 technical competence elements.
- The *behavioural competence range* – to describe the personal project management competence elements. This range covers the project manager's attitudes and skills. The ICB contains 15 behavioural competence elements.
- The *contextual competence range* – to describe the project management competence elements related to the context of the project. This range covers the project manager's competence in managing relations with the line management organisation and the ability to function in a project focused organisation. The ICB contains 11 contextual competence elements.

The PMI correlates the competences with work efficiency and considers that they can be measured according to generally accepted standards and improved through education and development. The main standard recognized by the PMI has been described in their basic document, *A Guide to the project Management Body of Knowledge* (the PMBOK Guide).

The current educational system in the Republic of Croatia is still primarily oriented towards developing professional skills, while project competences development is often neglected (Vrečko & Barilović, 2010). It is, however, possible to develop project competences through the existing educational system in several ways, and one is the use of the so-called project-based learning.

This is why we shall now describe the project learning method in more detail, seen as a possibility for developing project competences.

3. PROJECT-BASED LEARNING

The advantages of project-based learning have been known for quite some time. Leroy recognized the usefulness of such learning as early as 1920. He stated that project work in education promotes the learner's development through natural processes; it sets a natural environment and enables natural interaction of the learner with that environment; and is trying to achieve all of this through activities - through having the participant "learn to do by doing" (Leory, 1920). The practice of project-based learning soon started to be recognised in Europe as well, but has until recently been neglected in southern parts of Europe.

The project-based approach to the learning process is set among didactical systems because it combines elements of direct teacher control of the learning process and elements of the learner's individual work. It is based on experiential learning and encourages active learning. With project-based learning the participants learn to develop and improve their ideas, mutual respect, adopt and enforce a variety of strategies, what enhances their sense of belonging to the group and reinforces the motivation and the desire to acquire new knowledge. Instead of learning by topic here the acquaintance of the participant with some process implementation procedures is emphasized (Novak, 1990). Participants learn when and how to use specific knowledge, what enables them to develop competences for the implementation of certain activities (Atlagič, Ciglič, 2006).

Project-based learning transforms a monotonous educational process with the teachers' "monopoly" as a mediator of knowledge, because the lessons are more dynamic and they enable better interdisciplinarity among courses, and most importantly - personality development. It is based on a cooperative relationship between the lecturer and the learner. But on the other hand, according to Žužej (1991), it is significantly more demanding for the teacher to create such a cooperative relationship than to establish the authoritarian implementation of the educational process. Project-based learning greatly changed the role of the participants in the project work stages who are also engaged in such activities which in traditional learning are performed only by teachers. Authoritative and hierarchical relationships between teachers and learners are replaced by a democratic relationship which creates a relaxed atmosphere. Passive methods are replaced by active learning, where participants research, explore, build, create and solve various problems, etc. At the same time the participants also learn about various forms of communication, resolving conflicts that emerge during the work, balancing interests, mutual respect, co-ordination and so on (Novak, 1990).

4. PROJECT-BASED LEARNING CHALLENGES IN FOREIGN LANGUAGE CLASSES FOR DEVELOPING PM COMPETENCES

Using project-based learning in practice is faced with some challenges, mostly because the traditional educational system, which is commonly used in Croatia, does not encourage such an approach to teaching and learning. Consequently, the students first have to be taught how to engage in project-based learning, how to work in a team and how to avoid specific project-oriented process problems which may arise.

Since the authors of this paper are teachers of Project management classes on different undergraduate and postgraduate programmes, we have a lot of experience with conducting project-based learning methods. Using these methods is seen as the only logical and natural approach in working with students in Project management classes. But to extend the students' project management competences even more, the idea of using *English language teaching* (ELT) was developed to support Project management classes and to develop project management competences having in mind the advantages of an interdisciplinary approach to teaching. Project-based learning seemed as the best solution since it is an ideal instruction approach for classes oriented towards providing students with practical knowledge.

Using project-based learning in foreign language instruction complies with the constructivist approach whose aim is not to "receive" knowledge, but to "construct" it. If it is demanded from students to use a foreign language while they work on their projects, plan their tasks, do research, process data and evaluate results, they are encouraged to use the language meaningfully and in context. This is far more productive than forcing them to learn grammar rules and vocabulary in a de-contextualized classroom environment (Skledar Matijević et al, 2011). It is also very interesting since the focus is not only on developing the traditional four language skills (reading, writing, listening and speaking) but also on developing specific language skills necessary for project management.

This is why it was decided that the students would work on the same classroom projects in both Project management and ELT classes, in the same teams, so ELT classes would serve as some sort of an extension of Project management classes, where the students would continue working on their projects, implementing and developing their project management skills, with one difference – they would use English instead of their native language, and thus acquire the vocabulary and grammatical constructions specific for project management, what they would most definitely need in their future jobs. In reality they would have double the practice time – first in their native language in a Project management class, and then in English in an ELT class.

However, after developing the idea, the following obstacles arose in the attempt to implement it.

The first one was the knowledge level of the English language of the involved specialists – i.e. the mentors for the students' project work. As the prerequisite for the success of such an approach to foreign language learning is that all commu-

nication should be conducted in the studied language, this may discourage those specialists whose English may not be at the proficiency level. However, this does not pose a problem, since all the participants are aware that the subject-area specialist is included because of his/her expertise, and not because of their knowledge of English.

Another challenge is that students who share a common first language (Croatian in this case) may use that language rather than English when working in groups on their assignments. This cannot be avoided completely, but can be reduced by asking for frequent feedback in English and simply insisting on it (Skledar Matijević et al, 2011).

The third challenge is also characteristic of teamwork – some students tend to do less than others, especially if their level of knowledge is lower. Usually, the best solution is to encourage them to participate as much as possible and to leave it to the team to find a balance, as all team members are graded on the basis of their team's achievement.

However, the biggest challenge in our case was adjusting the timetables of the courses joined in a project-based learning class (namely, Project Management and English), the teachers' schedule and the available classrooms, and this was a challenge we could not overcome. Ideally, a Project Management class would be followed by an English class. This, unfortunately, was not possible due to the mentioned organizational problems, so we had to find a different solution to implement our idea of using ELT for developing Project Management competences, because although in practice they are mostly marginalized, foreign languages have great potential for interdisciplinary project-based learning and we were determined to use it.

Therefore, we were forced to find another solution for the implementation of our idea of using ELT classes to develop project management skills. The solution was simple – using ICB as the basic material for learning English.

The first step was to methodologically adjust this document to serve ELT purposes – developing the four basic language skills, while placing special emphasis on vocabulary. Thus, a syllabus was created based on the 46 competence elements, which were adapted to encourage students to acquire new vocabulary by means of vocabulary tasks, such as matching exercises, word pairs exercises, cloze tests, word games etc.

Although the preferred language of communication in classes is English, the students can rely on the NCB, National Competence Baseline, a Croatian version of the ICB, where they can find translations of all the important terms. The parallel existence of this document in two languages will inevitably lead to composing a glossary, but this is an endeavour that yet has to be undertaken.

5. CONCLUSION

The intention of such combined ELT/Project management classes is to focus on the specific English project management vocabulary, but also on the Project Management competences themselves. The result would be that the students will learn English vocabulary, lexical chunks and grammatical constructions without consciously trying to acquire them and would be preparing for IPMA certification at the same time. Thus, we provide students with the knowledge and skills necessary for passing the exam and earning ECTS points but also we help them in preparing for the IPMA certification exam because through learning English project management vocabulary they also acquire the knowledge about the basic project management competences.

The authors believe this is a great way to implement the interdisciplinary approach to teaching because the students benefit greatly from such classes, but also the teachers involved. This is why special attention should be given to overcoming organizational problems and reducing the marginalization of foreign languages because foreign languages can be combined with many different specialist areas and this results in teaching which conforms with the contemporary interdisciplinary educational trends, namely the 21st century pedagogy paradigm. (comp. Twenty-First Century Pedagogy).

SOURCES

Crawford, L. (2003) Assessing and developing the project management competence of individuals, *People in project management*, Turner, R. (ed), p. 13-30, Gower Publishing, Aldershot

Gareis, R. & Huemann, M. (2003) Project management competences in the project-oriented organization, *People in project management*, Turner, R. (ed.), p. 45-64, Gower Publishing, Aldershot

Hauc, A. (2007) *Projektni menadžment*, M.E.P. Consult and VŠPU, Zagreb

Hauc, A. & Vrečko, I. & Barilović, Z. (2011) A Holistic Project-Knowledge Society as a Condition for Solving Global Strategic Crises, *Društvena istraživanja*. Vol.20 (2011) No 4(114), p. 1039-1060

Huić, A.; Ricijaš, N.; Branica, V. (2010) Kako definirati i mjeriti kompetencije studenata – validacija skale percipirane kompetentnosti za psihosocijalni rad, *Ljetopis socijalnog rada*, Vol.17 No.2, p. 195-221

International Project Management Association (2006) IPMA Competence Baseline Version 3.0, IPMA, Nijkerk

Jurina, M. (2009) O upravljanju ljudskim potencijalima, *Visoka škola za poslovanje i upravljanje s pravom javnosti "B.A.Krčelić"*, Zaprešić

Keegan, A. & Turner, R. (2003) *Managing human resources in the project-based organization, People in project management*, Turner, R. (ed), p. 1-12, Gower Publishing, Aldershot

Omazić, M.A. & Baljkas, S. (2005) *Projektni menadžment*, Sinergija, Zagreb

Skledar Matijević, A. & Jurina Babović, N. & Krakić, A. (2011). Project-Based Learning in ELT. An Idea for a Project. *Zbornik radova sa Projekti i projektni menadžment*, Barilović, Z. et al (ed.), p. 813-821., *Visoka škola za poslovanje i upravljanje s pravom javnosti „B.A.Krčelić“*, Zaprešić

Twenty-First Century Pedagogy: <http://edorigami.edublogs.org/2008/08/16/21st-century-pedagogy/> (16 February 2012)

Vrečko, I. & Barilović, Z. (2009) Osposobljenost projektnih menadžera u Republici Hrvatskoj i Republici Sloveniji, *Zbornik radova*, Skledar, N. (ed.), p. 403-429., *Visoka škola za poslovanje i upravljanje s pravom javnosti „B.A.Krčelić“*, Zaprešić

Vrečko, I. & Barilović, Z. (2010) Improving the Tourism Educational System in Croatia and Slovenia with Elements of Project Management, *Acta Turistica Nova*, Vol. 4/2010 No.2., p. 125-151

World Bank. (2008) *Little Data Book*. Washington, DC: International Bank for Reconstruction and Development, The World Bank Development Data Group

Project Management Institute (2008) *A Guide to the Project Management Body of Knowledge (PMBOK® Guide) - Fourth Edition*, PM

THE ROLE OF DEVELOPMENT AGENCIES IN REGIONAL DEVELOPMENT

Marko Šostar

ABSTRACT

Regional Development Agencies create sustainable economic growth across countries, enabling local communities to fulfill their economic ambitions. Its primary role lies in the stimulation of the development of small and medium-sized trade in the region through securing financial support, holding educational courses, developing entrepreneurial infrastructure, providing information and consultation services to entrepreneurs, offering services to prospective foreign investors, and implementing different interregional and international projects aimed at creating favorable entrepreneurial conditions. During the time of global crisis and the fluctuations that occur on the world market, development agencies should be the key in the implementation of project ideas that contribute to regional development. Quality ideas enshrined in a high-quality projects lead to growth of specific economy. In this paper, we present the public opinion about the importance of Development Agencies and its needs in project development. Research will include conducting an awareness survey on the sample of 130 people on the random selection. The aim of this research is to contribute to better understanding the purpose of development agencies by evaluating the degree of public awareness about the services offered by development agencies and their impact on the regional development, as well as opportunities to improve and adapt to individual needs.

JEL Classification: R58

Keywords: Development Agency, Regional Development, Project Management, Economic Growth

1. INTRODUCTION

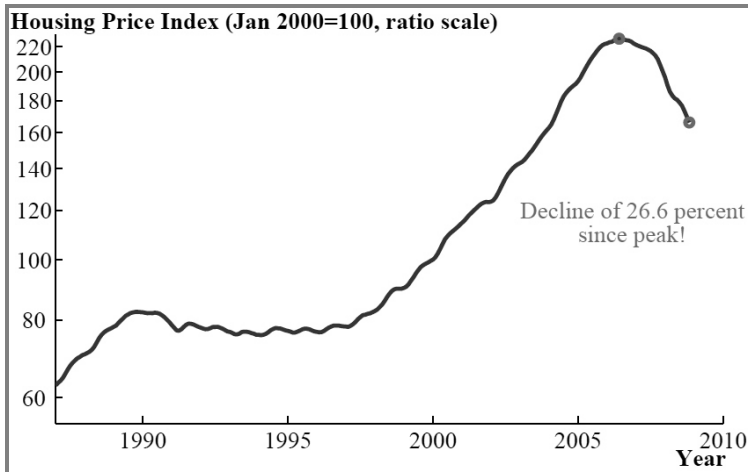
In times of crisis, project development is essential to recover the economy. Government abilities to deal with the crisis depend to a large extent on the margin

provided by their respective fiscal and monetary policies. Regional policy from the national government is crucial for economic recovery of any country. With quality projects, financial injections from the government and other available funds they have a great impact on economic recovery and GDP growth of any country affected by the crisis. To emerge regional development, project must be implemented to raise competitiveness of the region. With approximately 350 to 400 calls for proposals issued every year by the European Commission and its Executive Agencies, there are a wide number of European funding resources available for regional actors and their partners across Europe. However, these resources remain partly untapped or under-utilized due to a variety of internal and external barriers. One of the key issues identified is the level of complexity and red tape associated with these funds, which either prevent regions from accessing funding in the first place, or constitute a hurdle in the efficient and successful implementation of EU funded projects and programmes. To prepare and implement all projects that have potential to be funded, we need to turn to Regional Development Agencies (RDAs), which should be bridge between regional and local authorities, public institutions, NGOs, SMEs and other business by giving them consultancy help about every possible aid they can get.

2. CHALLENGES OF ECONOMIC CRISIS IN 21ST CENTURY

The classic explanation of financial crises, going back hundreds of years, is that they are caused by excesses—frequently monetary excesses—which lead to a boom and an inevitable bust. In the recent crisis we had a housing boom and bust which in turn led to financial turmoil in the United States and other countries. (Taylor, B. T., 2008, p. 1).

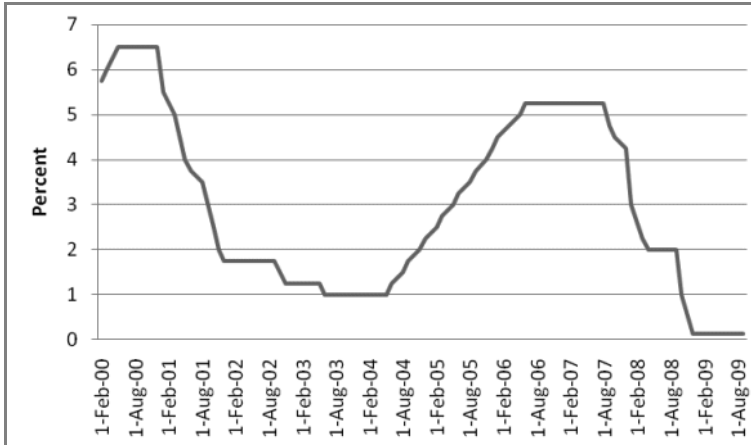
Figure 1: A Bursting Bubble in U.S. Housing Prices



Source: Jones, I. C. (2009)

The first major macroeconomic shock in recent years is a large decline in housing prices. In the decade leading up to 2006, housing prices grew rapidly before collapsing by more than 25 percent over the next three years. Alarming, the national index for housing prices in the United States declined by 26.6% between the middle of 2006 and the end of 2008. This is remarkable because it is by far the largest decline in the index since its inception in 1987. By comparison, the next largest decline was just 7% during the 1990-91 recessions. Lured by low interest rates associated with the global saving glut, by increasingly lax lending standards, and perhaps by the belief that housing prices could only continue to rise, large numbers of borrowers took out mortgages and purchased homes between 2000 and 2006. These numbers include many so-called “subprime” borrowers whose loan applications did not meet mainstream standards, for example because of poor credit records or high existing debt-to-income ratios. According to *The Economist*, by 2006, one fifth of all new mortgages were subprime. (Jones, I. C., 2009, p. 4). Against this background and after more than two years of exceedingly low interest rates, the Federal Reserve began to raise its fed funds target - the rate charged for overnight loans between banks.

Figure 2: The Fed Funds Rate



Source: Dokko et al (2009)

Between May 2004 and May 2006, the Fed raised its interest rate from 1.25% to 5.25%, in part because of concerns over increases in inflation. Higher interest rates generally lead to a softening of the housing market, as borrowing becomes more costly. In an environment with subprime borrowers facing mortgages whose rates were moving from low teaser rates to much higher market rates, the effect on housing prices was even more severe. If the decline in housing prices and the financial crisis were not enough, the economy also suffered from large movements in oil prices.

Figure 3: World Average Crude Oil Spot Price



Source: US Energy Information Agency (2011)

All that impacts have occurred globally during the economic crisis. Also, many EU countries were affected and are now struggling for its survival. The crisis had negative influence on GDP, unemployment, inflation, investments, competitiveness of economy, consumption, while every country had challenges to deal with those problems. The most important role in economy crisis was on regional policies in each of the country. Project development is excellent tool for engaging more funds in regional development. We must learn on the example of Poland, which is the one of the rear countries in the world and only country in EU that didn't feel the consequences of economic crisis. Its politic was to invest in knowledge. They educated people at all levels for preparation quality development projects and are the country with the highest absorption capacities in the European Union. The implemented projects made Poland more competitive and have raisin the investment rate. That led to new employment, higher wages and better living standard. This is the regional policy we need to follow.

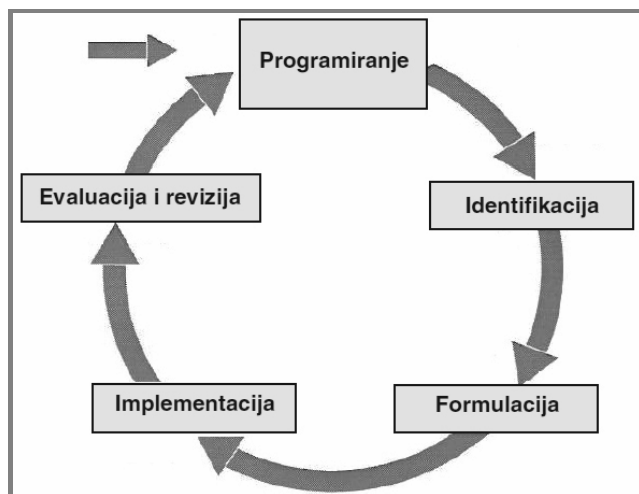
3. REGIONAL DEVELOPMENT AGENCIES AS PLATFORM FOR REGIONAL DEVELOPMENT

Project development is a discipline that transforms innovative ideas into concrete actions for a limited period of time. Its realization has significant contribute to regional development of specific country.

3.1. Quality Project Management

Project is any undertaking, or set of activities (tasks), with starting and ending points, and with defined objectives and constraints, and resource (people, materials, equipment) consumption (Carmichael, G. D., 2005, p. 19). The way in which projects are planned and carried out follows a sequence that has become known as the project cycle.

Figure 4: Project Cycles Management



Source: Central State Office for Development Strategy and Coordination of EU Funds, 2008

During the Programming phase, the situation at national and sectoral level is analysed to identify problems, constraints and opportunities which development cooperation could address. The purpose is to identify and agree the main objectives and sectoral priorities for development cooperation, and thus to provide a relevant and feasible programming framework within which projects can be identified and prepared. During the Identification phase, ideas for projects and other development actions are identified and screened for further study. This involves consultation with the intended beneficiaries of each action, an analysis of the problems they face, and the identification of options to address these problems. During the Formulation phase, relevant project ideas are developed into operational project plans. Beneficiaries and other stakeholders participate in the detailed specification of the project idea that is then assessed for its feasibility and sustainability. During the Financing phase, project proposals are examined by the funding agency, and a decision is taken on whether to fund the project. During the Implementation phase, the project is mobilised and executed. During implementation, and in consultation with beneficiaries and stakeholders, project management assesses actual progress against planned progress to determine whether the project is on track towards achieving its objectives. If necessary the project is re-oriented to bring it back on track, or to modify some of its objectives in the light of any significant changes that

may have occurred since its formulation. During the Evaluation phase, the funding agency and partner country assess the project to identify what has been achieved, and to identify lessons that have been learned. Evaluation findings are used to improve the design of future projects or programmes (European Commission, 2004, p. 16-17). After this circle we are back at the beginning and we can learn on our mistakes by adopting future projects to exactly need and to avoid any problem that has occurred through mentioned phases of the “Project Cycle Management.

3.2. Project Synergy with Regional Development Agencies

RDAs are considered as a means to provide regional development within the framework of a new regional development. These associations are central administrative and regional strategic establishments where the decisions and the policies about the applications of regional development are made by the inhabitants of the region in a participant manner. The RDAs determine the general development problems, grasp the opportunities and solutions and support the projects that provide those solutions (Kantarci, 2010, p. 42). RDAs are also concerned with the classification of regional development tools within regional, national, supra-national level and provision of regional coordination. As a consequence of this, the number of the RDAs that have a branch in Brussels is increasing. So, RDAs involve in monitoring the developments beyond the borders of their own and support regional dynamics by transferring these developments to regional stakeholders (Emini & Görün, 2010, p. 124). The Regional Development Agencies have purpose for local development and we can also call them Local Economic Development Agencies. The main idea of the Local Economic Development Agency is to promote economic development within its territory by helping to re-establish normal conditions for economic growth and job creation, strengthening local economic and administrative capabilities and promoting local participation (Puljiz, 2003, p. 31). Development project must be in coordination with RDAs, especially in project preparation, implementation and monitoring, as well as filtration of important ones for local development.

3.3. Triple Helix Model in Project Management

The triple helix system has been said to be positive synergy among the three different actors in knowledge spillovers. The model engages the university as the centre of excellent with its academic-based research and development activities, industry as the provider of the customer demand based on its commercial activities

as well as research and development, and the government as a policy maker. The integration of these different actors lies at the heart of the triple helix system that ideally will increase knowledge spillovers in the region (Irawati, 2006, p. 3). TH models can be elaborated in various directions. Firstly, the networks of university-industry-government relations can be considered as neo-institutional arrangements which can be made the subject of social network analysis. This model can also be used for policy advice about network development, for example in the case of transfer of knowledge and the incubation of new industry. The new and potentially salient role of universities in knowledge-based configurations can then be explored in terms of different sectors, regions, countries, etc (Leydesdorff, 2012, p. 7). Triple Helix Model is crucial for project management in the context of regional development. For quality projects it is needed to be actively involved various institutions from different sector. The obstacles and challenges from the operational structure are important for realizing the needs of each sector and to solve problem on satisfactorily.

4. THE FUTURE OF REGIONAL DEVELOPMENT AGENCIES

During the time of crisis and the fluctuations that occur on the world market, development agencies should be the key in the implementation of project ideas that contribute to regional development. The future of RDAs is highly predictable. Structural and cohesion funds available for EU countries are closely linked with the RDAs as they are the filter of quality development project that among others, contribute to regional development.

4.1. Methods of Research

Regional development experts agree that RDAs are very important and their function is essential for implementation the regional policy from national level. But, we ask ourselves a question: what is perception of public about RDAs. The research was conducted to determine their perception through awareness survey. The sample was 130 people on the random selection. The aim of this research was to contribute to better understanding the purpose of RDAs by evaluating the degree of public awareness about the services offered by RDAs and their impact on the regional development, as well as opportunity to improve and adapt its services to individual needs.

4.2. Results and discussion

The survey was conducted on the field to determine perception of people about RDAs and its impact

Table 1: People perception about RDAs

Perception survey; sample: 130 people; 10 questions				
		Yes	No	Other
1	Do you think that development agencies contribute to the overall economic development of a country?	97	21	12
2	Do you think that development agencies should contribute more to economic development of a country?	105	9	16
3	Do you think that people are sufficiently informed about the work of RDAs?	24	92	14
4	Do you think that you are sufficiently informed about the possibilities of application on EU funds?	34	75	21
5	Do you know any project financed from the EU funds?	8	115	7
6	Did you know that the EU funds can be awarded in the form of grants?	22	78	30
7	Do you think that development agencies are sufficiently transparent?	12	112	6
8	Do you think there is a need to educate people for the preparation of projects financed by the EU funds?	118	4	8
9	Do you think that RDAs promote themselves enough?	14	81	35
10	Do you think that RDAs employs capable people?	5	121	4

Source: Author research, 2012

The results of research are very indicative and shown the lack of synergy between RDAs and local population, SMEs, local and regional government as well as NGOs. When we ask people about contribution of development agencies on economic development. The most of responders (75%) think that development agencies are crucial for economic development and 81% of them think that development agencies should contribute more to economic development. Also, 71% of them think that people are not sufficiently informed about the work of the RDAs while 58% think that they don't have enough information about the possibilities of application on EU funds. Further more, 87% of them think that development agencies are not transparent enough while 62% think that RDAs does not promote themselves enough. 91% think that should be more educational programmes for preparation of projects financed from the EU funds while 93% think that RDAs

don't employ capable people. All mentioned are problem that national, regional and local government as well as development agencies need to face.

5. CONCLUSION

European funds have always been of paramount importance for European regions, and now more than ever at this crucial time when future funding programmes for the period after 2014 are being planned. An understanding of how regional development policy can best support regional growth stems from an understanding of regional economic performance. Regions are very heterogeneous; each possesses very different levels of income, rates of employment, mixes of high and low productivity activities, internal and external assets, comparative advantages, stages of development and public policies. Every European region has to invest in project development to apply their quality ideas towards available European funds which are the key of its development. It is proved on the case of Poland, that the economies attracting huge percentage of available funds does not have critical problems when the Europe is affecting the financial crisis. Each RDA has identified priority areas of science and business where they aim to add value, however these include stated intentions amongst nearly all the RDAs to be 'leaders' in biotechnology and drug discovery, and more recently nanotechnology. This is not tenable. The incentives offered by the RDAs to attract businesses in their chosen themes to their regions may be beneficial to the local area in the short term, but are not the best value that can be obtained from public money, and are not the best way to serve the interests of the full range of science-based businesses in specific region. Overall there remains a perception amongst some physics-based businesses that RDAs are perhaps not fully engaged with important activities, and appear not to be giving it the support it deserves as a significant source of new business and economic growth. Human resources have never been more necessary. The competitive forces that we face today and will continue to face in the future demand organizational excellence. The EU projects are very important factor of development of every region. With quality projects by the stimulated employees and quality educated team management, every region will have more success on the market. To deal with all the problems that every country is facing, we need to invest in education of people for project preparation, we need to encourage them to apply project to EU funds and to realize the importance of RDAs in their personal and regional development of each country. RDAs need to promote themselves better, to be available on its people and build a bridge between all the key stakeholders in regional develop-

ment. They should give the right information at the right time and be able to present their activities on the more often basis to the public. RDAs need to raise public perception about the importance in regional development without any transparent activities and good promotional actions to its target groups and final beneficiary in project development process.

6. BIBLIOGRAPHY

Carmichael, G. D. (2005), *Project Management Framework*, the University of New South Wales in Sydney, ISBN 905-809-32-55, Sydney

Central State Office for Development Strategy and Coordination of EU Funds (2008), *Guidelines for Project Cycle Management*, ISBN 978-953-7443-10-8, Zagreb

Dokko, J., Doyle, B., Kiley, T. M., Kim, J., Sherlund, S., Sim, J., Heuvel, V. S. (2009), *Monetary Policy and the Housing Bubble*, Divisions of Research, Statistics and Monetary Affairs, Federal Reserve Board, Washington, Available on: <http://www.federalreserve.gov/PUBS/FEDS/2009/200949/200949pap.pdf>, Accessed: (14-03-2012)

Emini, T. F. & Görün, M. (2010), *Regional Development Agencies as Local Actors of Development Policies and the Case of Turkey*, *European Journal of Social Sciences*, Volume 18, Number 1, ISSN 1450-2267

European Commission (2004), *Project Cycle Management Guidelines*, Volume 1, Bruxelles, Available on: http://ec.europa.eu/europeaid/multimedia/publications/documents/tools/europeaid_adm_pcm_guidelines_2004_en.pdf, Accessed: (06-03-2012)

Irawati, D (2006), *Understanding The Triple Helix Model from The Perspective of the Developing Country: A Demand or A Challenge for Indonesian Case Study?*, Business School-Newcastle University, MPRA Paper No. 5829, Available at: <http://mpra.ub.uni-muenchen.de/5829/>, Accessed: (13-03-2012)

Jones, I. C. (2009), *The Global Financial Crisis of 2007–20??*, Available on: <http://www.econ.ohio-state.edu/mccafferty/econ502.02/CurrentEvents2009.pdf>, Accessed: (14-03-2012)

Kantarci, B. H. (2010), the Contribution of the Regional Development Agencies to the Improvement in Underdeveloped Areas, *Journal of Information Technology and Economic Development*, Volume 1, Number 1, ISSN 2153-9731

Leydesdorff, L. (2012), the Triple Helix of University-Industry-Government Relations, Available at: <http://eprints.rclis.org/handle/10760/16559>, Accessed: (12-03-2012)

Puljiz, J. (2003), the Role of Economic Development Agencies in Promoting the Development of Lagging Areas of Croatia - The Case of LEDAs, *Economic Development on Local and Regional Level*, Smjerokaz, ISBN 953-7043-0-1, Zagreb

Taylor, J. B. (2008), "The Financial Crisis and the Policy Response: An Empirical Analysis of What Went Wrong," *Festschrift in Honor of David Dodge's Contributions to Canadian Public Policy*, Bank of Canada, p. 1–18, ISSN 089-13-811

ORGANIZATIONAL COMMUNICATION STRATEGY AS KEY FACTOR OF COMPANY SUCCESS

Kenan Spaho, M.Sc.¹

¹International Forum Bosnia – Centre for technology and economical development, Bosnia and Herzegovina, k.spaho@bih.net.ba, kenan.spaho@energoinvest.com

ABSTRACT

We all understand and appreciate importance of communication in our days. A breakdown in communication between people can result in problems which can be unsolved. This is the reason why communication is necessary in world of business for conducting business in efficient manner. Any business involves two or more sides who may be located anywhere in the world. Beside this external communication it is very important to have good internal communication (organizational communication) between employees. It will not be mistake if we say that good internal communication is key factor of company's success. In the following text we will use term organizational communication because it is spread in literature. Managers spend majority of their time communicating in several ways: meetings, face-to-face communication, written communication etc. On the other hand employees understand importance of organizational communication on workplace too. Organizational communication is not new science but in this new age it has got on its importance as a field of academics study. For the purpose of this paper we will focus on organizational communication strategy in order to show how to prepare document of organizational communication strategy in a company.

JEL classification: D23, M14

Keywords: Organizational communication, organizational communication strategy

1. INTRODUCTION

It is not possible to have good human relations without communication. On the other hand effective communication is required not only for human relations

but for good and successful business. In practice there is no organization without communication or there are organizations with bad communication and it cannot be considered as successful organizations. Effective organizational communication is essential from several aspects as:

- **For manager – employee relations.** The managers cannot get the work done from employees unless they are communicated effectively on what have to be done.
- **For motivation and employee morale.** Inappropriate or faulty communication among employees or between manager and his subordinates is the major cause of conflict and low morale at work.
- **For increase productivity.** With effective communication you can maintain good human relations and encourage new ideas from employees in order to increase production at low cost.
- **For employees.** Through communication employees submit their work reports, comments, grievances, and suggestions to their senior managers.

(<http://www.articlesbase.com/business-articles/importance-of-communication-in-an-organization-97064.html>, date of access 16.02.2012)

2. BASICS OF ORGANIZATIONAL COMMUNICATION

Communication is exchange of words and meanings, a two – way process of sending and receiving messages (Beckham, King, 1992). Also communication is transfer of information from sender to receiver with condition that receiver understands the message (Weihrich, Koontz, 1993). For efficient communication it is necessary that receiver understands meaning of message and show it to sender through some expected reactions (Ivancevich, Matteson, 2002).

Business communication can be **inside organization (internal communication)** and **outside organization (external communication)** (Fox, 2006). **Internal communication** is process where all employees take part unlike **external communication** where only some employees take part (Fox, 2006). For the purpose of our research we will focus on internal communication or in some literature sources organizational communication. For the purpose of this paper we will define organizational communication as process of information exchange and making decision between sender and receiver which consequence is positive result in raising

efficiency at least one of them (Sajfert, Đorđević, Bešić, 2006). There are several approaches to function of organizational communication. Here we will focus on two approaches. One approach is that function of organizational communication is visible through four fields of management (Petković, Janićijević, Bogičević, 2008):

- **Control of employees behavior**
- **Motivation of employees**
- **Development of interpersonal relations**
- **Making decision**

Second approach is that organizational communication has five functions (Nehrer, 1997):

- **Compliance gaining**
- **Leading, motivating and influencing**
- **Sense – making**
- **Problem – solving and decision making**
- **Conflict management, negotiating and bargaining**

But definitely the most important role of organizational communication is to relationship building in order to achieve its strategic objectives (Grunig, 1992).

Effective and efficient organizational communication consists of seven elements (Black, 1993):

- **Complete and true information about company**
- **Confidence between managers and employees**
- **Healthy and secure work conditions**
- **Fair and honest payment**
- **Continuity of work without conflict**
- **Satisfaction with work during most period of work time**
- **Proud with company and confidence in it**

Effective organizational communication must results in satisfaction with these seven elements. This paper will be based in these seven elements.

3. ORGANIZATIONAL COMMUNICATION STRATEGY – THEORETICAL APPROACH

The key elements which will lead us to effective and efficient communication campaign are (Vilkoks et al, 2005):

Situation analysis. There are three reasons for creating communication campaign: making corrective programs in order to overcome problems which have negative effect on organization, implementation of single project or making efforts to save reputation and get support of publicity.

Goals. There are two types of goals: informative in order to get better conscious of some question and motivating in order to motivate potential audience.

Audience. All communication programs are focused on some audience. Some of programs are focused on general audience but it is exception. Every program must have targeted audience. In organizational communication target audience are employees. Definitely, employees are the most important audience so department for public relations and department for human resource management must spend a lot of time in communication with them.

Strategy. Strategy is the way how to realize the goals and it gives directions to communication program. It is possible to have one general strategy or several strategies depending on targeted public. The most important strategies for communication are persuading and propaganda.

Tactics. Tactics are technical part of communication program which describe specified activities in order to implement communication strategies mentioned above. It assumes using communication instruments in order to reach primary and secondary public by key messages. We distinguish three tactics: written tactics, spoken tactics and finally visual tactics. These tactics are presented in Table 1.

Timetable. There are three aspects in creating communication timetable: decision of time for realization of campaign, creating order of activities and creating list of steps which are necessary for getting final goal.

Budget. There is no plan or program without the budget because for the implementation of it, it is necessary to have some financial resources. The practice is that management of company decides about amount of money and then responsible personal decide how to invest that money in communication campaign.

Evaluation. Evaluation is in direct connection with established goals of communication campaign. The goals must be measurable in order to show that communication program satisfied its purpose. For the purpose of evaluation of the communication program it must create adequate criteria and methodology.

This methodology will be the base for creating organizational communication strategy what is the subject of this paper.

4. METHODOLOGY

The methodology is based on the case study method. The object of our case study is a large company which has 800 employees, which makes business more on the international market than in Bosnia and Herzegovina. For the purpose of this paper we will mark this company as Company X. The company is organized in three organizational levels: top level, middle level and first line level. On the basis of the above mentioned structure of communication plan we will try to apply it on organizational communication in this company.

5. ORGANIZATIONAL COMMUNICATION STRATEGY – CASE STUDY

After a clearly defined theoretical basis of organizational communication, communication plan and methodology, now we will present how it will look like organizational communication plan for our Company X. The plan will be based on steps defined above.

Situation analysis. Last research in the company which has been done on a sample of 100 employees has shown that employees were satisfied with healthy and secure work conditions as well as with continuity of work without the conflict while they were unsatisfied with other elements (Spaho, 2010). That is the reason for creating such a plan in order to present how to overcome this problem.

Table 1: Communication tactics

Written tactics	Press release, informative bulletin, periodical journal of company, brochures and manuals, annual reports and corporate advertisement.
Spoken tactics	Face to face communication, techniques for writing speeches, holding speeches, press conference, entertainment for journalists, interview, meetings, live word
Visual tactics	Delivery of news to TV stations, video press releases, personal appearance on TV, films, corporate design etc

Source: Adapted from Vilkoš et al, 2005

Goals. Organizational communication is mostly focused on motivating goals in order to reach the main goal, readiness of employees to work for the company. In order to reach that goal it is necessary to meet these:

- **Enable complete and true information about company**
- **Build confidence between managers and employees**
- **Create healthy and secure work conditions**
- **Give fair and honest payment**
- **Enable continuity of work without conflict**
- **Make employees to be satisfied with work during most period of work time**

With these six elements it will be easy to meet seventh element, **proud with company and confidence in it**. Further, this will lead to **main goal, employees to be ready to go out of country what is main condition for our company to earn the profit**.

Audience. The target audience in organizational communication process is employees in company. The target audience must be divided in three categories such as:

- **Young generation consisting of employees between 20 and 35 years**
- **Middle generation consisting of employees between 35 and 50 years**
- **Older generation consisting of employees between 50 and 65 years**

The reason for this division is the fact that different generations have different needs and ambitious. Managers have a task that with adequate communication manage that needs and ambitious otherwise it will go to generation conflict. It is normal that the focus must be on young generation because that generation is key pillar and future of the company.

Strategy. The best strategy for the company is to use combination of both strategic alternatives: **persuading and propaganda strategy**.

Tactics. For the realization of above mentioned strategic alternatives the most suitable tactics are:

- **Face to face communication between managers and employees through periodical meetings**
- **Periodical journal of the company. In that journal employees must find all information of the company, situation, needs etc. Positive information**

such as getting new business contract will motivate employees. Also in this journal there must be place reserved for employees to express their knowledge by writing articles in area which they know.

Timetable. Face to face meetings must be organized by next plan:

- **First line managers must hold meetings every week in order to inform employees about situation and to see if there are some problems which must be presented to above management levels.**
- **Middle level managers must hold meetings every month in order to see situation in their divisions. During those meetings they must see if everything is OK and whether first line managers give them correct information. If necessary they need to take corrective actions using their authority without consultation with first line managers.**
- **Top managers must hold meetings every three months. The purpose of those meetings is to see situation in company and take corrective actions if necessary using their authority without consultation with first line managers and middle level managers.**

Periodical journal must be published every month with new information about company as well as with educative content.

Budget. For the purpose of organizational communication strategy there is no special budget because above mentioned tactics need standard everyday costs such as paper, electricity etc.

Evaluation. The evaluation process must be done thoroughly. The best way to do the evaluation is to make research about satisfaction of employees in company. This process is very complex and it must be done by department for human resource management and department for public relations. The best way for evaluation is to make questionnaire which will be based on employee's age and motivating goals as it is presented in Table 2.

Table 2: Questionnaire for evaluation

EMPLOYEE'S AGE		
20-35	35-50	50-65
COMPLETE AND TRUE INFORMATION ABOUT COMPANY		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
CONFIDENCE BETWEEN MANAGERS AND EMPLOYEES		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
HEALTHY AND SECURE WORK CONDITIONS		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
FAIR AND HONEST PAYMENT		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
CONTINUITY OF WORK WITHOUT CONFLICT		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
SATISFACTION WITH WORK DURING MOST PERIOD OF WORK TIME		
DISSATISFIED	PARTLY SATISFIED	SATISFIED
PROUD WITH COMPANY AND CONFIDENCE IN IT		
DISSATISFIED	PARTLY SATISFIED	SATISFIED

Source: Done by author

This questionnaire must be anonymous and assigned to all employees. The results of the questionnaire will show real situation in company and managers will see if it is necessary to take corrective actions.

6. CONCLUSION

Effective communication is very important for creation of a successful company. Bad communication between managers and employees will result in conflicts inside the company what will farther lead to moral declination and in the end it will not be possible to reach company's strategic goals. On the other hand, regular communication especially with young employees will stimulate employee's creativity and experience shows that it is better to work with creative employees.

All processes in company are based on people's behavior and communication among them. The communication process is a representation of a company - from leadership style to team working among employees. Every top management has a task to develop conscience about the effective communication and its importance in company and through that communication to impact employee's career development, his/her enjoyment in the job, and what is most important to motivate employee to be devoted to sharing the values of the company.

7 LITERATURE

Beckham, K., King J., (2008), *Building Coalitions: Communication in Coalitions*, University of Florida

Black, S., (1993), *The Essentials of Public Relations*, Kogan Page Limited

Fox, R., (2006), *Poslovna Komunikacija*, Hrvatska Sveučilišna Naklada, Pučko Otvoreno Učilište Zagreb

Grunig, J.E., (1992), *Excellence in Public Relations and Communication Management*, Hillside, New Jersey:

Neher, W.W., (1997), *Organizational Communication – Challenges of Change, Diversity and Continuity*, Allyn

Petković M., Janićijević N., Bogičević Milikić B., (2008), *Organizacija*, Ekonomski Fakultet, Beograd

Sajfert Z., Đorđević D., Bešić C., (2006), *Leksikon Menadžmenta*, Agencija Matić, Beograd

Spaho, K., (2010): *Organizational communication as key factor of company success, An Enterprise Odyssey: From Crisis to Prosperity – Challenges for Government and Business*, University of Zagreb, Faculty of Economics and Business, (International conference Opatija, may 26 – 29 2010).

Vilkoks, D., Kamron, G., Olt, F., Ejdži, V., (2005): *Odnosi s javnošću, strategije i taktike*, Centar za izdavačku delatnost Ekonomskog fakulteta u Beogradu, Beograd

Weihrich, H., Koontz, H., (1998), *Menedžment*, Mate, Zagreb

<http://www.articlesbase.com/business-articles/importance-of-communication-in-an-organization-97064.html>, date of access 16.02.2012

OPERATIONAL PLANNING IN THE COMPANY „XYZ“ Ltd.

ŠERCER MARIO, M.Econ.

ABSTRACT

Each company must have a defined and previously determined manner of realisation of its goals, which is achieved through planning. Accurate and detailed planning is extremely important for companies that operate on several locations, particularly when individual segments of production are located in various countries across Europe. It can be easily concluded that the company „XYZ“ Ltd. must have precisely defined plans for its management and business operations that will enable its regular flow of activities, the procurement of necessary resources for the achievement of goals, the implementation of certain activities in compliance with selected goals and strategies and mere monitoring and measuring of achieved results in order to be able to undertake corrective measures if the results are unsatisfactory. From the managerial point of view, the business structure of the company „XYZ“ Ltd. itself represents a certain challenge. In the long-term, satisfactory operating results can be achieved only by skilled, deliberate and well-organised management in all of its functions.

JEL Classification: L52

Keywords: operational planning, planning, management, project management, biomass

1. INTRODUCTION

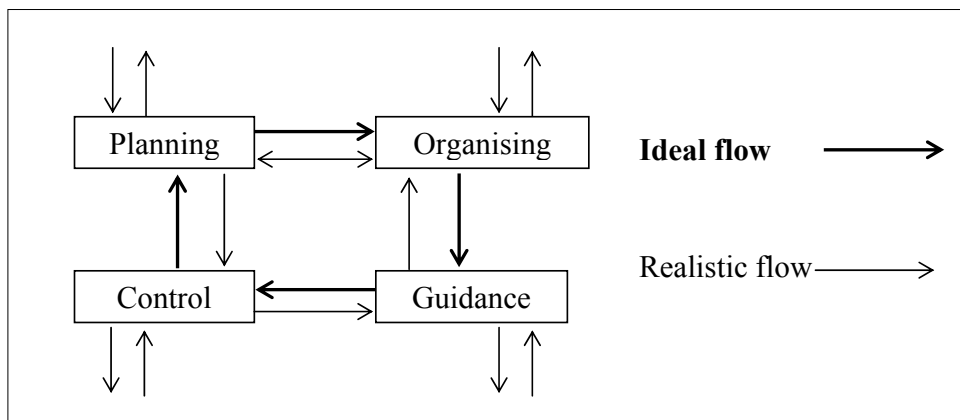
Management is defined as the process of organisation and maintenance of environment in which individuals, by working together in groups, efficiently achieve their selected goals. An interesting definition was made by Margaret Parker Follet, who considered management as “the art of getting things done through people“. In a company operating in the market economy on several locations in different countries across Europe, management is one of the most important activities. Each management process starts by planning, which can be defined as the process of set-

ting up future goals, assumptions about the environment in which they are to be achieved, the selection of action directions, as well as the means and ways of goals achievement.

2. PLANNING AS ONE OF THE BASIC MANAGEMENT FUNCTIONS

Management as a process includes a set of specific activities called management functions, and planning is one of them. Planning includes primarily the selection of goals and predetermination of expected quantities and quality of work to be done. Therefore, it can be established that planning is the process of making decisions about the goals, strategies and plans directing the operation of the company as a whole. Planning is just the first of the functions performed by managers during the performance of each task. It is not only the preparation of plans for defined time periods, but also a creative process.¹ Taking into account that all other management functions are harmonised with the selected goals and tasks of business operation in the planning process, it is easy to understand the responsibility of managers who perform this function. Planning is a constituent part of management on all levels, but its dimension differs with respect to the various levels of management.

Figure 2.1. Flow of Management Functions



Source: Sanja Pfeifer „Menadžment“ - lecture notes, Ekonomski fakultet Osijek, 2006, page 5

The management functions are shown in Figure 2.1. In an ideal situation, the management process would start with planning, after which the resources and the manners of plan development would be allocated, and finally, effects valued on the

¹ Karić, M. (2007), *Ekonomika poduzeća*, page 26

basis of control. But, in practice, the real model of management process is not that logical and successive. Many functions are performed simultaneously and repeated in cycles. The management process is complex and sequenced. Theoretically, the ideal flow of management process occurs when the activities follow or are performed one after another without recurring and overlapping. In reality, activities often flow simultaneously and randomly. Through planning, the dimensions of organisation are being determined, and through the organisation, the requirements for additional planning and other such matters are being established. In the text above, it has been mentioned that planning is a constituent part of management on all levels, but its dimension differs with regard to various levels of management; therefore, several levels of planning are differentiated. Top management deals with strategic planning, which also includes the formulation of the company's shared vision, the creation of organisational culture and the cultivation of entrepreneurial spirit. Medium-level management makes tactical plans and is active in the coordination of several organisational units. On this management level, long-term goals are reformulated into executive, operational specific goals and low-level units' tasks, i.e. the implementation of overall strategy and policy defined by top management. Operational planning is a task of low-management. It is directed towards the realisation of immediate tasks and goals. Operational managers immediately guide co-workers in their day-to-day work and tasks; therefore, this planning is characterised by a lesser impact of external environment, short-term perspective and orientation to optimisation of the production and service process.

3. BUSINESS STRUCTURE OF THE COMPANY „XYZ“ Ltd.

The company „XYZ“ Ltd. was established in 1957² as a small family firm located in Germany. For more than four decades, it has been active in designing and manufacturing of complete plants for efficient and ecological biomass combustion – from mere design outlines to putting into operation.

Since 1993, the firm has been a majority owner of the company „XYZ-Slo“ Ltd. from Maribor, which emerged through the privatisation of the former corporate group „B.K.“³, i.e. one of its manufacturing units, „P.J.“. „ABC“ is an engineering office, which has been providing construction and design services of plants to the

² <http://XYZ.de/index.php?geschichte> (27.02.2012.)

³ <http://www.ABC.si/o-nas> (27.02.2012.)

company „XYZ“ Ltd. since 2002 and coordinating technical operation between the headquarters in Germany and the production plant in Slovenia since 2002.

The main and major part of production is carried out in Maribor, where boilers, burners and dedusters as well as parts of transport technology are produced and completed, whereas lesser parts of transport technique are generally produced and the complete control unit made and programmed in Germany. Since these three business entities are situated on three different locations (three different European countries), there is no need to emphasise that the existing business system has to be considered, organised and implemented in an appropriate manner so as to make the overall operation of all entities run as smoothly and efficiently as possible.

Order-issuing authority with the exclusive right of decision-making is the parent company in Germany, where all strategic decisions are made and long-term goals defined. Agreements regarding the launching of new products and major construction redesigns are made in the parent company. The subsidiary company „XYZ-Slo“ Ltd. defines the main activities relating to it as a business unit, makes production time schedules both for its own projects and orders made by the parent company in Germany. Over the years, a level of complete independent processing and development of projects has been achieved in the field of the representation of „XYZ-Slo“ Ltd., i.e. marketing, sales, conclusion of contract, manufacturing of complete plants, delivery and installation and finally, putting the plant into operation. If needed, the know-how of the parent company is available to all business units and to the representatives across Europe who carry out installation of plants either independently or in cooperation with the company „XYZ“ Ltd. The engineering office „ABC“ is located in Croatia and is engaged exclusively in project design and providing final design services for all components included in the biomass combustion plant from the production programme of the company „XYZ“ Ltd. In the regular meetings organised in Germany, details on necessary modifications of the existing products and the construction of new products are agreed. Technical designs of the products are sent to the parent company in order to be filed there, and also to the production plant in Slovenia, where all necessary components are produced based on the designs, depending on individual orders. In the regular meetings in Germany and Slovenia, agreements are made relating to the current business operation and projects that are being developed and delivered. Also, short-term plans for the next three months are being made. The sales department of the company „XYZ“ Ltd. is located at the headquarters in Germany, since cca. 75% of supplies are sold in the German market, which is regionally divided

among independent representatives. The markets of other European countries are also covered by regional representative offices (France, Luxembourg, the Netherlands, Italy and Austria). The sales department of the subsidiary company „XYZ-Slo“ Ltd. in Maribor covers Slovenia, Croatia and Bosnia and Herzegovina. The coordination of business activities is of extreme importance: starting from making offers, calculations, contacts and negotiations with prospective buyers, purchase, production, sales, to the customer care after delivery. All these requirements call for a large amount of information that have to be processed and forwarded to the end customer in as short period of time and with as few errors as possible. Accuracy and timeliness are extremely important in the technical preparation and production, where even the smallest incorrect piece of information can cause significant damage. To make the entire business process function most easily and efficiently to the satisfaction of all participants involved (customer, salesman of materials, producer and others), the business system makes use of all necessary technical equipment, both the latest telecommunications equipment and computer equipment (hardware and software).

4. OPERATIONAL PLANNING

Operational planning of the company „XYZ“ Ltd. is based on five major determinants of project management, and these are: start-up phase, planning, implementation, supervision and control, and project completion.⁴ This planning is performed on a daily basis, and it is directed towards the realisation of immediate tasks and goals and towards the optimisation of production and service processes.

4.1. Operational planning of current business activities

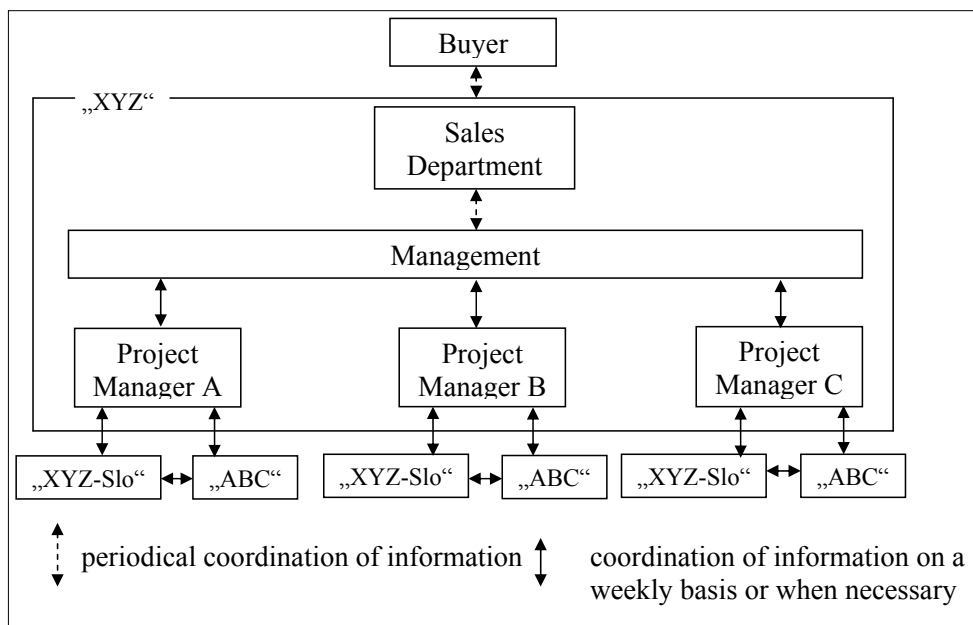
Planning of current business activities includes mostly the harmonisation of production capacities occupancy with agreed delivery deadlines of entire plants, individual components or spare parts. If the parent company has contracted installation and putting the plant into operation, then these activities are also to be put into time schedule, whereas in case of deliveries of plants to representatives (who install and put the plant into operation independently), care has to be taken about

⁴ Project Management Institute (2008) A Guide to the Project Management Body of Knowledge, page 6

timely and complete delivery. Representatives and end customers negotiate the time and scope of delivery and all other details regardless of the parent company.

In the operational planning of current business activities of the company „XYZ“ Ltd., all management levels are included: from the general manager, who is also the company's top manager, managements of the companies „XYZ-Slo“ Ltd. and „ABC“ to individual project managers with the working premises in the company's headquarters in Germany. The major part of planning, organisation and coordination is carried out in the headquarters. The operational planning of current business activities is shown in Figure 4.1.

Figure 4.1. Operational Planning of Current Business Activities



Source: Mario Šercer, own drawing

The sales department agrees the scope and time of delivery with the end customer. Since these are large plants that imply individual production and design for the most part according to the buyer's requirements and wishes, it is not possible for the producer to keep the plants' components on stock, but they are being produced according to the agreement and contracted delivery periods. In many cases, the delivery period does not depend on the mere production capacities, but also on external factors occurring with the customer, such as construction works in the boiler room etc. Contracts are signed by the company manager or his/her deputy

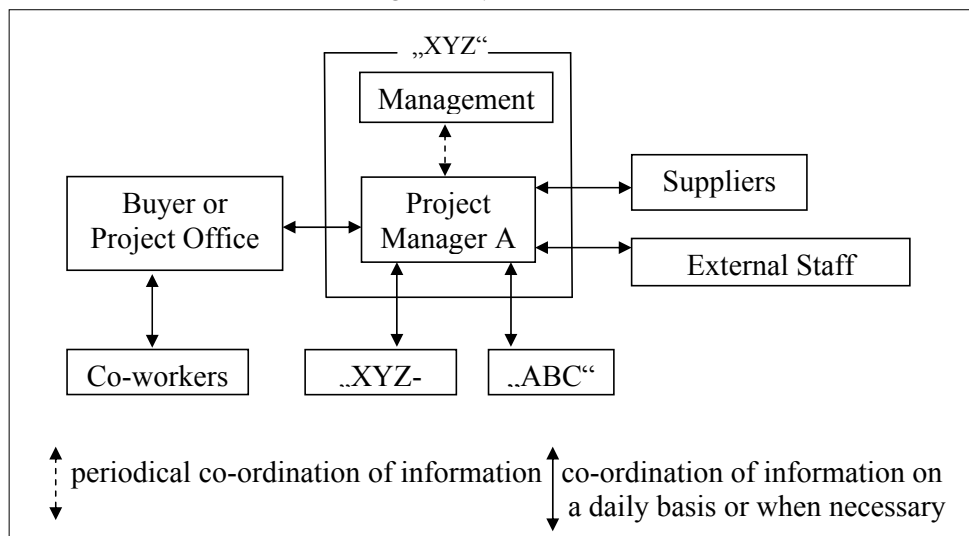
(being also the general sales manager). When the contract has been signed, the manager enters the respective project into the time schedule in rough terms (depending on the agreed time of delivery). In this phase and level of planning, details relating to the project processing are still not being considered. In the meetings of top management with operational management (which are held twice a week, and if necessary, more or less frequently), project managers are appointed for individual projects. It is also being considered whether it is necessary to make certain construction redesigns, a new construction of individual components or the already existing designs can be used in the production. If the contracted parts of delivery require alterations of the existing products or even the construction of new ones, the meetings regarding the planning of business activities also include the engineering office „ABC“, whose working capacities are to be taken into consideration when determining production and delivery terms. In accordance with harmonised and updated time schedule, an order for all necessary components and parts is made for each new project, and if necessary, external staff is employed.

4.2. Operational planning of projects

When managers have been appointed for all current projects, each manager starts with the operational planning of each project separately. The first step of this planning is making the project design, i.e. arrangement plan with all agreed components drawn in. The drawings can be prepared in several ways, depending on whether this is a new or an already existing facility in which the plant will be located. If in the respective project it is a question of an already existing facility, the project manager will be obliged to obtain from the buyer all necessary plans of premises in which the plant will be located. On the basis of this, drawings can be made with the plant completely drawn in. In this case, it is a question of a direct cooperation between the project manager and the customer. In case of new facilities, the procedure of preparing drawings can be twofold: the project manager has to obtain already completed facility drawings from the responsible architect, or the responsible architect obtains a drafted drawing from the company „XYZ“ Ltd. with the plant drawn in. On the basis of this drawing, he/she prepares the necessary documentation. In both cases, the project manager does not co-operate with the customer directly, but with the responsible architect, who is included in the project by the customer. On the basis of contracts and prepared drawings, a purchase order of all necessary components is made with the subsidiary company „XYZ-Slo“ Ltd. in Maribor. The company „XYZ-Slo“ Ltd. plans its production capacities and re-

sources necessary for timely deliveries independently, which is the responsibility of its management. If certain components and materials are to be provided that cannot be purchased in Slovenia, project managers in Germany are also being involved in the purchase. Each of them is in charge and responsible for timely procurement of all necessary parts and materials for their respective projects. Depending on transportation costs, the parts purchased in such way are delivered either directly to the production plant in Maribor or to the parent company in Germany, where they are being packed with other parts and delivered through a forwarding company to Slovenia as a joint shipment. As already mentioned, all plant components are being produced only individually after the contract has been concluded. In order to minimise the costs of warehousing and consequently, dead capital, certain materials are being ordered for each project individually. These include, for example, gear motors, fire clay bricks, insulation material etc. It is therefore the task of each project manager to include the suppliers of these materials into the project by means of appropriate purchase orders. If minor construction redesigns are necessary or production drawings of plant components are to be made, each project manager of the company „XYZ“ Ltd. has available its own resources or that of the company „ABC“ as external staff. Depending on the availability of capacities, a decision is made on the place where the production drawings will be made. The scheme of operational planning of projects is shown in Figure 4.2.

Figure 4.2. Operational Planning of Projects



A biomass combustion plant has to be connected to the overall heating system in compliance with all technical norms and regulations. This is to be achieved only with the exchange of appropriate information between the respective project manager and responsible persons in the companies working on the common project, regardless of whether they are included in the project by the customer, the company „XYZ“ Ltd. or by a third person. When all necessary installation works on the plant and its components have been carried out in the boiler room and the complete plant has been connected to the electric (control unit) and heating systems, the respective project manager agrees the date of putting the plant into operation with his/her customer. After that, the responsible chimney sweeper carries out an on-site inspection and measures the values of flue gas emissions. If the measured values do not exceed the limits prescribed by law, the responsible chimney sweeper issues an attestation that is to be renewed each calendar year.

5. CONCLUSION

Nowadays, under the constant pressure of market and competition, ever-increasing demands and expectations both of customers and suppliers, it is extremely important to carry out precise and detailed planning of all necessary steps in day-to-day work on certain projects. For this reason, the role of project manager becomes increasingly important, since the success of each project depends primarily on his/her competence. Each competent manager is obliged to follow the development of technology, IT and all other sectors, the implementation of which leads to better operating results. Being a separate unit, each project is unique. It has its beginning and its end, i.e. a certain lifetime, on which in many cases the project manager has only minor or no influence at all. Therefore, it is necessary to make all possible efforts and make use of the best means and technologies to achieve the best results in this pre-determined time period. Operational planning as the lowest level of planning is of extreme importance. It represents a connection and link between what is required and what will be achieved in the end. It can be concluded that operational planning is the level of planning whose results are tangible and visible, which means that committed errors can be detected immediately and directly. This is of great advantage, because, if errors are detected in due time, corrections can be made before the damage reaches a large volume. Although, theoretically, each project represents a separate unit, and operational planning therefore differs from one project to another, in each project, a competent project manager would gather

know-how and experience, and transfer and apply them in all similar projects as well as in all others, if practicable.

BIBLIOGRAPHY

Karić, M. (2007) „Ekonomika poduzeća“ Second Edition, Ekonomski fakultet u Osijek, ISBN 978-953-6073-08-5

Pfeifer, S. (2006) „Menadžment“- lecture notes, Ekonomski fakultet u Osijeku, Osijek

PMI (2008) „A Guide to the Project Management Body of Knowledge – Fourth Edition“, Project Management Institute, ISBN 978-1-933890-51-7

<http://XYZ.de/index.php?geschichte> (27.02.2012.)

<http://www.ABC.si/o-nas> (27.02.2012.)

IMPROVING THE QUALITY OF SERVICE THROUGH THE QUALITY OF HUMAN RESOURCE MANAGEMENT

Ines Škoko, univ.spec.oec¹

¹Polyclinic Intermed, Požega, Croatia, inarace@gmail.com

ABSTRACT

Polyclinic Intermed is private health care institution composed with several ambulances; gynecology, radiology, pediatrics, urology, gastroenterology and occupation medicine. It is established in late 2005, and it is still the only private health care institution in the country Požeško Slavonska. Consequently there is no any competition according to this type of private health care service, however competition is still present. This competition exists in public health care institution – Županijska bolnica Požega. The main difference between those two institutions is in the service to patients and its quality. Problems that appear in the public health care institutions are relationship between employees and more importantly, the quality of service which patients get. In private health care institution such as Polyclinic Intermed, offers the highest quality of service as possible. Qualities of service that are missing in the public institutions are the one that can be provided in private polyclinics. Polyclinic Intermed as a private health care service, provides contemporarily technology, professionally doctors and medical staff with personal approach to a patient that always need to be upgraded. Intermed politic “one on one” quality service is ability that can be offered to a patient personally and huge disability that lack in public health care institution. This fact brings private polyclinics to improve their service quality by analyzing patient, constantly questionnaire patient of their satisfaction or dissatisfaction of the service in Polyclinic Intermed. From that aspect, in this paper we are analyzing a real situation of the service in public hospital and that same service in private institution. The results of the research based on real satisfaction or dissatisfaction of the patients in private institution is the real indicator of creating those private health care institutions. The results also brought us to conclusion, that it is necessary for better citizen’s health standard, to support and stimulate more of those private health care institutions.

JEL Classification: O15

Key words: Private health care institution – polyclinic, public health care institution, service (“one to one”), employees, customer / patients.

1. INTRODUCTION

Polyclinic Intermed is private health care institution that is established in a time when the health care reform supposed to take its achievement. The idea of the reform based on the whole Croatia was to relocate diagnostic examinations in private clinics and polyclinics. In that case private clinics and polyclinics would have agreement with certain insurances which would cover patient diagnostic examinations, same one that public hospitals have today. This reform would be solution of solving the huge problem in public health care institution and that is long list of diagnostic examinations, but also another problem that affects on patients personally and that is privacy, politeness, discretion, comfort, information quality of their health and approach to the patient of the whole. Since today this reform did not approach in whole institutions in Croatia and that also includes district of Požega- Slavonia Country which also includes Polyclinic Intermed. In this situation Polyclinic Intermed was left without this insurance agreement and huge number of patient that are still waiting their free examinations in public health care institution. Since 2005, when polyclinic Intermed was established, it gathers their own patients that are willing to pay for their examinations. For those examinations it is normal to expect a better service than it is a service in public health care institution. Polyclinic Intermed as a private health care service, provides contemporarily technology, professionally doctors and medical stuff with personal approach to a patient that always need to be upgraded. Service of Intermed policy is “one on one” service which can be offered to a patient personally and huge disability that lack in public health care institution. This fact brings private polyclinic to improve their service quality by analyzing patient, constantly questionnaire patient of their satisfaction or dissatisfaction and also improving human resource management inside of this Polyclinic.

2. ORGANIZATION IN ZUPANIJSKA BOLNICA POZEGA AS A PUBLIC HEALTH CARE INSTITUTION

In public organization such as Zupanijska bolnica Požega it surrounds many department services in addition to have best possible organization. Those department

services consist of administration responsibility, economy division, law division, technical operating system and food operating system (Joumard; 2010, p128). In addition to practice hospital service that includes medical service, diagnostic service and health care service, Zupanijska bolnica Pozega is organized in following organization sections; intern medicine, surgery medicine, paediatric medicine, gynaecology and obstetrics medicine, diagnostic and medical nursing care. Among those specific medical orientations in this hospital in Pozega, there are few of them that are overlapping with private health care institution polyclinic Intermed also located in Pozega. Those medical orientations are internal medicine which includes gynaecology, radiology, paediatrics, urology, gastroenterology and occupation medicine. Zupanijska bolnica Pozega is only competition that this private health care institution has. However, public health care institution according to the private one and inversely, has different kind of health service quality, different relationship between patients and medical staff or doctors, and also different kind of human resource management (Young; 2010, p. 273).

On the head of this hospital is a director that has several departments under his office. Those departments are necessary in this kind of institution in order to have good organization. It includes service for general, law and technical duties that includes financial department, supply, analyses, statistical and medical information department, same as department of medical informatics, invoicing and pharmaceutical department. (Babic, Roksandic; 2006, p.153-155).

Financial incomes of the public health care institutions are mostly based on income of Croatian institution of public health insurance (Babic and Roksandic; 2006, p.83). Other incomes that are more based on renovating the building or investing in some new medical technology is covered mostly from the incomes of Pozega County. The biggest expenses in this public institution are in payments of employees, and less significant expense is maintaining of building in addition that there are no new investments in the building or investments in new medical technology.

2.1. Service quality in the public health care institution, Zupanijska bolnica Pozega

Public health care institutions in Croatia are traditional and most likely attended among the Croatian people. Since lately people in Croatia did not have any other choice and any different opportunity to experience other service than in the private

health care institution. Number of population through the past has been changed, while the most of those public hospitals did not change a lot (Drache; 2005, p.25). Today, situation in most of public hospitals is in deficiency of doctors in almost every type of specialization. This fact brings public institutions with smaller amount of doctors and increasing number of patients. Result of this situation certainly is no good for the hospitals for the doctors or most of all for the patients. In this kind of situation patients are waiting too long for some examination, a waiting list of different medical technology examination are too long, sometimes patients have to wait more than six months to be examined. Among all of those patients, doctors do not have enough time to dedicate on a patient. Dedication and service to a patient in this kind of health service cannot be in high quality as patients deserve to have. In most cases patients do not have other choices than be cured in those public health care institutions. In some areas in Croatia there are both public and private health care institutions.

2.2. Medical technology and staff

Most of public health care institutions or hospitals in Croatia contain with satisfied medical technology. According to health care situation today and in the past, Croatian institution of health insurance provide as best as possible medical technology, however, the number of those medical technology is never enough. Medical technology costs a lot and it is hard to follow new and improved technology (Callahan; 2009, p.93). Same situation is in Zupanijska bolnica Požega. Result of this condition in public hospitals is long waiting list of examinations on different medical technology. Rarely appear situation when some medical technology damage and then appears a huge handicap in whole hospital. Waiting lists, that are already long, they are making huge loss for patients and medical staff.

Medical staff in public health care institutions are high qualified and well educated. In Croatia most of doctors are employed in public health care institutions. In some cases they can choose which specialization they would like to specialize, but in some cases it is not likely. Nurses in hospitals are mostly preoccupied among huge number of patients that need medical care.

According to this situation doctors and nurses do not have time, ability and motivation to improve their service toward the patients. It is not reasonable to blame directly those employees and their lack of motivation, adequately solution for this situation would be in improving quality of human resource management and its organization.

3. ORGANIZATION PRIVATE HEALTH CARE INSTITUTION, POLYCLINIC INTERMED

From the very beginning this private polyclinic has well known management and human resource organization. On the head of this polyclinic was a manager whose idea was to start this business. Private institutions are profitably organizations, while hospitals as public health care organizations are basically nonprofit organizations. Operational parts of this polyclinic are financial department, marketing and management department, human resource department, maintaining and safety insurance department. Present employees, in Polyclinic Intermed are doctors with different specializations and nurses who are focused on patients comfort (Polyclinic Intermed; 2012, p.1).

3.1. Service quality in the private health care institution, Polyclinic Intermed

Polyclinic Intermed as a private health care institution in not financial supported with Croatian institution of health insurance. This private institution income gets from its own patients. Patients that are willing and patients that have enough financial support can cover themselves examinations that this private polyclinic can offer them. According to those facts every patient in this institution is valuable. Patients in this situation do not depend on the service that this polyclinic offers to them. Where does lay a difference? A difference is exactly in the service quality and how the human resource management is conducted. Every employed person in Intermed has its roll how and in which way to please a patient.

Nurses are the first employed persons who are patients' first contact to the polyclinic. First impression that patients get are nurses who are open and welcome for any information that they might need. This one on one contact is personal and individual based on patient's problem or issue. Nurses have obligation to make proper schedule of waiting list. This waiting list is important part of the organization system of this polyclinic. If the waiting lists are too long in the polyclinic patients may rather go in public hospitals. Nurses are basically a soul of this polyclinic. They are not the main object here, however without them this polyclinic could not function. After experiencing wonderful and caring nurse's service, patients are having their moment of time with a certain doctor they need. Comparing to the public hospitals, here patients have enough time for all questions and dilemmas on which they would like to have answers. Doctors are focused on that patient and its unique problem as much as it is possible. Thanks to well practiced organizations of

waiting list, there are no many patients in the waiting room sitting and anxiously waiting for their turn. Having this kind of organization gives patient maximum privacy, in other words, less people in waiting room – more privacy. Both, nurses and doctors have previous experience in public health care institution and they are aware of differences how and why they should approach to a patient with proper quality of service.

3.2. Human resource management in polyclinic Intermed

Human resource in polyclinic Intermed corresponds between this particular and unique social type of business and professional medical staff. In addition to make any progress in this type of business it is unavoidably to respond on management requests supported with professional medical employees. Polyclinic Intermed had its important duty to insure employees' adequate and professional education same as motivation, and all that supported with right ways of developing its career. Additionally, by increasing job satisfaction of each employee and manage his personal development brings the company on the higher level. Bringing any organizational and marketing or human resource progress it is necessary to include and involve medical staff. Involving doctors in radio interview and informing potential patients on importance of prevent diagnostic brings those employees on caring and moral level of satisfaction. Improving and refreshing polyclinic internet site with new interesting, actual and useful information is a duty that nurses maintain (Shi; 2007, p.10). According to profession, economist or any other occupation cannot replace this duty. Making this organization decision, nurses have their freedom of expressing their creativity. Sometimes it is challenge, sometimes it is motivation but it is obligation and responsibility for all of them. By organizing different actions such as free measuring of sugar in blood, free measuring of human pressure, information lecture for pregnancy, lecture for people with high pressure and others, nurses and doctors have opportunity for their creativity . Moreover, the most important information that future patient should be aware is the importance of prevention and examination for their real health status. Indirect education of all medical staff of polyclinic Intermed should motivate both patient and medical staff (Shi; 2007, p.14). Making a circle between patients, nurses, doctors, marketing department and manager's ideas and obligations should bring high quality of service same as high quality of human resource management.

4. THE MAIN PURPOSE OF CUSTOMER RESEARCH

The purpose of this research is establishing real satisfaction or dissatisfaction of the service quality that patient is getting in addition to increase the quality of human resource in this polyclinic. In this case we are talking about professional medical service that should be accompanied with discretion and privacy, moreover, nurses and doctors should be caring and accessible toward the patients same as providing them required information of their health status. It is necessary to understand which of those organization elements does not function properly and to give the best effort to make it function as best as possible, and for those elements that function properly there are always ways and new ideas to make them more preferable and even to progress them.

4.1. Category of research

As it is already mentioned, in this questioner it is important to establish patient's satisfaction or dissatisfaction, according to that, research is based on the primary data. Other potential patients that are not in polyclinic Intermed are potential target of attraction. In order to define a manner, thoughts and (dis)satisfaction of the patients according to the service that they can experience in this polyclinic, it is laboured on high-quality level of research.

4.2. Methods and models of collecting data

A primary research of this questioner consists of eight questions.

Gathering this information from the patients that experience quality of the service in polyclinic Intermed, it was personal and private. On the end of doctor's examination and few minutes before their would leave the polyclinic, a nurse would kindly ask a patient if he or she has a few minutes of their time to fill the questioner in order to express his or her experience in addition to help this polyclinic to improve or even change some things or approach to the patient. This method of questioner shows particular effective and on obviously satisfaction of the patients that they can express their satisfaction or dissatisfaction of provided service. The questioner is compiled on one side paper in order to be easy and quick to fill it up.

Questions that are chosen for this questioner are multiple choices but also there are questions in which patients have possibility to express their thoughts, suggestions and certainly their satisfaction or dissatisfaction. Simplicity and organizational stage of those questions make easier for the patients to answer on them, how-

ever, the answer on those questions was clear and they were not equivocate. This type of questions managed to cover all possibilities of satisfaction or dissatisfaction based on getting a certain appointment for certain examination, time period spend in waiting rooms before doctor's examination, achieving patient's satisfaction of doctor's approach, achieving the kindness, privacy and discretion, commodity and comfort, same as achieving satisfaction of the quality of the service and it's professionalism after all. All after all, questions are simple and understandable for patients of different age and different education.

5. ANALYZING DATES AND INTERPRETATION OF THESE RESEARCHES

On the end of collecting those answers of this questioner, answers were added up together for final research and analyzes.

In firs question, patients were asked how they found out about the polyclinic Intermed. Not just this was introduction of the questioner but also very important question that will lead Intermed to further type of key advertising. According to results it is clearly seen that expression of the answer "recommendation of other person", recommendation as the main aspect of caring over an information. How and on which way patients find out about polyclinic Intermed. Specifically in the percentage that is 78 percentages that means that recommendation in absolutely overcome. Answers which patients brought on the questioner and were not option were; family, internet site of Croatian Insurance, family doctor and internist from the hospital.

A second question was based on loyalty or patients who are coming again in this same polyclinic. Asking a question if they are for the first time in the polyclinic, it is possible to establish the amount of new patients and a number of those who are coming back. According to the results showed in the table, it is clearly seen how much polyclinic abound with new and with old and satisfied patients. For 53% of patients it was a first time in this polyclinic, and 47% were patients with one or multiple return.

In the next question, the goal was to realize if it was difficult for the patients to set their appointment and if the waiting list was too long for them. Importance of this question can alarm polyclinic Intermed if the waiting list is too long. Importance of adjusting it would not be a questionable. Main goal is to have shorter waiting lists of all medical appointments then it would be in public health care institution in county of Pozeega. With good organised medical stiff it is a duty to

provide a patient the quickest appointment of its examination. Moreover, it is one of several important aspects of good human management and reputation of polyclinic Intermed and its professional medical staff. The closest health care intuition to polyclinic Intermed is public hospital Zupanijska bolnica Pozega and according to this competition this polyclinic has to provide an appointment for its patient "immediately".

According to the answers, 5% over 95% of them expressed that they did not wait too long. Those results approve a fact that medical staff of polyclinic Intermed is good organized and motivated to improve the status of private health care institutions.

Further question apply to satisfaction or dissatisfaction of the service quality of the medical staff or nurses to the patients of polyclinic Intermed. Provided answers covers accessibility of medical stuff, politeness, privacy, discretion, commodity and information about the patient's health. From those facts, it overcomes politeness of medical stuff, and following one is comfort and commodity. It is taken in consideration that all aspects do not have the same importance in each personal life, in other words, privacy and discretion do not have the same importance as politeness or comfort. A fact that should be concerned in polyclinic Intermed is low satisfaction or even dissatisfaction of necessary patient's medical information. Towered to the results and its percentages, patients in polyclinic Intermed do not get enough information of their personal health, only 36% of them are satisfied and only 33% of them consider their privacy and discretion accomplished. Commodity and comfort same as politeness of medical stuff reach a percentage more then 50.

Thereafter strictly adding up circled answers a correct number of the answers appeared. The correct percentage of those answers it is clearly to characterize polyclinic Intermed as a private health care institution and its medical stuff. A goal of this organization and its quality of both service and medical stuff is making appointment in appropriate patient's time, avoiding a long waiting lists and time in waiting room. From the patients it is expected to be on a time so that other patients do not suffer. Sometimes it happens that patients in certain occasions have to wait for their examination; however, this period of time in any occasion cannot be as long as it is very usual in public hospitals. Such a good result of 93,2% of patients which confirm that they did not wait too long in waiting room, is also a well done job of human resource management.

In this question attention was based on satisfaction or dissatisfaction of the quality of doctor's service and its specialization. Relationship between patients and doctors are not the same in private and public health care institutions (Shi; 2007, p. 16). This fact can be approving with following results which shows that 100% of the patient's answers lead to complete satisfaction. Placing this kind of question was also challenging step for this polyclinic in order to prove or disapprove already provided facts.

Only one question was open type. The question was "What would You, as a patient of this private polyclinic, change?"

Most of the patients did not answer on this question. Idea was to place one question in which patients would have ability to express their wishes and demands. However, the goal was to bring new ideas and motivations for medical stuff to be better then they are now.

In the last question in this questioner patients were asked if they would recommend this polyclinic to others. From the previous results it is shown how important is someone recommendation. From this question it is possible to see in which status this private polyclinic stands.

According to the result of 100% of satisfied patients, it is clearly seen absolute satisfaction of patients that have experience this kind of health service. Those answers covers satisfaction in whole, it corresponds on all aspects that includes; quality of service, professional doctors, gentleness of medical stuff, contemporarily technology and organization in whole, but most of all, all together it is a result of good and professional human resource management in this private polyclinic.

6. CONCLUSION

Analyzing the quality of service and quality of human resource management trough its organization, both in private and in public health care institutions, it might bee see slight but huge differences that impact on patients. In the business as it is in health care institutions, clients or patients should not suffer at all. As a social care institution people are the most wound and sensitive. Circumstances in health institutions in Croatia today is not on the quality level as patients should get. According to research in this paper public health care institutions are overbooked with ill patients, the waiting lists for certain examinations or medical technology such as MR (magnetic resonance), mammography, UVZ etc. are too long, sometimes more

then four or six months. Unfortunately, the health care reform did not have even a chance to start with an idea as it was planned. Private polyclinics are left on their management of quality and professional service to each patient that is willing but also able to pay for this kind of service. According to the results of patient satisfaction or dissatisfaction questioner, it is likely seen that patients in the polyclinic are more than satisfied with service quality in whole. The goal of the whole health care system should be; a good quality service for all patients, not just for those who can pay a private examinations. Although, announcement in specialized newspapers according to their resource, private health care institutions in collaboration with health care insurances companies are the future of the better health care in whole. Considering the crises today, not just in Croatia, but also in the whole world, it is unrealistic to expect to invest or even support this kind health care organizations, however, shouldn't be a health care on the first place of any person?

7. BIBLIOGRAPHY

Shi L. (2007). *Managing the human resource in health care organizations*. ISBN 13: 978-0-7637-2997-4, Boston, Toronto, London, Singapore.

Yong, L. P., Saunders, S. R., Olsen L. (2010). *The health care imperative*. ISBN 0-309-14434-5, Washington, D.C.

Saltman, R.& Bankauskaite, V.& Vrangbæk, K. (2007). *Decentralization in health care*. ISBN 978 0 335 21925 4, New York.

Callahan, D. (2009). *Taming the beloved best, how medical technology costs are destroying our health care system*, ISBN 978-0-691-14236-4, New Yearsy.

Joumard, I.&Hoeller, P.& André, C.& Chantal, N. OECD (2010). *Health care systems*, ISBN 978-92-64-09489-5

Babic, T. & Roksandic, S. (2006). *Osnove zdravstvenog prava*, Tipex, Zagreb.

Dreache, D.& Sullivan, T. (2005). *Health reform*. London, ISBN 0-203-97358-5, New York.

Polyclinic Intermed, available;

<http://www.poliklinika-intermed.hr/poliklinika/razno/o-nama.html> , Accessed: (25-01-2012)

PROJECT ORGANIZATION, COMMUNICATION AND MOTIVATION DURING A BANK MERGER

Tadija Vrdoljak, Ph.D.¹, Željko Jagnjić, M.Sc.², Ivan Šverko, Ph.D.³

¹Konzum d.d. Zagreb, Croatia, tadija.vrdoljak@os.t-com.hr

²Hypo Alpe-Adria-Bank d.d., Zagreb, Croatia; zeljko.jagnjic@hypo-alpe-adria.hr

³Hypo Alpe-Adria-Bank d.d., Zagreb, Croatia; ivan.sverko@hypo-alpe-adria.hr

ABSTRACT

This article reports experience from the case of a merger integration project in the banking sector. It shows challenges that were met, describes approach taken to manage the whole project and provides key success factors – project organization, communication and motivation are described in detail. It highlights the importance of employees and proper climate which can be set up despite the fact that merger for some employees means “being redundant”. Proper project organization, communication and motivation will, however, bring final success.

JEL classification: G21, G34

Keywords: merger, project organization, project communication, project motivation

1. INTRODUCTION

Challenges that companies face during a merger are widely spread throughout the organization. On one side there are regular daily business operations which need to be performed without any obstacles – development or upgrade of products, client satisfaction, regulatory requests, selling targets etc. while on the other (side) the merger means facing new demands. Those are, for example: merger steering, development of new strategic objectives, organizational changes, IT system merger, leveling cultural and working process differences etc. As in any situation of change, merger process will generate additional stress, overtime, organizational chaos, ambiguity and anxiety (Gray; 2001, 104). Although we are witnessing different business takeovers on a daily basis (Reuters; 2009, PP) still we can find little

information about processes which are going on behind the scene. Also, taking into consideration that such projects have high failure rate (Schneider; 2003, 32) we found valuable to share our experience. In literature there are many suggestions how to organize and handle complex projects (Harrison and Lock; 2004, 70), and what approaches to take (Ashkenas and Francis; 2000, 110).

The article presents experience from the case of a 17 months long merger integration project which was realized between the Hypo Alpe-Adria-Bank d.d. from Zagreb (HAAB) and Slavenska banka d.d. Osijek (SBO), both from Croatia. In this paper activities which were realized prior to technical and legal merger are described. Post merger analysis and phases are not described at all. Our case can be seen as a specific one, since merger involved banks owned by the same owner and operating in the same country, Croatia, but in different regions so that there was no business overlapping.

2. MERGER REASONS AND PROJECT GOALS

There are numerous reasons for companies to merge (Schuler and Jackson; 2001, 240). Some of the most frequent include and are not limited to: horizontal mergers for market dominance and economies of scale; vertical mergers for channel control; hybrid mergers for risk spreading, cost cutting, synergies, defensive drivers; growth for world-class leadership and global reach; survival and critical mass; acquisition of cash, deferred taxes, and excess debt capacity; possibility to move quickly and inexpensively; to gain flexibility and increase leverage; to provide bigger asset base to leverage borrowing; to adopt potentially disruptive technologies; to increase financial gain and personal power; to gain a core competence to do more combinations; to obtain talent, knowledge, and technology. Depending on company profile and business environment in which company is operating afore mentioned reasons will be more or less visible driver for the merger.

In our case, HAAB and SBO were owned by the same owner and were operating in Croatia without business overlapping, so reasons for merger were: (i) to decrease overall cost with centralization of main activities; (ii) to consolidate talents, knowledge and technology which could be later used for market share increase.

Proper preparation with clear goals represent first phase in a project which will together with systematic managing lead to successful project end. Main goal in our case was clear and straightforward, yet a complex one: to perform legal and technical merger in first quarter of 2009. Sub-goals were as follows: (i) to build one strong

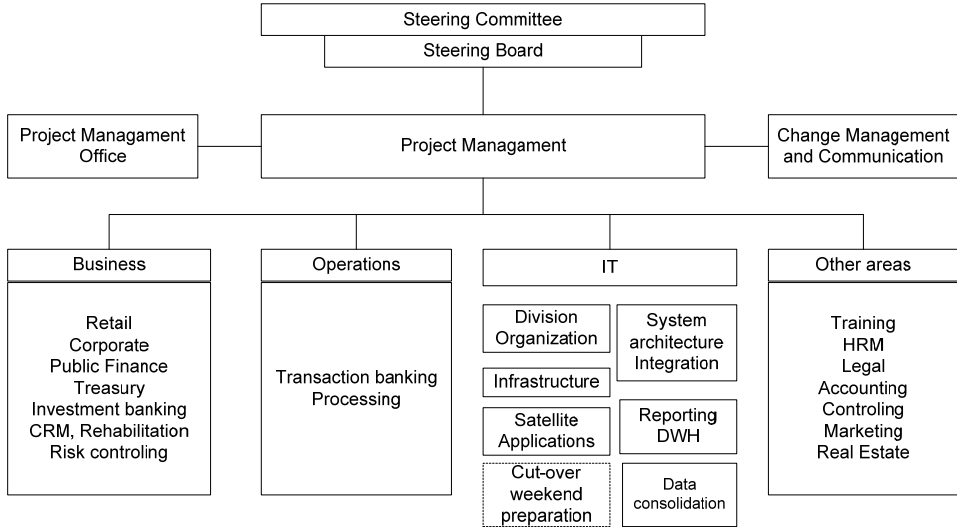
bank with a recognizable brand; (ii) to regain client trust; (iii) to increase market share; (iv) to achieve operational excellence and improve efficiency; (v) employees should be and are in the focus of all activities. It should be noted that achievement of sub-goals (i-iv) is actually visible in post-merger period and in that sense can be judged and evaluated afterwards. Sub-goal (v) was maintained during the whole project life cycle but additionally should be evaluated also during the post-merger period.

3. PROJECT ORGANIZATION

Every project organization must, in a way, follow specific company organization but also needs to be structured in a way which will enable achievement of project goals. Generally applicable model for organizing and managing merger projects does not exist, but anyhow project organization should advocate objectives such as: (i) project orientation to overall company goal, (ii) project efficiency (costs vs. benefits) and (iii) project flexibility (Meckl; 2004, 457). What needs to be done is to shape the structure, select employees and assign responsibilities. Project organization which was set up at the project beginning and was retained until project end is shown in Fig.1. It is a multi-group structure.

Steering committee consisted of members of top management (board members of both banks and the mother bank) plus external consultancy member. Project head was also included in the steering committee. Steering board consisted of members of top management of merger banks (HAAB and SBO). Project management consisted of project head and external consultancy member. Project head was in charge of all decisions and managing in general while external consultant provided project management “know-how” and support in terms of coordination.

Figure 1: Project organization



Source: Authors

Following the organizational structure of both banks, four main subprojects were identified: Business, Operations, IT and Other areas. Each subproject team was organized in relation to organizational segments and specific goals which had to be achieved during the project time frame. Specific situation was that for each subproject team double leader positions were identified – one person from HAAB and one person from SBO. A similar principle was established throughout project structure which seemed reasonable taking into consideration that banks, although similar by nature, were different. Business part consisted of segments/teams related to clients and they were responsible for creation of the new business strategy of the merged bank. Operations part was responsible for definition of advanced, market-oriented operational models for the merged bank. Other areas included segments which are typically support to bank’s core business. HRM was responsible for the new organizational set-up which will support the new strategy and operational model, legal division was mainly responsible for formal merger process, real estate division for new sitting arrangement, office equipment, etc. In general, subproject teams and their respective leaders were responsible for fulfillment of their tasks but also in charge of exchanging information with other subproject teams on both horizontal and vertical basis.

IT part was reflecting organization in terms of IT systems and was responsible for redesigning, upgrade and implementation of the target information system which is basically meaning of technical merger. By its size and mutual relations to other subprojects it was the most complex subproject.

As it can be seen from previous lines a complex project demands a complex structure which at the end put demands on human resources (Cartwright; 2005, 18). One part of the employees was exclusively assigned to the project and during the project they were not participating in line functions or regular daily jobs. Other group of employees was participating in both project and line functions. Such solution was implemented with project team leaders who stayed on their line function due to the organization hierarchy – they were necessary as decision makers (Davies; 2002, 189).

4. COMMUNICATION

In such a huge and demanding project communication, both vertical and horizontal, also represents one of key success factors. Communication process is a valuable way to retain and motivate employees but it also plays a critical role in the overall change process and complete merger (Schuler and Jackson; 2001, 242). Lack of communication can lead to confusion, increased uncertainty, low morale and decreased productivity. All these factors can, at the end, endanger the final project goal. When talking about communication we assumed: steering committees, different meetings, letters to employees, project PR, etc. Communication plan was set up at the project beginning and was strictly followed through the whole project life time.

4.1. Meeting structure

Our meeting structure was set up as presented on Figure 2. On different meetings different participants were presented where different topics were discussed and analyzed.

Figure 2: Meetings schedule

Week 1					Week 2				
Mon	Tue	Wed	Thu	Fri	Mon	Tue	Wed	Thu	Fri
Data cleansing 14:30-15:00		LIM 10:00-11:30		BIS 11:00-13:00	Data cleansing 14:30-15:00		PMI Jour Fix 10:00-11:30		BIS 11:00-13:00
PM Meeting 15:00-16:00					PM Meeting 15:00-16:00				

Source: Authors

PM meeting (Project Management) was operative project steering meeting based on subproject status reports where decisions about change requests, open issues and delays were discussed. On LIM (Local integration meeting) main topic was presentation of subproject status reports. Jour Fix was used for alignment between Business and IT subproject teams. BIS (Bank information system meeting) was operative IT subproject meeting where all IT subproject teams were presenting current status and related issues. On Data cleansing meeting status regarding data cleansing was presented and discussed. PM meeting and LIM were live meetings while Jour Fix, BIS and Data cleansing meetings were organized as videoconference.

Presented organization of meetings enabled clear and transparent communication on project operational level whose results at the end were visible through: concise and clear to-do lists for all team members; transparent issue and problem tracking/solving; straightforward information exchange, etc.

4.2. Letters to employees

Considering that all employees were somehow involved in the program, letters to employees were regularly sent on a monthly basis – overall 15 letters were sent during the 17 months long project time frame. Letters were sent by the chairmen of the management boards with reference to achieved results, main milestones reached and activities in the forthcoming period. Letters were maximum one A4 page long – they were used to motivate project participants, to strengthen team work and to show clear dedication of the management board towards the final goal. Letters were sent through e-mail and published on the company intranet.

4.3. External communication

Public relations are very important in banking business. Due to that fact, forthcoming changes were communicated and handled with great care. Regarding the changes in business later to be reflected on clients, each business division made an overview of changes to happen after the merger. For example, retail division made an overview of the changes in the tariff system, changes regarding the Bank in general etc. Such information was delivered to clients with usage of different communication channels (e-mail, regular mail, web page, newspapers).

Press conferences were organized with the management board and project leaders. Considering organizational changes, redundant employee program caused huge interest of the public since 250 employees were affected by the program. Through the whole project time frame 3 press conferences were held.

5. MOTIVATION

Human resources are one of the most important resources in merger projects (Schuler and Jackson; 2001, 243; Cartwright; 2005, 18), so proper employee motivation represents one of the keys for successful project finish. Motivation can be defined as employee characteristic to expand effort towards a particular set of behaviors (Tabassi and Bakar; 2009, 474). Yet in merger there is a need to balance between (i) retention of key employees and (ii) redundancy program (who stays and goes). Motivation should be carefully planned and properly executed. A perception of unfairness or inequality, in reward or other kind of treatment could have negative impact on performance and final goal (Gray; 2001, 105).

Typical situation in a merger, regarding human resources, demands that employees who are not project team members or associates take over huge amount of daily operations instead of employees involved in the project. On top of that/moreover, in our case there were employees who worked on both functions: as a project team member and also as a line manager/employee. In any of the mentioned cases work overload was much higher than 100%. An average rate in such cases was around 125% (i.e. since weekly workload is around 40 hours for 125% we are talking about 50 hours weekly which is equivalent of around 10 hours daily from Monday to Friday). As we stated earlier, the merger had an impact on organizational changes and some key project members and associates became redundant after program ended.

As a first step, key employee retention program was established. Each executive director nominated his/her employees and grouped them in three categories; A, B and C. Category A was comprised of employees whose leaving in the course of the project could endanger successful merger end. Mostly those were project team leaders but also employees with long experience within banks and those who had “know-how” about specific business processes. Category B included employees whose leaving in the course of the merger could endanger specific project team final results. Those were mainly business area experts and associates in projects teams. Within C category there were employees who took over regular, daily business from colleagues who were fully dedicated to the project and whose leaving could have an impact on regular daily business. Key employee retention program foresaw combination of different motivation factors i.e. keeping measures. Those measures included: financial stimulation (retention bonus), career development, selection of educational courses, financing of studies (Master, Doctoral, MBA), usage of incentives (Notebook, Mobile phone, Blackberry). In total 115 employees were included

in key employee retention program which represents 6.22% of the total number of employees in both companies.

Additional motivation was set up through a regular bonus system (Meckl; 2004, 460; Thamhain; 2004, 538) for the whole project. Since the duration of the project was fixed by a date for final merger weekend, bonus payout was related to big milestones within the project, mainly to implementation/upgrade of the source/target system. Milestones were set up as follows: (i) First milestone: implementation/upgrade of the source system; (ii) Second milestone: implementation/upgrade of the target system; (iii) Third milestone: successful merger weekend. It should be mentioned that the mentioned milestones were also related to organizational changes and were equally distributed within the project time frame, i.e. every 6 months.

Changes in the organization were also communicated and seen as a motivation factor since different positions within company were announced and vacant. Although positions were open for all employees, project members were encouraged to apply for positions in which their expertise and talent could further be used. Such an approach is highly related to company wish to consolidate talents and knowledge on all levels.

CONCLUSION AND DISCUSSION

The final success which was visible through successful legal and technical merger on the planned date can be identified through different practices which are in relation with literature (Tetenbaum; 1999, 23; Schuler and Jackson; 2001, 250; Vester; 2002, 40).

Project organization:

In any project, project organization should be carefully prepared and observed through perspective of: (i) project structure and leadership, (ii) well-thought out goals and objectives, (iii) planning

Project structure and leadership - every project organization must, in a way, follow specific company organization but also needs to be structured in a way which will enable achievement of project goals. Project leader must focus exclusively on the merger. He/She must understand company needs and be able to steer a complex project. During the whole project time frame he/she should be completely removed from the line function and fully dedicated to the project.

Well-thought out goals and objectives - clear goal and objectives must be set at the project beginning. All employees must be informed in a clear and transparent way about the final goal and objectives. Milestones and dates can be changed during the project time frame but the overall goal and objectives must remain unchanged until project end.

Planning - planning is considered a central element of modern project management. Although planning does not guarantee project success, lack of planning will probably guarantee failure (Taiwo at all; 1996, 92; Dvira at all; 2003, 93). It is very difficult or even impossible to know precisely at the initial planning stage, even with the help of external consultancy, which are the activities that need to be carried through the whole project time frame. Planning should be done at least on high level (major milestones and dates) and if possible with involvement of project teams. In such case detailed planning should be done on project team level and will reflect and provide realistic realization.

Communication:

Communication process is a valuable way to retain and motivate employees. Lack of communication will increase stress level and at the end rumors will start. In combination with complex project task, productivity and moral will be decreased. All these factors can, at the end, endanger final project goal. Communication principles should be set up at the project beginning and followed through the whole project time frame. Special attention should be paid, in internal communication, to employees who will become redundant after merger takes place. Also a company should address and communicate all relevant issues/changes to its clients.

Motivation:

Human resources are one of the most important resources in merger projects (Schuler and Jackson; 2001, 247; Cartwright; 2005, 27). Without proper motivation of employees on all levels (leaders, members, associates) and retention of key talents it would be impossible to finalize the project in given time frame and with final success. Different motivation factors can and should be used. Set up of key retention program can also be seen as motivation factor which will decrease/lower uncertainty which comes with a merger in terms of endangering stability and continuity in employees work life (Gallstedt; 2003, 451).

We can conclude that 17 months long merger project finished successfully. During the project we discovered many issues and problems which had been solved.

Our experience confirms the theory that it is all about people. That is the reason why one of the project subgoals named “Employees are in the focus of all activities” was set up. Proper project organization together with careful planning can and will prepare a company for demanding tasks. But at the end of the day employees are those who transform paper activities to practice. Merger projects are specific in sense that there is always a need to balance between retention of key employees and redundancy program (who stays and goes). Proper motivation and timely communication together with good organization can establish proper climate in which a project can be run without major obstacles.

REFERENCES

- Ashkenas, R.N. & Francis, S. (2000) Integration Managers: special leaders for special times, *Harvard Business Review* 78 (6), 108–116.
- Cartwright, S. (2005) Mergers and acquisitions — an update and appraisal. In: Hodgkinson, G.P., Ford, J.K. (Eds.), *The International Review of Industrial and Organizational Psychology*, John Wiley and Sons Ltd, 1–39.
- Davies, T.C. (2002) The “real” success factors on projects, *International Journal of Project Management* 20, 185–190
- Dvira, D., Razb, T., Shenharc A.J. (2003) An empirical analysis of the relationship between project planning and project success, *International Journal of Project Management*, 21, 89–95
- Gallstedt, M. (2003) Working conditions in projects: perceptions of stress and motivation among project team members and project managers, *International Journal of Project Management*, 21, 449–455
- Gray, R.J. (2001) Organisational climate and project success, *International Journal of Project Management* 19, 103–109
- Harrison, F. & Lock, D. (2004) *Advanced Project Management: A Structured Approach*, Gower Publishing Limited, England
- Meckl, R. (2004) Organising and leading M&A projects, *International Journal of Project Management* 22. 455–462
- Reuters, T. (2009) Thomson Reuters Releases Q2 2009 Global Investment Banking Reviews, http://thomsonreuters.com/content/press_room/financial/2009_07_02_Q2IB_reviews

Pristup (travanj, 2011).

Schukler, R. & Jackson, S. (2001) HR Issues and Activities in Mergers and Acquisition, *European Management Journal* Vol. 19, No. 3, 239–253

Schneider, W. (2003) Trouble at the top: a sign of deal disorder, *Mergers & Acquisitions: The Dealmaker's Journal* 38 (4), 30–33

Tabassi, A.A. & Bakar, A.A.A. (2009) Training, motivation, and performance: The case of human resource management in construction projects in Mashhad, Iran. *International Journal of Project Management* 27, 471–480

Taiwo K.A.; Akanbi C.T.; Ajibola O.O.; Andersen E.S. (1996) Warning: activity planning is hazardous to your project's health!, *International Journal of Project Management*. 14 (2), 89–94.

Tetenbaum, T.T. (1999) Beating the odds of merger and acquisition failure: seven key practices that improve the chance for expected integration and synergies. *Organizational Dynamics*, 22-36.

Thamhain, H.J. (2004) Linkages of project environment to performance: lessons for team leadership, *International Journal of Project Management*, 22, 533–544

Vester, J. (2002) Lessons learned about integrating acquisitions, *Technology Management* 45 (3), 33-41

THE ROLE OF MANAGEMENT IN FUNCTION OF THE SYSTEM OF PRIMARY EDUCATION IN BROD-POSAVINA COUNTY

Anica Vukašinić¹, Berislav Bolfek, Ph.D.²

¹Brodsko posavska county, Croatia, anica.vukasinovic@gmail.com

²Polytechnics of Slavonski Brod, Croatia, berislav.bolfek@vusb.hr

ABSTRACT

In terms of current changes and the increasing market globalization, Croatian education system needs to be modified and adjusted to the educational systems of developed countries whose economies are based on knowledge. It is necessary to strengthen the role of management in education and in the field of human resource development which are the basic prerequisite to better engage all available resources in achieving organizational objectives, increase organizational efficiency and competitive strength, and lower overall system cost. Education of the active population is an important component of quality “human capital” that decisively determines the direction and pace of national development.

JEL Classification: O15

Keywords: education system, management, human resources

1. PRELIMINARY CONSIDERATIONS

Management considerations of human resources have been intensively used in education. The awareness of achieving these national goals of education is growing because they cannot be realized without a care for those who should specify and achieve these goals in schools. It refers to teachers and professional school staff, and lately, to Principals. Among their management functions, we emphasize the importance of recognizing and exploiting the knowledge and skills of employees. In addition, the principals should be trained for leadership and guidance of professional development of the staff to accomplish the pedagogical process and share responsibility for achieved results. It indicates to two main groups of indicators of human resources in education, quantitative as well as qualitative, which complements each other.

We have analysed the primary schools in the Brod-Posavina County to show how reliable of a quantitative indicator human potential is considering its excellence and its actual relevance in the completion of the tasks of the school system and its institutions.

2. MANAGEMENT'S ROLE IN THE DEVELOPMENT OF THE PRIMARY SCHOOL SYSTEM ABROAD

By studying the way management contributes to the enhancement of the quality of work in schools a few tendencies come to light. With the introduction of management as a scientific discipline into the academic world demand for its study has grown. Management studies have become a meaningful component in universities. Many institutions have gained a solid reputation and its attendants are sought out by employers. It would be safe to say that the concept of management has become *lingua franca* in modern society (Engwall; 2007, 4-35).

Countries are unanimous in their evaluation of the importance of education for social and national prosperity and raises the question not only of how schools are managed but more importantly of the quality of management of national education, from larger sums of the education budget to the expertise of the staff that run and guide the school system.

Many countries are aware of the burden of past legacies and traditions in the school system that hinder real answers to new challenges. The solution is being sought out in the intensive qualification of school principals in the area of human potential and financial management.

Successful schools have a clear vision of themselves that is not only in the eye of the Principal but is shared by the whole faculty of teachers and broader staff (Staničić; 2006, 164-167). There is a noticeable resistance to change on school management level and on the level of educational institutions. Motivating staff to change their views and practice is one of the most important skills needed for a principal. In many countries the most successful employees receive a financial stimulus and are publically recognised for the contribution.

These initiatives have had an impact on the quality of program planning for preparing principals to adapt to their modern roles. (e.g. HEADLAMP). A National College of Management/Leadership in Education has been established in Great Britain (NCSL). National standards for principals have been introduced as well as

institutions that licenses principals to run schools (NPQH). Many reputable universities in England have established post-graduate studies in school management.

The implementation of management in English primary schools since the year 2000, has made itself obvious in the following aspects (Brown; 2005, 468-481):

- the very meaning and purpose of introducing management in to primary schools,
- in the education and training for managing,
- the formation and content of management goals,
- in the measures of implementation from the teachers and principals,
- in the influence of management on the vocational training of teachers,
- in the adequacy and possibility of evaluation.

Many countries put a great emphasis on the the development of human potential through various forms of vocational training of employees. Special attention is given to qualifying school Principals. Some countries have introduced laws prescribing professional standards for principals. With the acceptance of the Lisbon Treaty of 2000, Europe began the creation of the most competitive economies based on knowledge in the world. This strategic goal is possible through life-long learning as a foundation. The main goal is advancing the quality of human capital.

3. MANAGEMENT'S ROLE IN THE DEVELOPMENT OF THE PRIMARY SCHOOL SYSTEM IN CROATIA

For the advancement of quality of human capital on a national level it is necessary to simultaneously achieve to strategic goals:

- raise the average quality of educational achievements of students and the active population.
- a higher average of educational achievement needs to be reached without creating a void based on social or geographical differences between the students.

The development goals in education in the Republic of Croatia are:

1. Enhancing the quality and efficiency of education (develop teaching and learning, develop a link between education and the professional world, developing educational opportunities for adults, enhancing educational opportunities and an atmosphere of equal opportunity).

2. Encouragement of permanent professional development of teachers and other employess in education.
3. Developing a management strategy for the educational system and to maximize it's efficiency (solidify the management system, increase financial funds for the educational system, measures to enhance educational monitoring).
4. Education for social connection (cohesion), economic growth and development (develop a system external evaluation of education).

Developed countries in Europe and elsewhere have socially and economically directed their efforts to creating a society of knowledge where knowledge is the base human capital and a foundation for the development of a modern society. There is an expressed need for more investment in education, but also in education strategies such as: determining goals and priorities, enhancing system management as a whole, an alternate allocation of funds for certain purposes as well as a selecting a method in which economic and social conditions this can be acheived.

The Principal has a major role in the implementation of change. Principals successfully introduce change in their schools by gradually introducing team work and creating a culture of support among the teachers. The acceptance of this culture means this can be achieved (Höög & Olofsson; 2005, 595-606).

We cannot ignore that some analysis have been made in Croatia, and they slowly started to make changes in the realization of the educational system. Within the Development Plan of Education (2005-2010) Croatia has undertaken several important steps to improve the quality and effectiveness of its educational system to establish comprehensive national standards and achieve better coordination between the education system and market needs. Croatian National Educational Standard (CNES) was developed in 2004. CNES ideas were good, but the results of the OECD's PISA survey, conducted among half a million students from 74 countries of the world, completely shattered the myth of Croatia as a country of knowledge. The results were well below the average of member countries, which points to the need for necessary changes in the educational system as well as changes in work organization of each school. Changes are possible if we choose the highest quality human resources to enable them to implement changes, but necessary resources, support and further knowledge are needed.

4. RESULTS OF HUMAN POTENTIAL RESEARCH IN THE SCHOOL SYSTEM IN BROD-POSAVINA COUNTY

Research of human potential was carried out in February 2012 in all primary schools in Brod-Posavina County that were founded by the County (23 primary schools) and the City of Slavonski Brod (10 primary schools). Data collection for the research was successful since all the schools that were invited to partake in the research did so. The first table shows the results of the Swot analysis of the educational system in the area of Brod-Posavina County and are compared to the the results found on a national level (Republic of Croatia).

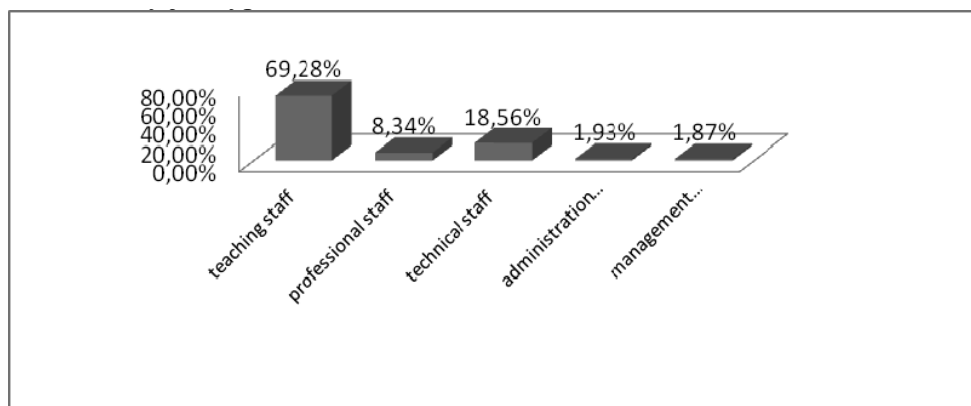
REPUBLIC OF CROATIA	BROD-POSAVINA COUNTY
STRENGTHS	
a right and an obligation to continuously qualification option for teachers to be promoted to mentors, advisors and professional teacher mentors and professional teacher advisors consolidation of the management organisational culture financial support from the EU Increase in demand for top quality experts strong and cheap social software infrastructure	projects that support the process of continuous education permanent education of young people stimulation of research acceptance and execution of EU standards in the educational process existing educational system
WEAKNESSES	
too much emphasis on formal education, ignoring skills and competences mostly declarative support from the government inadequate IT equipment in schools insufficient number of educated experts no recognition of aquired pedagogic competency untuned network of institutions that could offer a complete and standardized pedagogic-psychological education	lack of expertise in teaching program content does not engage the students creative competence inadequate professional qualification of teaching and professtional staff out of synce infrastructure with the needs of modern education abandoned life-long learning
OPPORTUNITIES	
building a Croatian educational "brand" strategic orientation towards co- ordinatitng change with the help of international support consolidation of professional support institutions creation of a modern and flexible lesson plan and program inclusion of local community in education education as an important export product technological integration in the classroom	modernization of infrastructure through public-private partnerships establishment of centres for technological development and application of acquired knowledge conducting of EU policy in education national and international support for the creation of better prerequisites for the development of an educational system

THREATS	
inadequate training of human resources for the initiatives and changes - tolerance of teachers and principals' insufficient education in educational institutions - inadequate implementation of education - tolerance of insufficiently defined mission, vision and strategy - biased decisions making based on inadequate researches	slow development of counties brain drain reduced number of students in primary schools unacceptance of life long learning resistance towards introduction of new skills and technology international financing programs are mostly unknown

Source: authors

The following results present the representation of employees in the primary schools of Brod-Posavina County by groups and types of jobs. The results are shown in graph 1.

Graph 1: Representation of employees in primary schools in Brod-Posavina County by job types



Source: author calculations

Primary schools in the Brod-Posavina area have in total 1810 employees, 1254 of which are teaching staff, 151 are expert staff, 336 are technical, 34 work in accounting and 35 employees fill administrative roles. The aforementioned schools have in total 14.752 students from 1st to 8th grade and are divided up in to 771 classes.

The research also yielded data on professional training of employees in schools in the Brod-Posavina County in 2011, the results of which are shown in table 2.

Table 2: Professional training of primary school employees in the Brod-Posavina County in 2011

PROFESSIONAL TRAINING AND QUALIFICATION OF EMPLOYEES IN 2011				
participants	Didn't take part	Took part once	Took part more than once	Took part in all the programs
Teaching staff	156	70	924	416
Professional staff	55	3	61	32
Technical staff	265	46	14	11
Accounting staff	4	7	15	8
Administrative staff	9	4	14	8

source: author calculations

The method and procedure of professional training and qualification of teachers is issued by the Minister through various programs approved by the Ministry of Science, Education and Sports. Professional training and qualification includes individually organised training in his or her science in fields that are relevant to an efficient and quality educational experience in schools.

Some facts:

- 12.44% of the teaching staff did not partake in any professional training program in their schools, 5.58% took part once, 73% took part more than once, 33% of employees were involved in all forms of professional training organised in their schools in 2011,
- 36.42% of professional staff was not involved in any professional training program in their schools, 1.98% took part once, 40.39% took part more than once, 21.19% of employees were involved in all forms of professional training organised in their schools in 2011,
- 78.86% of the technical staff did not partake in any vocational training program in their schools 13.69% took part once, 4.16% % took part more than once, 3.27% of employees were involved in all forms of vocational professional training organised in their schools in 2011,
- 11.76% of the accounting staff did not partake in any vocational training program in their schools, 20.58% took part once, 44.11% took part more than once and 23.52% took part in all forms of vocational training.

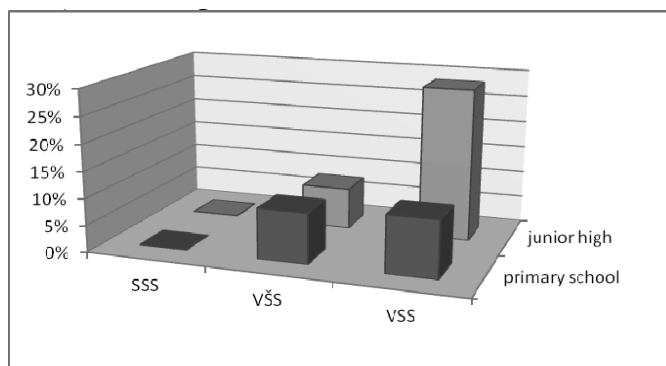
- 25.71% of the administrative staff did not partake in any vocational training program in their schools, 40% took part more than once, 22.85% took part in all forms of vocational training.

The research also included the use of Information and Communication Technology (ICT) in the classrooms of primary schools in Brod-Posavina County in 2011 and the results can be seen in graph 2.

Research shows that primary school teachers who have the secondary school education in Brod-Posavina County do not use ICT in the classroom, 9.4% of teachers with vocational college degrees that work in primary grade school and 7.75% of teachers in junior high use ICT. Teachers with a university degree use ICT in the classroom, 10.62% of them use it in primary and 28.46% of them use it in junior high which is not enough and indicates a need for additional IT training of the teacher staff. Professional staff also do not use ICT enough with only 31.78% of employees with vocational college degree. The results show that ICT needs to be used in a more widespread manner in primary schools in Brod-Posavina County.

Graph 2: Use of information communicational technology in the classroom in primary schools in Brod-Posavina County

a) Teaching staff



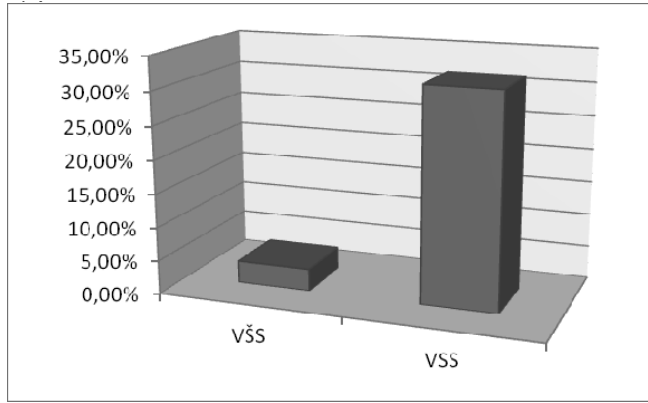
Source: author calculations

SSS=Secondary school education

VŠS=Vocational College Degree

VSS=University degree

b) professional services



Source: author calculations

Professional training of primary school principals in Brod-Posavina County in 2011 was also a subject of our research and here are the results in table 3.

Table 3: Professional training of primary school principals in Brod-Posavina County in 2011

PROFESSIONAL TRAINING OF PRINCIPALS in 2011																	
Number of principals	Expertise		No. of mandates							licenses	Professional training in 2011 (principal attendance)						
	Vocational degree	University degree	1	2	3	4	5	6	MSES		BPC	school	CAOSP	ETTA	personal	other	
33	12	21	12	6	5	3	5	2	0	53	126	112	41	25	14	8	

Source: author calculations

According to the law on education in primary and high schools, the Principal is the director responsible for the legitimacy and professional function of a school. Licenses are issued which are a testament to the professional competence of the teach-

ers, professional staff and principal. Not one principal in Brod-Posavina County has this license eventhough many principals have served more than 2 terms. There are 36.36% of principals have a vocational degree while 63.63% have a university degree.

Professional training is a right and obligation guaranteed by law and principals have used this right on average 1.6 times. They attended meetings and workshops organised in various schools on average 3.8 times a year. They attended seminars organised by the Croatian Association of Primary Schools on average 0.75 times, attended seminars organised by the Association of Principals 1.24 times and attended private professional training 0.42 times. Eventhough it is by law obligatory to continually attend professional training, a professional qualification for teachers and non-teaching staff, as we can see in the example of the County of Brod-Posavina, attendance is nowhere near satisfactory to advance the quality of the educational process, optimal functioning of the school system and the completion of its goals.

5. CONCLUSION

The Swot analysis has exposed many organisational positives and flaws on the local and country level. Through analysis of existing resources and opportunities that were identified through environmental analysis and are essential for defining a future strategy. Qualitative and quantitative research into the investment in human potential has given discouraging results that show a lack of investment in the area of their planning, enhancement and development.

Quality people are needed and they need to be trained, motivated and professionally developed so they can contribute to the quality of acheiving educational goals. These are the goals of management in education, especially school management and its components: organisation, direction and development of the school system.

The research shows that management in schools should enable efficiency and enhancement of the the educational system through additional education, professional training and ICT training of all staff who are an invaluable capital that increases the value of the organisation of knowledge. This why the research of human potential in schools in the Brod-Posavina County raises many questions regarding the functioning of the school system which can only be answered by systematic research of even more complex factors.

LITERATURE

Brown, A. (2005). Implementing performance management in England, s primary schools, Wolson College, University of Cambridge, Cambridge, UK, *International Journal of Productivity and Performance Management* Vol. 54 No.5/6, pp 468-481 ISSN 1741-0401

Engwall, L. (2007.). The anatomy of management education, Department of Business Studies, Uppsala University, Sweden, *Scandinavian Journal of Management* 23 4-35 ISSN 0956-5221.

Höög, J., Johansson, O. and Olofsson, A. (2005). Successful principalship: the Swedish case, Department of Political Science, Centre for Principal for Development, Umeå University, Umeå, Sweden, *Journal of Educational Administration*, Vol.43 No.6 pp. 595-606 ISSN 0957-8234

Ministarstvo znanosti, obrazovanja i športa, (2005). Plan razvoja sustava odgoja i obrazovanja 2005.-2010. Zagreb, str. 11-22.

Staničić, S. (2006). Profesionalizacija ravnatelja škole: pristup i ostvarenja, *Školski priručnik 2006./2007.*, Znamen, Zagreb, str.164-167 ISBN 953-6008-29-7

Strugar, V. (2006). Europski obrazovni ciljevi i hrvatsko školstvo 1990.-2005.: postignuća, promašaji i perspektive, u knjizi: Vrgoč, H. (ured.): *Europski izazov hrvatskom školstvu*, Hrvatski-pedagoško-književni zbor, Zagreb ISBN 953-6134-61-6

Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi, *Narodne novine* 87/2008.

STRATEGIC ANALYSIS OF KEY ISSUES IN INFORMATION SYSTEMS MANAGEMENT IN CROATIAN COMPANIES

Slavomir Vukmirović, Ph.D.¹, Marko Čičin-Šain, Ph.D.²

¹University of Rijeka Economics Faculty, Croatia, vukmirovics@gmail.com

²Primorska Banka d.d., Rijeka, Croatia

ABSTRACT

This paper describes research on key issues affecting the information systems management in the Croatian companies. The research concept was based on a study of information systems development in the U.S. companies conducted by the *Management Information Systems Research Centre* (MISRC) at the University of Minnesota and Society for Information Management (SIM).

With the aid of survey questionnaires, the research attempts to identify the key issues of information systems management in Croatia, rank the issues and compare them with the research results in the most developed countries in the European Union and United States. The data collected from 56 medium sized and large companies in Croatia during the 2010 and 2011 year.

By comparing the first ten issues in Croatia and EU, similarities and differences were identified and the results revealed that six of total ten issues coincided with each other. Through a comparative analysis of the results of research conducted in Croatia with the research results in the European Union and United States, we were able to investigate to what extent do priorities accorded to informatization differ, which are the fields where the Croatian companies have reached the informatization level of the most developed countries and where are the differences, and their extent.

Identification and comparative analysis of the key issues in the information systems management enable us to identify guidelines and recommended practices for development of the business information system. In this context, the major business trends were studied as well as major trends in the development of information technology and business support software particularly from the perspective of in-

formatization of top to middle-level managers. SWOT analysis was carried out on the basis of a comparative analysis of the characteristics of business informatization in Croatia, EU and USA.

JEL Classification: L12, L15

Keywords: Information systems management, strategic analysis, management, key issues, research, comparative analysis

1. INTRODUCTION

Key issues which affect the information systems management were defined based on the study of information systems development in the U.S. companies conducted by the *Management Information Systems Research Centre* (MISRC) at the University of Minnesota and Society for Information Management (SIM) (Brancheau, J.C. et al., 1996).

By identifying the key issues in the development of information technology, a methodological frame of the strategic development of information systems can be built. Comparative analysis of the key issues made on the basis of the periods of development of the information systems enables us to identify the main trends of development of the information technology in the context of possibilities of its implementation in business and offers valuable data and information to define guidelines for strategic development of the business information systems (Luftman, J., 2005.), (Brancheau, J.C. et al., 1996).

Continuous research within the defined time periods allows for comparative analysis of the issues that impact the information systems management, revealing trends and offering information relevant to forecasting the development of informatization. In other words, comparative analysis of the results of researches by specific time period offers a mean of identifying issues, which are growing in relevance with the trend of continuous growth, or show a decreasing trend or have varying trends where trend of changes and return to previous position is recorded (Vukmirović, S. et al., 2009.), (Brancheau, J.C. et al., 1996).

2. KEY ISSUES IN INFORMATION SYSTEMS MANAGEMENT IN EU AND USA

The importance of the impact of IT on organizations around the world, especially in light of the global economic crisis, has amplified the need to provide better understanding of the specific geografic similarities and differences of important IT

managerial and technical trends Going beyond identifying economic implications on on decisions pertaining to IT is the need to understand the considerations for leveraging the impact of transformal new technologies, especially in light of development and usage in globally-linked environment (Luftman, J. et. al., 2012).

By comparing Croatia to Europe and United States (U.S.), this paper presents the important information management and technology trends (e.g., management concerns, emerging technologies, budgets/spending, organizational considerations) necessary to prepare IT leaders for the challenges that await them .The top 10 management concerns reported by the EU and U.S. respondents for 2011 are shown in Table 1, together with the comparative rankings in 2010.

Table 1. Top IT management concerns in EU and USA

Cimbenik	EU 2011	EU 2010	USA 2011	USA 2010
Business agility & speed to market	1	3	2	2
IT and business alignment	1	4	1	3
Business productivity and cost reduction	3	1	4	1
IT reliability end efficiency	4	6	6	3
Business process management/reengineering	5	2	3	3
IT cost reduction	6	8	10	8
IT strategic planning	7	7	5	6
Security and privacy	8	15	8	9
Change management	9	5	12	12
Enterprise architecture/infrastructure capability	10	10	7	13

Source: Luftman, J., Derksen, B., European Key IT and Management Issues, Trend for 2012, CIO-net, Mechelen – Belgium, www.cionet.com

The IT cost reduction, and the importance of improving business productivity is in line with the that the current trend seems to be unique in this recession (instead of simply cutting IT budgets, IT leaders seem to be responding to this recession by focusing on IT as an enabler/driver of business productivity for the rest of the business (Luftman, J. et al., 2010). Even though data for individual countries are not reported in this paper, it is interesting to note that this trend is present in all geographies. Within Europe business productivity and cost reduction are ranked second but IT cost reduction is also among the top 5 management concerns. Having both IT cost reduction and business productivity & cost reduction within the top 5 management concern might create if not managed effectively.

Today's faster business pace and improving economy demand IT organizations to respond quickly and effectively. Activities that used to be measured in years are now measured in months or even weeks. As this high ranking of speed and agility attests, being able to "sense and respond" has become even more critical. Both the European and U.S. results demonstrate this well because the past couple of years business agility and speed to market has moved up from the mid-teens to the number 1 European management concern (Luftman, J. et al., 2012).

3. Key Issues in Information Systems Management in Croatia

With the aid of survey questionnaires, the research attempts to identify the key issues of information systems management in Croatia, rank the issues and compare them with the research results in the most developed countries in the European Union and United States. The data collected from 32 medium sized and large companies in Croatia during the 2011 year. The following table shows the top ten issues which affect the information systems management in Croatia.

Table 2. Top IT management concerns in EU and USA

RB_C	RB_EU	Naziv	Ocjena
1	3	Business productivity and cost reduction	9,0
2	8	Security and privacy	8,8
2	N	Quality of products (services)	8,8
4	2	IT and business alignment	8,7
5	4	IT reliability and efficiency	8,6
6	6	IT cost reduction	8,4
6	N	Alignment with Government regulations	8,4
8	N	Using Information systems for Competitive Advantage	8,2
10	1	Business agility & speed to market	7,9
10	N	Human Resources in Information system	7,9
10	5	Business process management/reengineering	7,9

Source: Authors

The table 2 compares the results of research conducted in Croatia compares with the research results in the European Union. The comparison reveals that seven of the top ten issues coincide with each other: Business agility & speed to market, IT and business alignment, Business productivity and cost reduction, IT reliability end ef-

iciency, Business process management/reengineering, IT cost reduction and Security and privacy. The table also reveals the four most corresponding issues: Business agility & speed to market, IT and business alignment, Business productivity and cost reduction, IT reliability and efficiency. A high level of correlation or feedback between the issues must be pointed out, particularly significant correlation noted between Business productivity and cost reduction and IT and business alignment.

Managers become aware that an IT organization is not a separate and disconnected process from other business activities in a company. A successful informatization of business systems can only be achieved by integrating IT investment in a company's development budget and reaching a high level of information and close cooperation in realization of projects. In this way, management ideas and company goals such as cost optimization, productivity growth or business process improvement shall be easier to understand and communicate. Practice reveals that without consolidating and aligning IT solutions and implementing innovations, cost-cutting measures are not enough to solve long-term business problems. In this context, correlation between business productivity and cost reduction has been recognized as an important asset (Evello, 2012).

Managers have realized that more savings can be made by developing information systems that are based on modern technologies instead of reducing investment in the informatization process. In other words, employees spend one quarter of their time to search for data. More than 40 percent of people use incorrect data when making decisions resulting in consequences that ultimately require rework actions. Organization of information in all their various types, building information context and understanding information as continuous development is the key to successfully move from a large quantity of data towards smarter data. The economic crisis pushes companies to increase productivity. Modern information technology is a tool for a smarter business as compared to the previous several years or even last year and can significantly increase productivity and reduce costs (IBM, 2010).

IT and business alignment brings new challenges for any organization and imposes imperatives both for business managers and IT managers and directors, or system designers. Vendors and implementers of such solutions are also facing great challenges and high demands. IT managers must recognize and evaluate business effects for every single solution or improvement they propose. They are oriented and focused on users of their services or company's end users. This requires a lot of preparatory work such as continuous information systems analysis, strategic plan-

ning and improvements, understanding company's business process, documentation and cost-effectiveness and feasibility studies in accordance with the world-recognized project management methodology (Evello, 2012).

Business agility is the ability of a business to adapt rapidly and cost efficiently in response to changes in the business environment. Comparative analysis shows that Business agility and speed is ranked ninth in Croatia and reveals a significant difference in comparison to the results of research in EU where Business agility and speed is the highest ranked. On the other hand, being ranked among the top ten means that Croatian managers are aware of the importance and necessity to achieving business agility and speed. An investment of 2.6 million Croatian Kuna in the business process platform made by Business Innovation Center of Croatia (BICRO) to help companies develop business agility is a good example. The Business agility platform project is based on business process modelling and platforms (Bicro, 2010).

An example of a successful development of the informatization in achieving business agility and speed is the company Podravka d.d. . By virtualization of infrastructure through the Hyper-V solution, the time needed for ordering and implementing physical servers and delivery of applications has been reduced from four weeks to four hours. Such a quick response time is essential to adapt rapidly to regulatory and fiscal changes that regularly occur in Podravka's associated companies in 19 countries.

The table also shows that Alignment with Government regulations is highly ranked. The intensification of the process of alignment with Government regulations in EU brings higher demands for business information systems, particularly from the perspective of utilisation of modern technology and business agility. On the path to EU membership existing laws and regulations need to be aligned requiring frequent changes in current business practices. Information systems will need to have more flexible reporting solutions in order to adapt rapidly to frequent changes and modifications as imposed by regulatory bodies.

4. KEY APPLICATIONS AND TECHNOLOGIES IN CROATIAN COMPANIES

The objective is importance and rank of applications and technology developments in Croatian companies. The following table describes key applications and technologies. The research conducted on a sample of 56 companies during the 2010 and 2011 year. The table 3 shows 15 key applications and technologies in Croatia according to the research

Table 3: Key Applications and Technologies

RBC	RBE	RBUS	Naziv	Ocjena
1	N	8	Security and protection of information system	4,5
2	N	N	Specialized and assign applications	4,3
3	N	13	Microsoft upgrade	4
4	1	1	Business intelligence	3,9
5	5	9	Mobile and wireless applications	3,7
6	N	5	Business Continuity	3,7
7	2	4	Enterprise resource planning (ERP)	3,5
8	3	9	Customer relationship management (CRM)	3,5
9	N	N	Dana warehouses, OLAP	3,5
10	N	14	Web 2.0	3,5
11	N	N	Web applications	3,4
12	3	7	Collaborative and workflow tools	3,2
13	5	12	Business process management systems and reengineering	3,1
14	N	9	Software as a service (SaaS)	3
15	N	5	Cloud computing	2,3

Source: Authors

The table 3 shows 15 key applications and technologies in Croatia according to the latest research conducted in 2010 and 2011. The EU column shows 5 key applications in the European Union (Luftman, J. et al., 2012), while the USA column contains 10 key applications in the United States (Luftman, J., et al. 2010).

The research conducted on a sample of 56 companies reveals that the highest ranked in Croatia is Security and privacy. This indicates a great need for information systems reliability and importance of information systems for internal and external users.

Comparative analysis reveals that Business intelligence is the first ranked issue in EU and USA, while it has been ranked among the first five in Croatia. Mobile computing has also been ranked among the first five issues in Croatia, while Human Resources in Information system and Customer relationship management have been ranked among the top ten. Business continuity management has the same ranking in Croatia and USA. Online cooperation tools and Business process

reengineering have been ranked among the first five issues in EU, while they have got lower rankings in Croatia and USA.

New software and business process virtualization solutions (Software as a service and Cloud computing) have the lowest rankings. It is important to note that Software as a service comes close to the other issues from the aspect of its evaluation mark, while Cloud computing falls significantly behind. The US scale shows that Cloud computing comes between the first five issues, while Software as a service is ranked ninth. SaaS is the most applied level so far, which uses finished software solutions such as Email Apps. Business as a service (BaaS) offers fully comprehensive solutions for business process and is the highest level in cloud computing. New virtualization solutions, Software as a service and Cloud computing have stood out as key issues in achieving business productivity and agility and reducing costs.

According to the research results derived from EU and USA, Business intelligence is the most important application and technology. Simply defined, Business intelligence is the process of collecting available internal and external relevant information and their conversion into useful information that can help business users in decision making. Business intelligence (BI) is a set of concepts and methods to gather, analyze and distribute information by use of various software tools. In the Croatian language, business intelligence may also mean ability of a business to understand and adapt rapidly to new business circumstances (Wikipedia, 2012). Interactivity and adaptivity are the most important characteristics of Business intelligence as a strategic tool that plays a key role in business informatization. Business intelligence focuses on the particular field of data processing and consolidation to retrieve information for decision making.

5. INFORMATION SYSTEMS MANAGEMENT IN CROATIAN COMPANIES THROUGH SWOT ANALYSIS

The output of the comparative analysis of the rankings of issues affecting the information systems management in companies in Croatia, EU and USA, enabled us to investigate a strategic approach to the information systems development in Croatian companies through a SWOT analysis. The SWOT analysis is used for the assessment of a company's strengths and weaknesses, opportunities that can arise as well as possible threats that it faces (Zver et al., 2003). The SWOT analysis of the information systems management in Croatia was evaluated to identify strengths, weaknesses, opportunities and threats faced by companies in Croatia in a process

of informatization of businesses. It is the purpose of the SWOT analysis to define guidelines and recommended practices aimed at implementing a successful and effective process of informatization of businesses in Croatia and reaching European quality standards and effectiveness within the shortest possible period.

The strengths, weaknesses, opportunities and threats have been defined based on starting positions for the informatization development and E-business level of Croatian companies. Through a comparative analysis of the rankings of issues which affect the information systems management, as well as applications and technologies implemented in Croatia, EU and USA, it can be concluded that Croatian companies fall significantly behind the most developed countries in EU. On the other hand, it is noticeable that there is a great potential for Croatian companies in moving effectively and relatively quickly to higher levels of development of the process of informatization of businesses aimed at reaching EU and USA quality standards and effectiveness.

The following are strengths, weaknesses, opportunities and threats for Croatian companies evaluated through a simple SWOT analysis which was carried out on the basis of a comparative analysis of the characteristics of business informatization in Croatia, EU and USA.

Strengths:

- Developed computer and telecommunications infrastructure (Croatia is above EU average when it comes to high-speed Internet connections in companies),
- Managers have become aware that investment in informatization is not a cost and increasingly believe that information systems development can be a mean to reduce business costs and create additional value,
- Good cooperation with leading international IT companies in business informatization and development of integrated, overall business solutions,
- Compared to previous researches, it is noted that differences in informatization development between Croatia and EU have been decreased, particularly when speaking of quality standards, cross-organizational interactions, business intelligence etc,
- Croatia is highly ranked in World Bank report as the leading transition country in terms of investment in ICT sector.

Weaknesses:

- Lack of efficient, world's leading managers needed to create a planned and systematically shaped business informatization vision and strategy and a coordinated approach to the process of informatization of businesses in Croatia aimed at interacting in cross-organizational processes,
- There is still a strong tendency for companies to purchase custom software tailored according to requirements of in-house IT departments, which decreases demand for software packages,
- A limited number of domestic companies capable of developing more demanding software products,
- A small annual production of top experts for ICT activities,
- Low presence of domestic IT companies in the development of informatization of businesses,
- Prevailing supremacy of large international IT companies where business practices are often adjusted to new information systems without taking into consideration existing processes that create additional value and competitive advantage.

Opportunities:

- Growing and synergic bonding of hardware and software resources and human resources in Croatian IT companies based on models of successful IT corporations and companies in developed countries,
- Intensification of alignment to Government regulations in EU brings high quality standards and complex demands to business information systems imposing intensive development of the informatization both at operative and strategic level,
- Building a powerful ICT sector which will be competitive and capable of entering into partnership with developed international IT companies in the process of informatization of businesses and their cross-organizational interactions,
- Positive orientation that fosters openness of EU to invest in Croatia, particularly ICT sector and informatization development in Croatian companies,
- Insufficiently developed regions of Middle and East Europe with increasing needs for information and communication technologies, which offers export opportunities.

Threats:

- Lack of understanding of the importance of information and communication technology due to lack of knowledge,
- Large international IT corporations have control over development of business information systems, particularly in large companies,
- Insufficient digital literacy of decision makers, and social problems deriving from old fashioned attitude,
- Wide-spread tendency to purchase imported packaged software products as an illusion that domestic solutions are incapable,
- Lack of awareness of need for motivating and educating top intelligent human resources capable of thinking abstractly, in a visionary manner in developing computer programs and creating software products and services,
- Lack of vision and support for investing in informatization aimed at creating innovative solutions.

6. CONCLUSION

A successful strategic management of the information systems can only be achieved through a dynamic development of the process of informatization, which will enable agility and speed to changes in business environment as it is evident from the scale where Business agility and speed is the highest ranked. Through a comparative analysis of the results of research conducted in Croatia with the research results in the European Union and United States, we were able to investigate to what extent do priorities accorded to informatization differ, which are the fields where the Croatian companies have reached the informatization level of the most developed countries and where are the differences, and their extent. The research reveals that Croatian companies are focused on Business productivity and cost reduction, Security and privacy, Quality of products and services, IT and business alignment and IT reliability and efficiency. Business agility and speed and Business process management and reengineering are the segments where Croatian companies fall behind.

Based on the comparative analysis of the issues affecting the information systems management in Croatia, EU and USA ranked on a scale from one to ten, a SWOT analysis was carried out from the perspective of strategic development of the process of informatization in Croatian companies. By comparing the characteristics of informatization of business systems in Croatia, EU and USA through a SWOT

analysis, we were enabled to systematize strengths, weaknesses, opportunities and threats, which can help in defining guidelines and building a methodological frame of an effective and successful process of informatization in Croatian companies aimed at reaching European quality standards within the shortest possible period.

REFERENCES

Bicro, poslovno – inovacijski centar Hrvatske, Bicro ulaže 2,6 milijuna kuna u razvoj platforme za poslovnu agilnost, 2010. www.bicro.hr (12.03.2012)

Brancheau, J.C., Janz, B.D., Wetherbe, J.C. (1996). Key Issues in Information Systems Management: A Shift Toward Technology Infrastructure, *MIS Quarterly*, 20 (2), MN, USA.

Evello d.o.o, IT consulting & business services, Na koji način uskladiti IT i poslovanje? <http://www.evello.hr/default.aspx?id=55> (20.03.2012)

IBM Forum 2010 Agenda, IBM Forum, Split, 2010, Otkrijte pametna rješenja za kreativni svijet, <http://www-05.ibm.com/hr/forum/agenda.html#anchor1> (10.03.2012)

Luftman, J., Key Issues For It Executives 2004, Luftman, J. (2005). Key issues for IT executives 2004. *MIS Quarterly Executive*, 4(2), 269–285

Luftman, J., Ben-Zvi, T., Key Issues for IT Executives 2010: Judicious IT Investments Continue Post-Recession. *MIS Quarterly Executive* 9(4): (2010)

Luftman, J., Derksen, B., European Key IT and Management Issues, Trend for 2012, CIONet, Mechelen – Belgium, www.cionet.com (20.03.2012)

Vukmirović, S., Čapko, Z., Informacijski sustavi u menadžerskom odlučivanju, Ekonomski fakultet Sveučilišta u Rijeci, Rijeka, 2009.

Zver, B., Topolovec, B., Kozina, M., Strateško planiranje automatizacije uredskog poslovanja, Informacijske i komunikacijske tehnologije u uredskom poslovanju, IV. međunarodni simpozij, Zbornik sažetaka, Fakultet organizacije i informatike, Varaždin, 1993., str. 33-35.

Wikipedija, Poslovna inteligencija, http://hr.wikipedia.org/wiki/Poslovna_inteligencija (12.03.2012)

RISIKOMANAGEMENT

Oberst Wolfgang Gabrutsch, MBA
Prof. Dr. Eidenmueller

ABSTRACT

As the increasing dynamics of the environment presents high challenges to the management, a consistent further development of tools and systems for controlling, as well as of business planning is indispensable. In order to defend and to enhance the competitiveness of businesses and to establish a sound basis for business planning, devices which render evaluation as well as the optimal use of risks and opportunities possible are required.¹

It is not only legislature which makes proactive security management mandatory, but the tendency to proactive security management can also be observed in the private sector. A growing number of businesses implements systems for planning management and risk management in order to calculate the company's risks or the risks of the corporate environment.

JEL Classification: JEL, M19

Keywords: business planning, management

EINLEITUNG

„Es kommt nicht darauf an, die Zukunft zu wissen, sondern auf die Zukunft vorbereitet zu sein.“ (Perikles, ca. 490-429 v. Chr.)

Schon in der Umgangssprache finden sich vielfältige Bedeutungen für den Begriff „Risiko“. Auch in der betriebswirtschaftlichen Literatur gibt es eine Vielzahl unterschiedlicher Definitionen. Die vorhandenen Risikodefinitionen lassen sich bspw. in drei Gruppen einteilen, wobei eine Unterscheidung nach Ursache und Wirkung des Risikos vorgenommen wird:

¹ Cf. (Gleißner, 2003, p. 406)

Die erste Gruppe zielt dabei auf die ökonomische Wirkung des Risikos ab und definiert Risiko [...] als Möglichkeit der Planverfehlung, als Gefahr einer Fehlentscheidung, als Verlustgefahr und als Gefahr einer Zielabweichung.

Die zweite Gruppe stellt die Ursache des Risikos in den Vordergrund und versucht Risiko über ein vorhandenes Informationsdefizit zu erklären. Dabei geht sie von einer Entscheidungssituation aus, in der keine Sicherheit bezüglich der Konsequenz einer Entscheidung herrscht, aber dennoch entweder objektive und / oder subjektive Wahrscheinlichkeitsverteilungen für die eintretenden Konsequenzen vorliegen, durch die das Risiko beschrieben wird.

Die dritte Gruppe führt die beiden oben genannten Komponenten zusammen und definiert Risiko als eine Kombination von möglicher Zielverfehlung und einem Informationsdefizit.

So sieht Helten den Risikobegriff [...] immer in Zusammenhang mit unvollständiger und unvollkommener Information über die Wirkungszusammenhänge der Realität und den daraus resultierenden Ziel- und Planabweichungen, die möglicherweise zu Schäden und Verlusten führen können [...]. Ziel- und Planabweichungen, die zu einem positiven Ergebnis führen, können hingegen als „Chance“ bezeichnet werden.

„Obwohl wir täglich den Nutzen der Technologie genießen, scheint die Skepsis hinsichtlich der Fähigkeit der Wissenschaft zur Lösung all unserer Probleme zuzunehmen und die Angst vor den potentiellen negativen Auswirkungen einiger ihrer Errungenschaften zu wachsen. Die Besorgnis darüber, dass wir in einer durch erhöhte Unsicherheit gekennzeichneten Welt leben, wächst. Diese Situation erfordert eine drastische, jedoch auch schwierige Anpassung unserer Herangehensweisen an Risiken.“²

„Neben der Unsicherheit wird das Fehlverhalten von Mitarbeitern des Unternehmens als weitere Risikoursache genannt. Dies äußert sich in Fehlern bei der Entscheidungsvorbereitung und –realisierung, z.B. ungenügender oder falscher Informationsbeschaffung, -aufbereitung, -speicherung und –übermittlung, falsch gesetzten Zielen und Prämissen, Quantifizierungs- oder Bewertungsfehlern, falschem Mitteleinsatz oder fehlender Ausführung von Handlungen bei der Leistungserstellung“³. „Das Fehlverhalten kann auch bewusste Verstöße gegen die Interessen des Unternehmens wie Veruntreuung oder Diebstahl umfassen.“⁴

² (Grenger, Henrion, & Small, 1990)

³ (Voigt, 1992, S. 493)

⁴ (Mikus B. , 2001, S. 7)

„Darüber hinaus ist eine zusätzliche Ergänzung des Begriffs erwägenswert. Wie auch in der obigen Begriffsbestimmung wird in Theorie und Praxis häufig nicht die Möglichkeit einer jeden Abweichung des Ergebnisses von einem angestrebten Zielwert, sondern nur die einer negativen Zielverfehlung als Risiko bezeichnet. Eine potentielle positive Abweichung hingegen wird üblicherweise Chance genannt.“⁵

„*Risiko-Management* erfüllt folgende Funktionen: Identifikation der Risiken, Bewertung der Risiken, Erarbeitung von Maßnahmen zur Gegensteuerung und Überwachung von Risiken.“⁶

Risikomanagement bezieht sich nicht nur auf Groß- und mittelständische Unternehmen, sondern auch auf Universitäten und Schulen. Auch den Universitäten und Schulen ist es ein Anliegen, Risiken zu vermeiden, die den Bestand und den Betrieb des Unternehmens gefährden können. Insbesondere durch die steigende Bereitschaft zu AMOK-Taten in Bildungseinrichtungen in den letzten Jahren hat die Relevanz einer systemischen Identifikation, Bewertung und Bewältigung von Risiken weiter zugenommen. „Der Risikoumfang ist in vielen Branchen und Bereichen deutliche höher geworden, was sich an schnellen technologischen Veränderungsprozessen, Abhängigkeiten von wenigen Kunden oder ganz neuen Risikokategorien (z.B. potentielle neue ausländische Wettbewerber aufgrund der zunehmenden Globalisierung) zeigt.“⁷

Risikomanagement nimmt in den Konzepten des strategischen Managements eine Position ein, die einerseits den traditionellen und den fähigkeitsorientierten Ansatz präzisiert und instrumentell vertieft. Andererseits bestätigt die kritische Auffassung von Mintzberg die Notwendigkeit eines Risikomanagements.

Im traditionsorientierten Ansatz von Ansoff besteht die Funktion des Risikomanagements darin, dass die gesetzten Ziele und die formulierten Strategien laufend auf ihre Angemessenheit und auf ihre Erfüllung überprüft werden. Das Risikomanagement stellt Leitplanken dar, ihm kommt in der Zielerreichung und in der Umsetzung der Pläne eine zentrale Rolle zu.

Im fähigkeitsorientierten Ansatz von Porter liegt die Aufgabe des Risikomanagements darin, die Gründe systematisch und rechtzeitig zu identifizieren, welche Erfolg und Misserfolg von Strategien verursachen. Der Fokus des Risikomanagements liegt auf der Absicherung der Fähigkeiten und der Sicherstellung der Wettbewerbspositionen.

⁵ (Neubürger, 1980, S. 38)

⁶ (Stöger, 2007)

⁷ Vgl. (Gleissner & Berger, 2007, S. 7)

Schließlich erhält das Risikomanagement im kritischen Ansatz von Mintzberg ein besonderes Gewicht als Führungsinstrument, weil es in der Lage ist, in jeder Situation die Chancen und Gefahren der strategischen Position zu ermitteln und die Entwicklung der Organisation spontan dorthin zu lenken, wo sich die besten Erfolgsmöglichkeiten bei geringsten Risiken aufzeigen.

Analog zur traditionellen Sichtweise von Management mit den drei Ebenen des strategischen, operativen und taktisch/dispositiven Managements lässt sich das Risikomanagement auf diese drei Ebenen ausrichten: das strategische, das operative und das dispositive Risikomanagement.

Das strategische Risikomanagement orientiert sich an Führungsentscheidungen langfristiger und grundsätzlicher Natur. Das Risikomanagement im strategischen Bereich ist ein typischer „Top-down-Ansatz“. Er konzentriert sich – wie die Strategie der Organisation – auf grundsätzliche Fragen und kümmert sich noch wenig um die operativen und dispositiven Details.

Demgegenüber befasst sich das dispositive Risikomanagement mit den Fragen der technischen und organisatorischen Risikodetails von Systemen und Prozessen. Es handelt sich um einen „Bottom-up-Ansatz“. Er ist konkret sachbezogen.

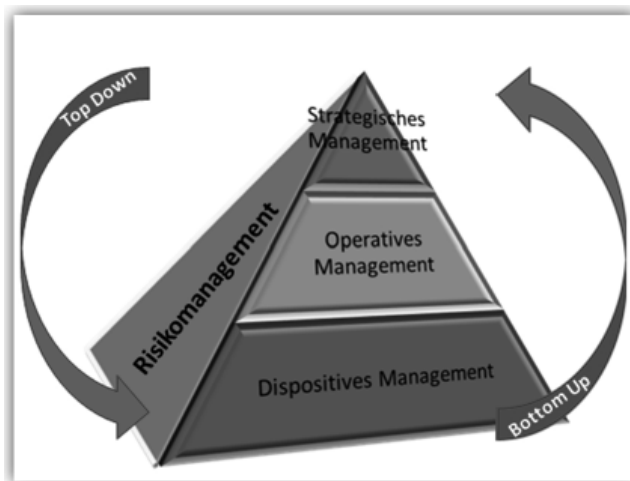


Abbildung 1 - Risikomanagement-Ansätze⁸

⁸ Vgl. (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 30)

Dazwischen gibt es das operative Risikomanagement, das den Mittelweg der beiden vorgenannten Ansätze darstellt. Ganz typisch für die operative Ebene sind z.B. das Produkt- und das Projekt-Risikomanagement.“⁹

Bei der Einführung des Risikomanagements sind lt. Gleissner & Berger vier Schritte notwendig:



Abbildung 2 - Einführung eines Risikomanagementsystems¹⁰

Risikomanagement wird jedoch immer noch als lästige Pflichtübung angesehen und nicht als Kernaufgabe der Unternehmensführung. Durch den Terroranschlag 9/11 in Amerika und den AMOK-Angriffen in den letzten Jahren, wurden formale Risikomanagementsysteme aufgebaut, die jedoch erhebliche Schwächen aufweisen. Problemfelder in diesem Bereich sind:

- Schwächen in der Fokussierung der Risikoanalyse,
- Das Fehlen von Verfahren für die Risikoaggregation,
- Die fehlende Integration des Risikomanagements in Planung und Controlling
- Eine überbürokratische Organisation der Risikomanagementsysteme,

⁹ (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 29 f.)

¹⁰ Vgl. (Gleissner & Berger, 2007, S. 7)

- Defizite bei der Risikobewältigung sowie bei der Einbeziehung von Managementrisiken.

„Die Vorteile eines systematischen Risikomanagements, wie

- Transparenz über die Risikosituation
- Frühaufklärung und Krisenprävention sowie
- Die Möglichkeiten bei unternehmerischen Entscheidungen die erwarteten Erträge/Nutzen mit den eingegangenen Risiken abzuwägen sind offenkundig.“¹¹

Wildemann fasste die Bausteine zur Umsetzung des Risikomanagements für die wertorientierte Steuerung folgend zusammen:



Abbildung 3 - Das Bausteinkonzept zur Umsetzung des Risikomanagements für die wertorientierte Steuerung¹²

„Die Ziele des Risikomanagements bestehen darin, Strategien nach Chancen und Bedrohungen zu durchleuchten, Risiken zu entdecken, abzusichern und damit einen Beitrag zur Entwicklung und Kontinuität einer Organisation zu leisten. Im Vordergrund stehen Unsicherheiten, die zu möglichen negativen Auswirkungen auf Ziele und Pläne führen können. Sie früh zu identifizieren und abzuwenden ist

¹¹ (Gleissner & Berger, 2007, S. 9)

¹² Vgl. (Wildemann, 2004, S. 6)

das Anliegen. Risikomanagement verbessert dadurch die Entscheidungsprozesse. Organisationen sind eng mit dem Umfeld verflochten. Es bestehen vielfältige direkte und indirekte Beziehungen zu Mitarbeitern, zu Kunden und Lieferanten, zu Auftrags- und Geldgebern, zu Angehörigen und Nachbarn, zu Behörden und zu Interessentengruppen. Je besser die Tätigkeiten und die Entwicklung der Organisation mit den Interessen der Shareholder und der Stakeholder übereinstimmen, desto stabiler und sicherer sind die Umfeldbedingungen.“¹³

DER RISIKOMANAGEMENTPROZESS

„Risikomanagement ist weit mehr als das (selbstverständliche) Einhalten gesetzlicher Vorschriften (z.B. aus Arbeits- und Umweltrecht), das Abschließen von Versicherungen und das Erstellen von Notfallplänen. Risikomanagement ist tatsächlich ein umfassender Prozess der Identifikation, Bewertung, Aggregation, Überwachung und gezielter Steuerung aller Risiken, die Abweichungen von den gesetzten Zielen auslösen können.“¹⁴

Mit der ON-Regel 49000 ff. werden die Schritte im Risikomanagementprozess „Vorbereitung-Risikobeurteilung-Risikobewältigung-Risikoüberwachung“ angeführt.

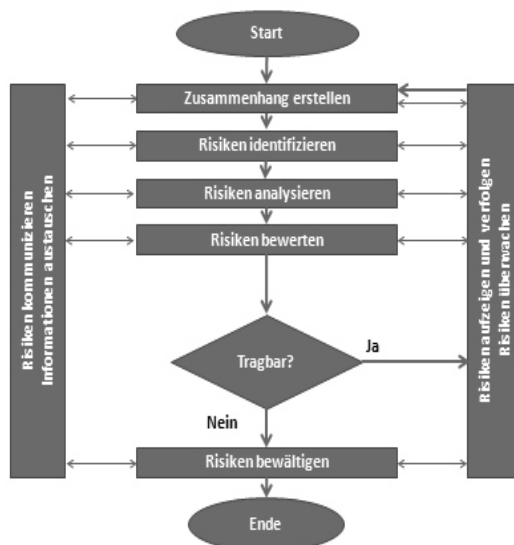


Abbildung 4 - Der Risikomanagement-Prozess¹⁵

¹³ (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 34)

¹⁴ (Gleissner & Berger, 2007), S. 18

¹⁵ (International Organization for Standardization, 2006)

Der ISO 31000 Standard umfasst einen risikobezogenen Kernprozess mit den Elementen „Zusammenhang erstellen“, „Risikoidentifikation“, „Risikoanalyse“, „Risikobewertung“, „Risikobewältigung“ sowie die zusätzlichen Elemente „Kommunikation und Informationsaustausch“ sowie „Risiken aufzeigen, verfolgen und überwachen“.

ZUSAMMENHANG ERSTELLEN

Da ein Risiko immer eine ungeplante Abweichung von Zielen einer Organisation oder von Prozessen mit Soll-Funktionen darstellt, muss zu Beginn im Risikomanagement-Prozess festgestellt werden, was die Ziele, Strategien und Soll-Funktionen beinhalten. Externe Umstände und Anforderungen wie Trends und Entwicklungen, gesetzliche Anforderungen oder „best practices“ müssen im Risikomanagement berücksichtigt werden. Schließlich spielen die Ressourcen der Organisation für das Risikomanagement bzw. die Natur der Risiken selbst – der Grad der Unsicherheit und die Komplexität der Risiken – eine wesentliche Rolle bei der Risikobeurteilung.¹⁶

Im Rahmen der Risikopolitik werden die risikopolitischen Entscheidungen getroffen. Voraussetzung hierfür ist der Abschluss der Risikoanalyse. Im Rahmen der Risikopolitik gilt es insbesondere festzulegen, welche risikopolitischen Ziele das Unternehmen verfolgt (risikoneutral, risikofreudig, risikoscheu), durch welche Maßnahmen die Risiken vermieden, begrenzt oder vermindert werden können, welche Risiken externalisiert werden und wie der Risk Management Mix gestaltet werden soll.

¹⁶ (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 84)



Abbildung 5 - Zusammenhänge erkennen

„Die risikopolitischen Ziele eines Unternehmens legt die Unternehmensleitung, evtl. in Zusammenarbeit mit einer Risiko-Management-Organisationseinheit, fest. Die Basis für die Festlegung der risikopolitischen Ziele bildet das Risikoinventar. Oberstes Ziel muss in jedem Fall die Existenzsicherung des Unternehmens sein. Nachgelagerte Ziele können beispielsweise sein, das Unternehmensimage nicht durch Produkthaftpflichtschäden oder Umwelthaftpflichtschäden zu schädigen. Im Bereich der Informationstechnologie kann die Vermeidung des Abflusses von sensiblen Informationen in den Zielkatalog aufgenommen werden.“¹⁷

RISIKOBEURTEILUNG

Die Risikobeurteilung gliedert sich in drei Tätigkeiten Risikoidentifikation, Risikoanalyse und Risikobewertung. Es gibt viele verschiedene Methoden, um die Eintrittswahrscheinlichkeit und die Auswirkung von Risikoereignissen, des Eintritts ungünstiger Umstände und von Fehlentwicklungen zu ermitteln, zu beschreiben und zu verstehen.

¹⁷ (Romeike & Hager, Erfolgsfaktor Risikomanagement 2.0 (2. Auflage), 2009, S. 511)

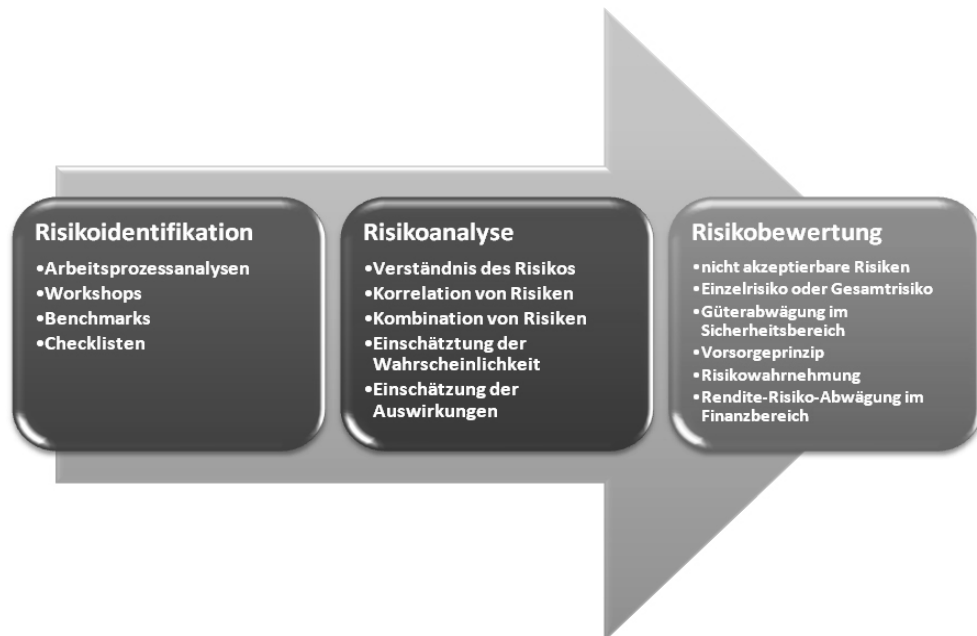


Abbildung 6 - Risikobeurteilung¹⁸

Im Wesentlichen lässt sich unterscheiden zwischen Methoden, die einem Top-down-Ansatz folgen, wie etwa die Szenarioanalysen, und solchen, die einen Bottom-up-Ansatz wählen. Dies sind die sogenannten Funktionsanalysen.¹⁹

RISIKOIDENTIFIKATION

„Der Risikoidentifikation kommt die Aufgabe zu, mögliche Gefahren, Ereignisse, Entwicklungen, Trends und Szenarien zu erkennen, die eines oder mehrere Ziele der Organisation beeinträchtigen könnten.“²⁰

In der Praxis haben sich insbesondere folgende Methoden für die Identifikation von Risiken als wesentlich herausgestellt:

¹⁸ Vgl. (Vanini, 2005, S. 1028 ff.)

¹⁹ Vgl. (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 96)

²⁰ (Brühwiler B. , Risikomanagement als Führungsaufgabe, 2007, S. 96)

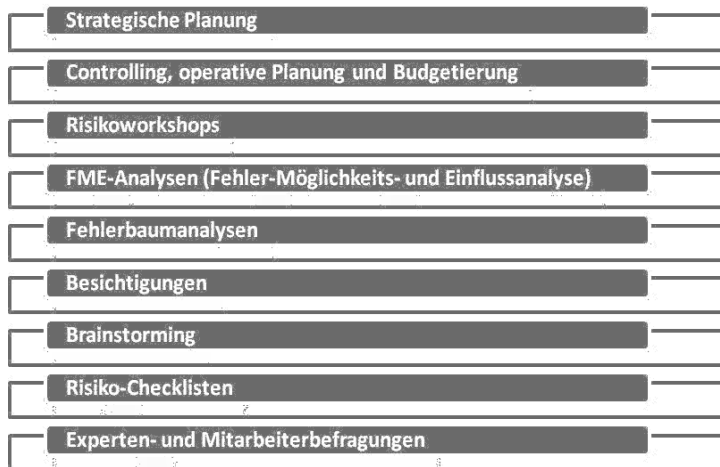


Abbildung 7 - Risikoidentifikation²¹

RISIKOANALYSE

„Risiko“ wird als Kombination der beiden Grundbegriffe „Schadenshöhe“ und „Eintrittswahrscheinlichkeit“ definiert, wobei Art, Höhe und Abschätzungssicherheit des jeweiligen Schadens von den speziellen Rahmenbedingungen abhängig sind, unter denen ein bestehendes Risiko (als Möglichkeit eines zukünftigen Schadens oder auch Nutzens) analysiert werden kann.

Das Risiko (R) ergibt sich durch eine Wahrscheinlichkeitsaussage, die die zu erwartende Häufigkeit (H) des Eintritts eines Schadens und das zu erwartende Schadensausmaß (S) nach folgenden Berechnungen berücksichtigt: $R = H \cdot S$

Im US-MIL-ST 882 D:200 wird Risikoanalyse (Anm. d. Verf. dort als „mishap risk assessment“ bezeichnet) als Abfolge von Teilschritten beschrieben:

- Gefahrencharakterisierung für bestimmte Risikobereiche und/oder kritische Prozesse,
- Ermittlung der möglichen Schadenshöhe,
- Eintrittswahrscheinlichkeit des Schadens,
- Gewichtung und Reihung möglicher Risiken.²²

²¹ Vgl. (Gleissner & Berger, 2007, S. 23)

²² Vgl. (Department of Defence, 1993)

„Prognosen sind schwierig, besonders, wenn sie die Zukunft betreffen“ – dieser Aphorismus, der unter anderem Mark Twain, Karl Valentin und Winston Churchill zugeschrieben wird, bringt die Problematik auf den Punkt: Von einer guten Prognose wird mehr erwartet, als eine bloße Fortschreibung des Ist-Zustandes in die Zukunft.²³ Eine besondere Bedeutung haben angesichts der Unsicherheit zukünftiger Entwicklungen als primäre Risikoursache Prognoseverfahren. Diese lassen sich in intuitive bzw. qualitative und analytische bzw. quantitative Verfahren unterteilen.²⁴

Für die Methodik der Prognoseerstellung ist die Wahl des Prognosezeitraumes ausschlaggebend.

Vor allem im Bereich der kurzfristigen Prognosen bieten sich quantitative Prognose-Verfahren wie zum Beispiel Zeitreihenanalysen oder Regressionen an, bei denen unterschiedliche Variablen mit Hilfe mathematischer Operationen miteinander verknüpft werden (wie z.B. bei Börsenkursen oder Wettervorhersagen). Zu beachten ist hierbei die angenommene Entwicklungsrichtung des Prognosegegenstands. Selten ist diese linear; um Wechselwirkungen und nicht-lineare Entwicklungen, die sich erst langfristig zeigen, zu berücksichtigen, muss gegebenenfalls auf entsprechende nicht-lineare Rechenmodelle zurückgegriffen werden.

Vor allem für den Bereich der längerfristigen Prognosen ist daher ein Rückgriff auch auf qualitative Prognosemodelle sinnvoll, die mit einer verbal-argumentativen Verknüpfung der für eine entsprechende Prognose bedeutsamen Variablen unter anderem durch die Nutzung von Insiderwissen und Intuition arbeiten. In diesen Bereich fallen unter anderem die Szenario- und Delphi-Technik.

Bei der Risikoanalyse handelt sich um eine Abfolge von mehreren Schritten:

- Gefahrencharakterisierung
- Ermittlung der Schadenshöhe
- Eintrittswahrscheinlichkeit
- Gewichtung und Reihung möglicher Risiken

²³ (Lehmann & Berresheim, 2009, S. 396)

²⁴ Vgl. (Barth, 1984, S. 113 ff. und S. 175 ff.)

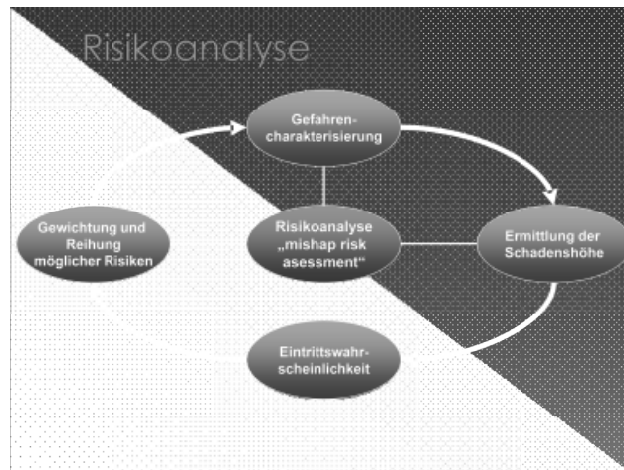


Abbildung 8 - Risikoanalyse (vgl. ONR-192320)

Risikoidentifikation – Ermittlung der Schadensarten und Erstellung einer strukturierten Gefahrenliste

Zu dem Aufgabenbereich der Risikoanalyse gehört die Identifizierung möglicher Risiken, die in dem Risikomanagementprozess eine Sonderstellung einnimmt, da sie die Untersuchungsobjekte der nachfolgenden Phasen festlegt. Aus diesem Grund wird eine möglichst vollständige Erfassung der Risikoquellen als sinnvoll erachtet.²⁵ Zudem erfolgt in dieser Phase eine Untersuchung der Ursachen und Wirkungen von Risiken, die sich auch auf Ursache-Wirkungs-Beziehungen, Wechselwirkungen zwischen verschiedenen risikoauslösenden Faktoren sowie aggregierte Wirkungen beziehen sollte.²⁶ Schließlich werden die aufgedeckten Risikoursachen und/oder Risiken anhand ihrer Eintrittswahrscheinlichkeiten und der zu erwartenden Ausmaße der negativen Zielabweichung bewertet. Unter Einbeziehung der Ergebnisse der Risikobewertung werden dann Maßnahmen oder Maßnahmekombinationen zur Handhabung der Risiken entwickelt und anschließend bewertet sowie ausgewählt.²⁷

Aus der Betrachtung der gegenwärtigen Gefahrensituation ergeben sich in der Prävention und der Abwehr latenter bzw. akuter Gefahren zu berücksichtigende

²⁵ Vgl. (Mugler, 1979, S. 82)

²⁶ Vgl. (Füser, 1999 52. Jg., S. 755 ff.)

²⁷ Vgl. (Mikus B., 2001, S. 14)

sowie durch Risikoanalyse zu erfassende Anlassfälle für Ereignisse außergewöhnlichen Umfangs.

- Im Bereich der ONR-192320 werden als latente bzw. akute Gefahren genannt:
- Unwetter und deren Folgen (wie z.B. Überschwemmungen und Überflutungen, Lawinen, Vermurungen, Erdrutsche, Erdbeben)
- Spontane Freisetzung mechanischer oder thermischer Energie
- Störungen kritischer Infrastruktur einschließlich systembedingter Schwächen
- Massenansturm betroffener Menschen, insbesondere Verletzter, Erkrankter oder Zufluchtsuchender
- Freisetzung oder Ausbringung radiologischer, nuklearer, biologischer oder chemischer Gefahrstoffe bzw. Kampfmittel

Folgende Risiken, die die staatliche Integrität und die Lebensgrundlagen gefährden, werden in der ONR-192320 angeführt:

- Naturkatastrophen, hauptsächlich bedingt durch atmosphärische oder geologische Phänomene, einschließlich deren Folgen
- Stör- und Unglücksfälle größeren Ausmaßes
- Suchen und Epidemien
- Migrationsströme
- Sabotageaktionen und direkte Angriffe (Anschläge) durch kriminelle, extremistische oder terroristische Elemente
- Auswirkungen der organisierten Kriminalität und des internationalen Terrorismus
- Aufgriffe und Waffenwirkung im Rahmen konventionell oder subkonventionell ausgetragener bewaffneter Konflikte.

Risiken, die das Leben bedrohen oder die Lebensqualität vermindern sind unter anderem:

- Natur und Umwelt
- Zivilisatorische Systemrisiken
- Wirtschaft
- Technologie

- Unzulänglichkeiten, Fehlleistungen und Versagen des Menschen
- Epidemien und Seuchen
- Kriminalität, Subversion, Sabotage und Terrorismus
- Bewaffnete Auseinandersetzungen und Krieg

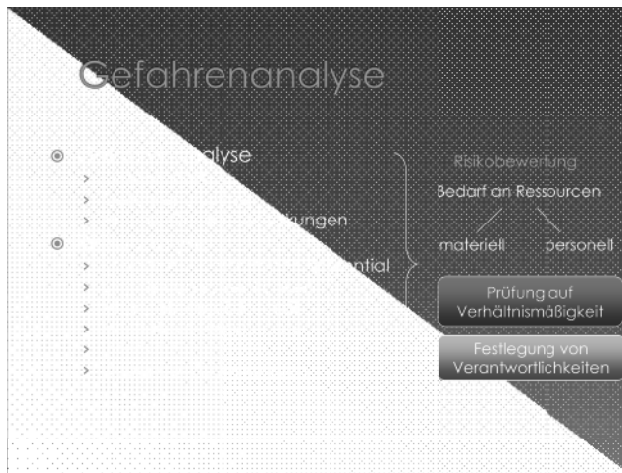


Abbildung 9 - Zusammenhang Gefahrenanalyse - Risikoanalyse (vgl. ONR-192320)

Risikomanagement betrachtet einzelne Risiken in einem definierten Kontext. Aber meistens will das Risikomanagement die Gesamtsicht von Risiken einer Organisation oder eines Systems ermitteln. Es beschäftigt sich mit einer Vielzahl von Risiken. Diese können untereinander in Beziehung stehen und voneinander abhängig sein. Man spricht von der Korrelation der Risiken.

Risiken können positiv oder negativ miteinander korrelieren. Die Korrelation beschreibt die gegenseitige Abhängigkeit, die sich sowohl auf die Wahrscheinlichkeit als auch auf die Auswirkung bezieht. Sind die zwei Risiken A und B völlig unabhängig voneinander, so ist ihre Korrelation =null. Bedeutet das Eintreffen von Risiko A, dass dann zwingend auch Risiko B eintritt, so ist die Korrelation +1. Bedeutet das Eintreffen von Risiko A, dass dann Risiko B unmöglich eintritt, so ist die Korrelation -1. Jedes Risiko wird auf seine Abhängigkeit von einem anderen Risiko untersucht.

	Szenario 1	Szenario 2	Szenario 3	Szenario 4	Szenario n
Szenario 1		-50 %	Unkorr.	-50 %	+30 %
Szenario 2	-50		+100 %	+30 %	Unkorr.
Szenario 3	Unkorr.	+100 %		Unkorr.	Unkorr.
Szenario 4	-50 %	+30%	Unkorr.		-50 %
Szenario n	+30 %	Unkorr.	Unkorr.	-50 %	

Abbildung 10 - Korrelation für die Ermittlung gegenseitiger Abhängigkeiten

Die Risikoanalyse muss der positiven Korrelation einzelner Risiken einer Organisation besondere Aufmerksamkeit schenken. Es ist entscheidend, über Informationen zu verfügen und die Bedingungen zu kennen, unter denen einzelne Risiken sich gegenseitig verstärken.

Demgegenüber führen Risiken, die negativ korrelieren, zur (strategischen) Diversifikation.

SZENARIO-TECHNIK

Die Szenario-Technik als eine für die Prognose potenzieller Unternehmenskrisen besonders geeignete Methode lässt sich nur unscharf in das Schema der quantitativen oder qualitativen Verfahren einordnen, da sie als *Methodenverbund* Elemente beider Prognoseverfahren enthält und damit eine Form der kombinierten quantitativen und qualitativen Prognosen darstellt.²⁸

Zu den qualitativen Methoden gehören diejenigen, die zur Erstellung von Prognosen keine formalen Modelle verwenden, sondern auf subjektive Einschätzungen über zukünftige Ereignisse beruhen, wie (weitgehend) die Szenario-Technik.²⁹ Im Rahmen der Szenario-Technik werden auf systematische Weise i.d.R. zwei bis

²⁸ (Hahn & Hungenberg, 2001, S. 329 ff.)

²⁹ Vgl. (Kahn & Wiener, 1971)

fünf konsistente, unterschiedliche Szenarien erarbeitet, aus denen Unternehmen mögliche Konsequenzen für ihr zukünftiges Handeln in den betroffenen Bereichen ableiten können.³⁰

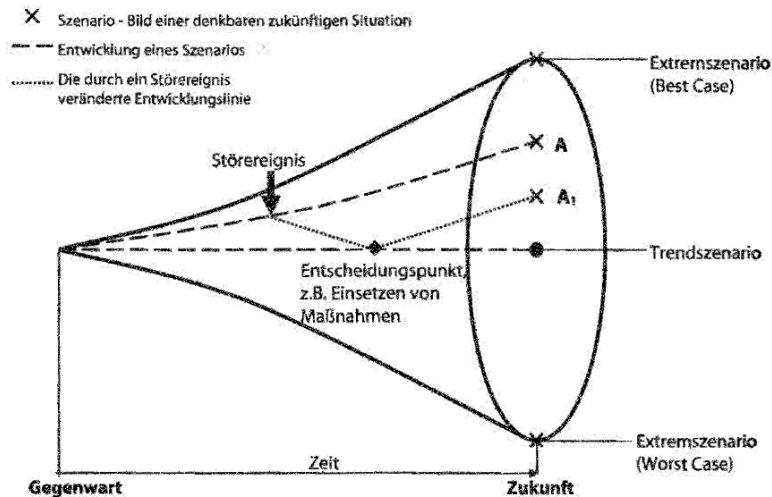


Abbildung 11 - Trichtermodell der Szenario-Technik³¹

- Nutzen der Szenario-Trichter-Methode:
- Erweiterung des Wahrnehmungshorizontes um Ereignisse mit geringer Eintrittswahrscheinlichkeit aber potentiell weitreichender Wirkungen.
- Sensibilisierung von Abweichungen vom Trend
- Förderung der Vorstellungskraft – FRAMING – Wahrnehmung – worauf muss reagiert werden
- Einschränkung von Wunschdenken
- Erkennen und Akzeptieren von neuartigen Alternativen
- Aufdecken potentieller Schwachstellen – blinde Flecken
- Sensibilisierung der Führung gegenüber alternativen Entwicklungsmöglichkeiten
- Sensibilisierung von potentiellen Krisensituationen

³⁰ Vgl. (Gausemeier & Fink, 1999, S. 80)

³¹ (Hahn & Hungenberg, 2001, S. 330)

BRAINSTORMING

Die Methode sammelt in einem Team ohne Einschränkung eine Vielfalt von Ideen, bewertet und ordnet sie.

DELPHI-TECHNIK

Die Methode kombiniert Expertenmeinungen, um von einem Problem stufenweise Ursachen und Auswirkungen zu identifizieren, die Wahrscheinlichkeit des Auftretens sowie die möglichen Auswirkungen zu schätzen und zu beurteilen. Die Delphi-Methode hat unter den mehrstufigen Methoden als ein Verfahren der mehrfachen Expertenbefragung besondere Bedeutung und praxisorientierte Relevanz erlangt. Dieses Verfahren ist durch sein spezifisches Vorgehensmuster gekennzeichnet.³²

- Auswahl der zu befragenden Experten,
- Beantwortung der Fragebögen durch die Experten,
- Statistische Auswertung der Fragebögen,
- Bekanntgabe der Mittelwerte der erhaltenen Antworten sowie Begründung stark abweichender Antworten der Experten an die Befragungsteilnehmer,
- Wiederholung der Befragung etwa zwei- bis fünfmal; bis ein repräsentativ erscheinendes Prognoseergebnis vorliegt.

RISIKOBEWERTUNG

Die Kategorien für den Schweregrad eines möglichen Schadens bzw. die Höhe des Aufwandes zur Bewältigung eines möglichen Schadensfalles sollten qualitative Beschreibungen glaubwürdiger Schadensannahmen darstellen. Die Schadensursachen können personeller (menschliches Versagen, Bedienungsfehler), organisatorischer (Prozessfehler), materieller (Umwelteinflüsse) oder technischer (Fehlfunktionen, Ausfälle) Natur sein.

³² Vgl. (Welters, 1989, S. 264)

Kategorisierung der Schadenshöhe bzw. des Ressourcenaufwandes			
Bezeichnung	Kategorie	Kriterien	
Katastrophal	I	Menschliche Gesundheit	Tod oder Totalinvalidität
		Finanzieller Schaden	Größer als 1 Mio Euro
		Umweltschaden	Irreversible Schäden mit Verstoß gegen gesetzliche Regelungen
Kritisch	II	Menschliche Gesundheit	Teilinvalidität, Verletzungen oder chronische Erkrankungen mit Spitalsaufenthalt bei mind. 3 Personen
		Finanzieller Schaden	Größer als 200.000 Euro
		Umweltschaden	Reversible Schäden mit Verstoß gegen gesetzliche Regelungen
Marginal	III	Menschliche Gesundheit	Verletzungen oder Erkrankungen, die den Ausfall mindestens eines Arbeitstages nach sich ziehen
		Finanzieller Schaden	Größer als 10.000 Euro
		Umweltschaden	Sanierbare Schäden ohne Verstöße gegen die Gesetzgebung
Vernachlässigbar	IV	Menschliche Gesundheit	Verletzungen oder Erkrankungen ohne Arbeitsausfall
		Finanzieller Schaden	Kompensationsschaden größer als 2.000 Euro
		Umwelt	Minimale sanierbare Umweltschäden ohne Verstöße gegen die Gesetzgebung

Abbildung 12 - Kategorisierung der Schadenshöhe bzw. des Ressourcenaufwandes³³

Ermittlung und Kategorisierung der Eintrittswahrscheinlichkeit für jede Schadensart:

Die Eintrittswahrscheinlichkeit bezeichnet jene Wahrscheinlichkeit, mit der eine bestimmte Schadensart während eines Beobachtungszeitraumes oder während der Lebensdauer eines Systems auftritt. Sie kann in Form von tatsächlich beobachteten (historischen Daten) oder hypothetischen Fällen ausgedrückt werden. Als Bezugs-

³³ Vgl. (Österreichisches Normungsinstitut, ONR-192320, 2006, S. 20)

größen dienen dabei fixe Zeitintervalle, intuitiv erfassbare Zeiträume oder Zeitabschnitte (Lebenszeit, Dauer einer Aktivität) oder Populationsgrößen. Im Frühstadium einer Planungsaktivität ist es oft nicht möglich, exakte quantitative Abschätzungen der Eintrittswahrscheinlichkeit anzugeben. In diesem Fall greift man auf historische Daten analoger Fälle und Systeme oder qualitative Expertenabschätzungen (expert judgement) zurück.

Beschreibung	Kategorie	Individuelle Beobachtung	Population und Inventar
Häufig	A	Tritt häufig während der Lebensdauer eines Individuums, eines Systems oder einer einzelnen Komponente auf. Größe: 1 mal in 10 Fällen, 1 mal in 10 Jahren usw.	Wird regelmäßig beobachtet
Wahrscheinlich	B	Tritt während der individuellen Lebensdauer öfter auf. Größe: 10^{-2} oder 1 mal in 100 Jahren, 1 mal auf 100 Fälle	Wird oft beobachtet
Gelegentlich	C	Tritt sehr wahrscheinlich während der Lebensdauer eines Individuums oder einzelnen Systemen auf. Größe: 10^{-3}	Kann einige Male beobachtet werden
Selten	D	Die Wahrscheinlichkeit, dass der Schaden während der individuellen Lebenszeit Eintritt ist gering, der Schaden ist jedoch nicht unmöglich. Größe: zwischen 10^{-5} und 10^{-3}	Unwahrscheinlich, die Annahme des Auftretens kann jedoch als plausibel gelten
Unwahrscheinlich	E	Die Wahrscheinlichkeit ist geringer als 10^{-6} , also etwa 1 Schadensfall in 1 Mio Jahren	Unwahrscheinlich, aber nicht ausgeschlossen

Abbildung 13 - Kategorisierung möglicher Eintrittswahrscheinlichkeiten³⁴

Die Modelle, mit denen unterschiedliche Prognosen erstellt werden, lassen sich in drei Kategorien klassifizieren:

- Erstens durch die Kategorie der Zeit (dh wie groß der Zeitraum ist, den sie in die Zukunft blicken);

³⁴ Vgl. (Österreichisches Normungsinstitut, ONR-192320, 2006)

- Zweitens durch die Dimensionen, die dabei berücksichtigt werden (eindimensional, dh nur die verstreichende Zeit als Erfolgsfaktor, oder mehrdimensional, dh Berücksichtigung weiterer Faktoren);
- Drittens durch die Art der Verknüpfung der berücksichtigten Faktoren untereinander (quantitativ oder qualitativ).³⁵

„Der Begriff der Prognose stammt aus den Griechischen und bedeutet so viel wie „Voraus-Wissen“ oder „Vor-Kenntnis“ im Gegensatz zu Prophezeiungen, Weissagungen oder Orakeln ist eine Prognose definiert als wissenschaftlich begründete Aussage über die Beschaffenheit eines in angebbare Zukunft wahrscheinlich zu erwarteten Ergebnisses oder Sachverhalts, die auf Beobachtung der Vergangenheit und einer Theorie beruht – oder, um es auf den Punkt zu bringen; Eine Prognose ist eine (durch Daten oder Erfahrung) begründete Vermutung über die Zukunft.“³⁶

Kombination beider Kategorien in einer Matrix

Ermittlung und Reihung von Risikokategorien

	Katastrophal	Kritisch	Marginal	Vernachlässigbar
Häufig	1	3	7	13
Wahrscheinlich	2	5	9	16
Geringensich	4	6	11	18
Selten	8	10	14	19
Unwahrscheinlich	12	15	17	20

Matrixdarstellung

Abbildung 14 - Ermittlung und Reihung von Risikokategorien³⁷

Risikoquantifizierung

Auch im Risikomanagement gilt der bekannte Grundsatz „If you can't measure it, you can't manage it“.³⁸ Dass Risiken dennoch häufig nicht quantifiziert werden, hat verschiedene Ursachen. Zu nennen sind insbesondere Probleme mit

³⁵ Vgl. (Hüttner, 1986, S. 4)

³⁶ (Leutzbach, 2000)

³⁷ Vgl. (Österreichisches Normungsinstitut, ONR-192320, 2006)

³⁸ (Gleißner W., 2006)

verfügbaren Daten über Risiken, Kenntnisdefizite hinsichtlich der Methodik zur Risikoquantifizierung und die Aversion vieler Menschen, mit Zahlen und Mathematik umzugehen (und sich damit nachvollziehbar und klar festzulegen).³⁹ Die wesentlichen Risiken werden in einem Risikoinventar zusammengefasst.

Risikoregulierung

Die Begriffe „Risikoanalyse“, „Risikomanagement“ und „Risikoüberwachung“ können am besten in Form eines Management-Regelkreises dargestellt werden.



Abbildung 15 - Gesamtprozess der Risikoregulierung (vgl. ONR-192320, S. 6)

Da sich die Risiken im Zeitverlauf ständig verändern, ist eine kontinuierliche Überwachung der wesentlichen Risiken ökonomisch notwendig und durch das KonTraG gefordert. Aus Effizienzgründen wird das Risikomanagement meist durch eine geeignete IT-Lösung unterstützt.

Gemäß den Anforderungen des KonTraG muss daher die Verantwortlichkeit für die Überwachung der wesentlichen Risiken, einschließlich Angaben zu Überwachungsturnus und Überwachungsumfang, klar zugeordnet werden. Zudem muss die Unternehmensführung eine Risikopolitik formulieren, die grundsätzlich An-

³⁹ Vgl. (Gleissner & Berger, 2007, S. 36)

forderungen und Umfang mit Risiken fixiert. Auch die Vorgabe von Limiten und die Definition eines Berichtsweges für die Risiken sind hier zu dokumentieren.⁴⁰

DIE ORGANISATION DES RISIKOMANAGEMENTS

Die Risikohandhabung in der Unternehmensführung wird häufig einer spezifischen Funktion oder Institution zugeordnet, der des Risikomanagements. Für dieses haben sich unterschiedliche Konzeptionen herausgebildet, deren charakteristische Merkmale nachfolgend beschrieben werden sollen.

Ursprünglich stammt das Risikomanagement aus den USA und ist aus der Versicherungswirtschaft hervorgegangen. Daraus resultierte ein relativ enges Wirkungsfeld, das sich hauptsächlich auf den Schutz der Vermögenswerte eines Unternehmens vor unerwarteten Störungen bezog. Das Risikomanagement hatte zur Aufgabe, den Umfang der Versicherungsleistungen sowie der Höhe der zu zahlenden Prämien bestmöglich zu gestalten. Die Betrachtung beschränkte sich somit auf den reinen und nicht auch den spekulativen Risiken Aufmerksamkeit gewidmet wurde.⁴¹

Dieses Risikomanagement im Sinne versicherungsmäßiger Deckung betrieblicher Risiken wurde weiterentwickelt und um systematische Risikoanalysen sowie über die Versicherung hinausgehende Sicherungsmaßnahmen zur Schadensverhütung ergänzt. Dieses erweiterte Konzept wird als spezielles Risikomanagement oder Risikomanagement im engeren Sinn bezeichnet.⁴² Dessen Aufgabe besteht in der Sicherung gegen negative Veränderungen der Rahmenbedingungen der unternehmerischen Tätigkeiten sowie in der Erfassung und Beeinflussung der Risikoursachen und –wirkungen derart, dass der (erwartete) Zielerreichungsgrad erhöht wird.⁴³ Die neueren Risk-Management-Konzeptionen wenden sich nicht nur der Kategorie der spekulativen Risiken zu, sondern stellen auch zusätzlich auf eine prospektive (statt reaktive) Bewältigung dieser Risikoart ab. Zieht man ferner den Vergleich zu den neuen Konzepten des Krisenmanagements und des strategischen Managements, so wird offenbar, dass sich sehr weit gefasste Risk-Management-

⁴⁰ Vgl. (Gleissner & Berger, 2007, S. 42)

⁴¹ Vgl. (Farny, Grundfragen des Risk Management, 1979, S. 21)

⁴² Vgl. (Karten, 1978, S. 308)

⁴³ Vgl. (Haller, 1986, S. 38 f.)

Ansätze und Krisenmanagement-Ansätze sowie die Konzeptionen des strategischen Managements stark aufeinander zubewegt haben.⁴⁴

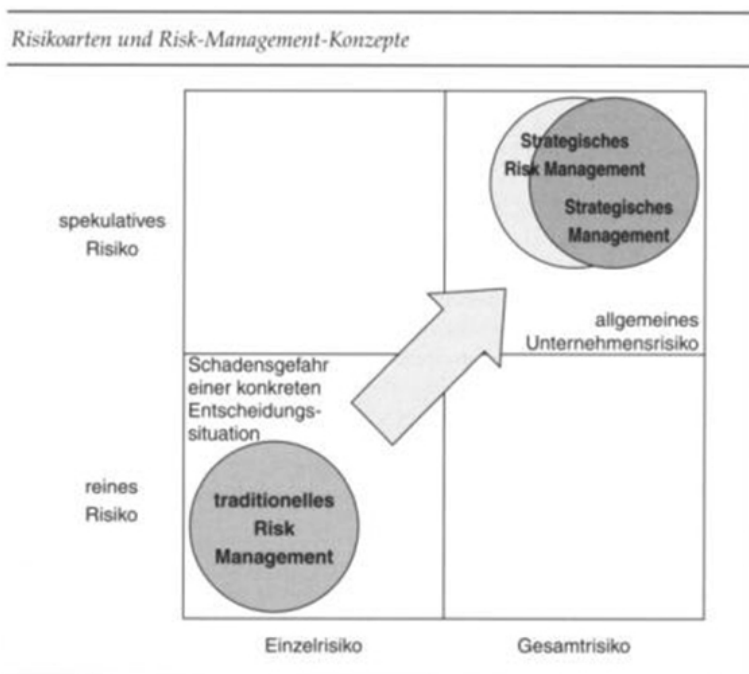


Abbildung 16 - Risikoarten und Risk-Management-Konzepte⁴⁵

Teilweise äußern die Mitarbeiter – durchaus berechtigt – Bedenken, dass ein hoher zusätzlicher bürokratischer Aufwand für das Risikomanagement erforderlich zu sein scheint.⁴⁶ Durch eine straffe Organisation des Risikomanagementsystems kann unnötiger bürokratischer Aufwand konsequent vermieden werden, ohne auf die angestrebte Transparenz über die Risikosituation verzichten zu müssen, die für die Steuerung des Unternehmens notwendig ist. Das Risikomanagement wird in den meisten Fällen dem Controlling bzw. der kaufmännischen Leitung zugeordnet. Die Gesamtheit aller Dokumentationen zum Risikomanagementsystem wird als Risikohandbuch bezeichnet. Typische Inhalte sind:

- Risikopolitik (risikopolitische Grundsätze des Unternehmens),

⁴⁴ Vgl. (Macharzina, 2008 6. Aufl., S. 672)

⁴⁵ (Macharzina, 2008 6. Aufl., S. 673)

⁴⁶ Vgl. (Shleifer, 2000)

- Aufbau- und Ablauforganisation (Verantwortlichkeiten und Vorgehensweise bei der Risikoanalyse, der Risiko-Überwachung sowie der Berichterstattung),
- Erläuterungen und Verfahrensanweisungen (verwendete Werkzeuge wie Risikofelder, Musterberichte, Überwachungsmeldungen und dergleichen).

ANFORDERUNGEN AN DIE ORGANISATION DES RISIKOMANAGEMENTSYSTEMS

Bei der Organisation des Risikomanagements werden große Anforderungen an die Organisation selbst gestellt. Dabei ist zu beachten, dass die Risikofelder genauestens festgelegt werden. Innerhalb der Risikofelder sind die Risiken zu erkennen und zu analysieren. Wichtig dabei ist, dass die Risikokommunikation funktioniert und entsprechend gefördert wird. Die Zuordnung von Verantwortlichkeiten und Aufgaben bilden ein wesentliches Element.

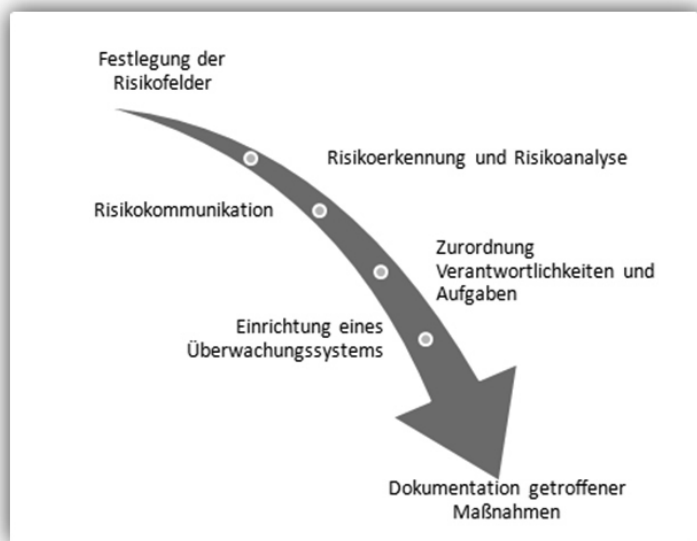


Abbildung 17 - Anforderungen an die Organisation des Risikomanagementsystems⁴⁷

Sämtliche getroffenen Maßnahmen sind entsprechend zu dokumentieren und eine entsprechende Zeit aufzubewahren.

⁴⁷ Vgl. (Institut der Deutschen Wirtschaftsprüfer)

AUFBAU EINES RISIKOMANAGEMENTSYSTEMS⁴⁸

Risikomanagementansatz

Als eine allgemeine Voraussetzung für die Funktionsfähigkeit eines Risikomanagementsystems kann die Schaffung einer zentralen Stelle (im Folgenden als zentrales Risikocontrolling bezeichnet) genannt werden. Darunter kann in den einzelnen Unternehmensbereichen bzw. Unterstützungsfunktionen ein dezentrales Risikomanagement (besetzt durch die Risikoeigner/Risk Owner) eingerichtet werden. Die Hauptaufgabe des zentralen Risikocontrolling besteht darin, das Risikomanagement zu einem konsistenten und effizienten System auszubauen und die Funktionsfähigkeit des Systems zu gewährleisten – z.B. durch Koordination und Unterstützung aller Aufgaben und beteiligten Personen.

Meist kann mit einem einstufigen System eine für die zu bewältigenden Aufgaben ausreichende Struktur geschaffen werden. Einstufig meint dabei, dass das Risikomanagementsystem nur über eine zentrale Koordinationsstelle – eben das zentrale Risikocontrolling – verfügt. Direkt darunter angeordnet sind dann die Verantwortlichen für einzelne Bereiche bzw. Teilaufgaben des Systems.

Bei großen oder sehr stark verflochtenen Unternehmen mit einer entsprechend komplexen Risikolandschaft scheint es in jedem Fall empfehlenswert, ein mehrstufiges System zu gestalten. In einem solchen wird die Koordinationsaufgabe des zentralen Risikocontrollings durch vergleichbare dezentrale Stellen unterstützt, die für einen Teilbereich des Unternehmens die Koordination für das dort angesiedelte Subsystem des Risikomanagements übernehmen. Besonders häufig anzutreffen sind solche mehrstufige Systeme in Holdingsstrukturen oder vergleichbaren Organisationen, in denen eigenständig agierende und ausreichend bedeutsame Unterorganisationen existieren. Vorstellbar ist natürlich auch eine teilweise Zweistufigkeit eines Risikomanagementsystems, indem in einem Bereich ein Subsystem aufgebaut wird, während alle anderen Bereiche von einer Zentralstelle aus gesteuert und koordiniert werden.

Die Stelleninhaber von Risikomanagementaufgaben erhalten aus dieser Aufgabe heraus keine Weisungsbefugnis gegenüber anderen Mitarbeitern. Sie haben jedoch ein ausgeprägtes Recht auf Information. Theoretisch sinnvoll wäre natürlich eine grundlegende Trennung von Risikoverursachung und Risikoüberwachung. In praxi

⁴⁸ Vgl. (Gleissner & Berger, 2007, S. 50 ff.)

wird jedoch mindestens auf der Ebene der Risikoeigner eine Personalunion mit Linienfunktionen nahezu unumgänglich sein, wodurch einerseits eine faktische Entscheidungsbefugnis der am Risikomanagementprozess Beteiligten gegeben ist und die Trennung von Ausführung und Überwachung nur in Teilen gelingt.

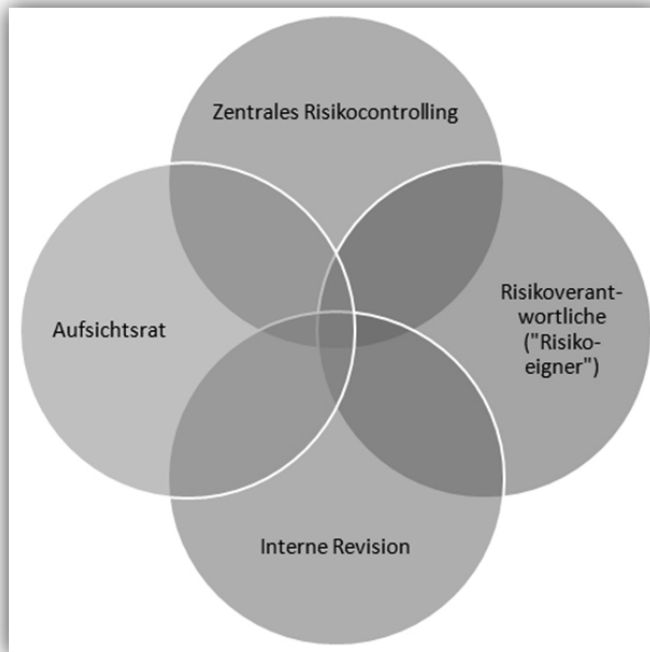


Abbildung 18 - Beteiligte bei der Risikoüberwachung

Insbesondere durch die Doppelfunktion von Risikoeignern als „Risikoverursacher“ steigt die Bedeutung der Unabhängigkeit des zentralen Risikocontrollings.

CONTROLLINGANSATZ: INTEGRIERTES RISIKOMANAGEMENT

Die Grundidee dieses Ansatzes ist darin zu sehen, dass Risiken immer mögliche Planabweichungen darstellen und damit die Identifikation, Bewertung, Aggregation und kontinuierliche Überwachung der Risiken möglichst weitgehend in Planung und im Controllingsystem des Unternehmens verankert werden soll. Bei dieser Vorgehensweise wird zunächst durchgängig nach allen Möglichkeiten gesucht, die vorhandenen Managementsysteme (Planung, Controlling, Budgetierung – aber auch Qualitätsmanagement) zu nutzen, um die Aufgaben des Risikoman-

agements mit abzudecken. Jede Planung basiert auf unsicheren Annahmen über die Zukunftsentwicklung. Diese unsicheren Annahmen stellen genau diejenigen Risiken dar, die Planabweichungen auslösen könnten und deshalb im Rahmen des Risikomanagements erfasst, bewertet und gegebenenfalls durch geeignete Maßnahmen bewältigt werden müssen. Der „Controllingansatz des Risikomanagements“ nutzt zunächst unsichere Planannahmen und später tatsächlich eingetretenen Abweichungen, um Risiken zu identifizieren und zu bewerten und integriert damit die Aufgabe der Identifikation und Bewertung von Risiken in die Planungs-, Controlling- und Budgetierungsprozesse, Planer und Controller werden damit zugleich Risikoeigner für diejenigen Risiken, die ihr normales Tätigkeitsfeld betreffen und dort Planabweichungen auslösen können.

ÜBERWACHUNG UND RISIKOBERICHTERSTATTUNG

Die Verfahren für die permanente Überwachung von Risikofeldern und wichtigen Einzelrisiken sind festzulegen. Dadurch soll sichergestellt werden, dass sowohl neue Risiken, aber auch Veränderungen bereits identifizierter Risiken frühzeitig erkannt werden. Im Einzelnen ist folgendes festzulegen:

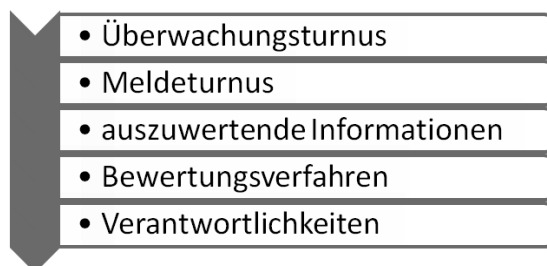


Abbildung 19 – Risikoüberwachung

Bei gravierenden Veränderungen sind sofort ad-hoc-Meldungen an Risikoccontroller und Linienvorgesetzte auszulösen. Dafür sind Schwellenwerte zu definieren.

RISIKOMANAGEMENT- UND FRÜHAUFKLÄRUNGSSYSTEME

Die primäre Aufgabe von Frühaufklärungssystemen (und speziell der Untergruppe der quantitativen Prognosesysteme) besteht darin, eine möglichst fundierte Vorhersage der zukünftigen Entwicklung einer die Unternehmensführung interessierenden Größe zu erstellen. Derartige Größen können für die Unternehmung rel-

evante Umfeldfaktoren (z.B. Rohstoffpreise, Nachfrage Wechselkurse) oder unmittelbar die Zielgrößen des Unternehmens (z.B. Umsatz, Gewinn oder Cash Flow) sein. Die Frühaufklärungssysteme erstellen damit Prognosen über die bei heutigem Informationsstand zu erwartende zukünftige Entwicklung, damit die verantwortlichen Entscheidungsträger im Unternehmen sich in ihren heutigen Entscheidungen und Handlungen adäquat an den Herausforderungen der Zukunft orientieren zu können. Damit besteht jedoch die primäre Aufgabe (üblicher) Frühaufklärungssysteme darin vorherzusagen, was im Mittel passieren wird – eben nicht darin, darüber zu informieren, welchen Umfang mögliche Abweichungen von diesen Prognosen (also Risiken) haben werden. Frühaufklärungs- und Prognosesysteme schaffen somit die Grundlagen für Risikomanagementsysteme, die sich mit dem Umfang möglicher Abweichungen (der Planungs- oder Prognosegenauigkeit) befassen. Beide Aspekte sollten nicht miteinander verwechselt werden.

PRÜFUNG DER LEISTUNGSFÄHIGKEIT EINES RISIKOMANAGEMENTSYSTEMS

Prinzipiell können drei Ansatzpunkte für eine schnelle und effiziente Prüfung des Risikomanagements unterschieden werden, die es z.B. dem Aufsichtsrat erlauben, unkompliziert die Leistungsfähigkeit des Risikomanagementsystems zu hinterfragen.

- Die Systemprüfung
- Die Outputprüfung
- Die Abweichungsanalyse

RESÜMEE

Da die zunehmende Dynamik der Umwelt hohe Anforderungen an die Unternehmensführung stellt, ist die Weiterentwicklung von Instrumenten und Systemen des Controllings, sowie der Unternehmensplanung unbedingt notwendig. Um die Wettbewerbsfähigkeit von Unternehmen zu verteidigen und zu steigern und die Unternehmensplanung auf eine solide Grundlage zu stellen, bedarf es hier Verfahren, die eine Bewertung, aber auch optimale Nutzung von Risiken und Chancen ermöglichen.⁴⁹

Zu einem proaktiven Sicherheitsmanagement verpflichtet nicht nur der Gesetzgeber, vielmehr lässt sich eine Tendenz im privatwirtschaftlichen Bereich ver-

⁴⁹ Vgl. (Gleißner W., 2003, S. 405)

zeichnen. Immer mehr Unternehmen implementieren Planungs- und Risikomanagementsysteme, um die Risiken im Unternehmen oder der Unternehmensumwelt zu ermitteln.

LITERATURVERZEICHNIS

ISO/IEC Guide 51. (1999). *Normungsarbeit, Teil 120: Leitfaden für die Aufnahme von Sicherheitsaspekten in Normen*.

Abegglen, C. (2007). Nachhaltige Unternehmensentwicklung als Oberziel eines Integrierten Managements - Das Management des Lebenszykluskurve - Theorie und Beispiele aus der Praxis. In Neumann/Graf, *Management-Konzepte im Praxistest* (S. 117-146). Wien: Linde Verlag Wien Ges.m.b.H.

Barth, H. (1984). Prognoseverfahren. *Controller Magazin*, 113-126 und S. 175-184.

Bleicher, K. (2004). *Das Konzept integriertes Management: Visionen- Missionen- Programme*. Frankfurt/Main: Campus Verlag.

BM.I. (2007). Richtlinie Führungssystem der Sicherheitsexekutive in besonderen Lagen. *Erlass des BM.I*, 5. Bundesministerium für Inneres.

Bockslaff, K. (02 2002). Notfallplanung, Kern eines ganzheitlichen Risikomanagements. *Unternehmensschutz*, S. 17-20.

Brühwiler, B. (1980). *Risk Management - eine Aufgabe der Unternehmensführung*. Bern: Haupt.

Brühwiler, B. (2003). *Risk Management als Führungsaufgabe*. Bern/Stuttgart/Wien: Haupt.

Brühwiler, B. (2007). *Risikomanagement als Führungsaufgabe*. Bern: Haupt.

Brühwiler, B. (1-2 2009). Die Norm ISO 31000. *MQ Management und Qualität*, S. 24.

Department of Defence. (1993). *Standard Practice for System Safety*. Washington D.C.: Department of Defence.

Department of Defence. (10. Februar 2000). *MIL-STD-882D*.

Dudek, K. (1 2007). Die besondere Aufbauorganisation. *SIAC Journal*, S. 14-28.

- Farny, D. (1979). Grundfragen des Risk Management. In W. Goethke, & G. (Sieben, *Risk Management - Strategien zur Risikobeherrschung* (S. 11-37). Köln: Sieben, G.
- Farny, D. (1979). Risikomanagement in der Produktion. In W. u. Kern, *Risk Management - Strategien zur Risikobeherrschung* (S. 11-37). Köln: Kern. W.
- Fritz, H. (2009). *Die temporäre Raum-Zeit-Zone*. Technische Universität Berlin, INSTITUT FÜR STADT- UND REGIONALPLANUNG. Berlin: Graue Reihe des Instituts für Stadt- und Regionalplanung.
- Füser, K. (16. April 1999 52. Jg.). Risikomanagement- KonTraG - Erfahrungen aus der Praxis. *Der Betrieb*, S. 755 ff.
- Gausemeier, J., & Fink, A. (1999). *Führung im Wandel - Ein ganzheitliches Modell zur zukunftsorientierten Unternehmensgestaltung*. München/Wien: Hanser Wirtschaft.
- Gleißner, W. (Nr. 4. 28. Jg. 2003). Stochastische Planung, Rating und Balanced Scorecard. *Controller Magazin*, S. 400-406.
- Gleißner, W. (April 2006). Die Nicht-Nicht-Qualifizierbarkeit von Risiken. erschienen als Kolumne auf RiskNet.de.
- Gleissner, W., & Berger, T. (2007). *Einfach Lernen! Risikomanagement*. Leinfelden-Echterdingen: studium-ratgeber.de.
- Grenger, M., Henrion, M., & Small, M. (1990). *Uncertainty: A guide to dealing with uncertainty in quantitative risk and policy analysis*. New York: Cambridge University Press.
- Hahn, D., & Hungenberg, H. (2001). *PuK. Planung und Kontrolle, Planungs- und Kontrollsysteme, Planungs- und Kontrollrechnung. Wert orientierte Controlling-Konzepte, 6. Aufl.* Wiesbaden.
- Haller, M. (Band 33 1986). Risiko-Management - Eckpunkte eines integrierten Konzepts. *Risiko.Management, Schriften zur Unternehmensführung*, S. 7-43.
- Hüttner, M. (1986). *Prognoseverfahren und ihre Anwendung*. Berlin: de Gruyter.
- Institut der Deutschen Wirtschaftsprüfer. (kein Datum). PS 340. *Prüfungsstandard*.
- International Organization for Standardization. (2006). ISO 3100 - Risk Management. *ISO 3100 - Risk Management*.

- Juraforum.de, L. v. (2004). <http://www.juraforum.de/lexikon/KonTraG>. (S. Einbock, Herausgeber, & EINBOCK INTERNET BUSINESS) Abgerufen am 29. Dezember 2009
- Kahn, H., & Wiener, A. (1971). *Ihr werdet es erleben. Voraussagen der Wissenschaft bis zum Jahre 2000*. Rienbek: Rowohlt.
- Karten, W. (Nr. 4. 30. Jg. 1978). Aspekte des Risk Managements. *Betriebswirtschaftliche Forschung und Praxis*, S. 308-323.
- Kendall, R. (1998). *Risk Management, Unternehmensrisiken Erkennen und Bewältigen*. Wiesbaden: Gabler.
- Kopp-Krimpenfort, M. v. (2006). *Notfallmanagement - Ziele, Konzeption und Bestandteile*. Norderstedt, Deutschland: GRIN Verlag.
- Kupsch, B. (1995). Risikomanagement. In H. Corsten, & M. (. Reiß, *Handbuch Unternehmensführung, Konzepte - Instrumente - Schnittstellen* (S. 529-543). Wiesbaden: Reiß, M.
- Landes, A. (2009). *Image the Future*. Judenburg: 1A Druck.
- Lehmann, A., & Berresheim, A. (7 2009). Die Strategische Risiko-Analyse (SRA). *Kriminalistik*, S. 396-402.
- Leutzbach, W. (2000). *Das Problem mit der Zukunft: Wie sicher sind Voraussagen?* Düsseldorf: Alba.
- Macharzina, K. (2008 6. Aufl.). *Unternehmensführung. Das internationale Managementwissen. Konzepte - Methoden - Praxis*. Wiesbaden: Gabler.
- Malik, F. (2001). *Führen, Leisten, Leben*. München: Wilhelm Heyne Verlag.
- Malik, F. (2008). *Die richtige Corporate Governance*. Frankfurt/Main: Campus Verlag GmbH.
- Malik, F. (2008). *Strategie des Managements komplexer Systeme*. Bern: Haupt.
- Mikus, B. (2001 (2. Auflage)). *Make-or-buy-Entscheidungen in der Produktion. Führungsprozesse - Risikomanagement - Modellanalysen*. Wiesbaden: Verlag der Gesellschaft für Unternehmensrechnung und Controlling m.b.H.
- Mikus, B. (2001). Grundlagen und Konzepte des Risikomanagements. In U. Götze, K. Henselmann, & B. Mikus, *Risikomanagement* (S. 3-25). Heidelberg: Physica-Verlag.

- Mugler, J. (1979). *Risk Management in der Unternehmung*. Wien: Wirtschaftsverlag Orac.
- Müller-Stingl/Grillitsch/Graf. (2007). Wissensmanagement im Blickpunkt. In Neumann/Graf, *Management-Konzepte im Praxistest* (S. 385-424). Wien: Linde-Verlag.
- Neubürger, K. (1980). *Risikobeurteilung bei strategischen Unternehmensentscheidungen*. Stuttgart: Poeschel.
- Neumann, R. (1995). *Risiko Organisation - organisiertes Risiko*. Frankfurt am Main: Peter Lang GmbH.
- Neumann, R. (2007). Theorien der Veränderung von und in Organisationen. In N. (Hrsg.), *Management-Konzepte im Praxistest* (S. 186-196). Wien: Linde international.
- Österreichisches Normungsinstitut. (2004). ON-Regel 9002-2. *ON-Regel 9002-2*.
- Österreichisches Normungsinstitut. (2006). ONR-192320. *ONR-192320*. Österreichisches Normungsinstitut.
- Romeike, F. (2004). *Lexikon Risiko-Management*. Köln: Wiley.
- Romeike, F., & Hager, P. (2009). *Erfolgsfaktor Risikomanagement 2.0 (2. Auflage)*. Wiesbaden: Gabler.
- Schnepf, D. (Oktober 2009). *Das Österreichische Nachhaltigkeitsportal*. (U. u.-1. Bundesministerium für Land- und Forstwirtschaft, & T. (. 51522-0, Herausgeber) Abgerufen am 22. November 2009 von <http://www.nachhaltigkeit.at/article/articleview/78307/1/25540/>
- Schulze, T. (2006). *Bedingt abwehrbereit*. Wiesbaden: Verlag für Sozialwissenschaften/GWV Fachverlage GmbH.
- Senatsverwaltung für Gesundheit, U. u. (kein Datum). *berlin.de*. Abgerufen am 22. 11 2009 von <http://www.berlin.de/sen/gesundheit/vorsorge/bevschutz/kritis.html>
- Shleifer, H. (2000). *Inefficient Markets: An Introduction to Behavioral Finance*. Oxford.
- Sinn, H.-W. (1980). *Ökonomische Entscheidungen bei Ungewißheit*. Tübingen: J.C.B. Mohr.

- Sportpark-Klagenfurt. (kein Datum). *Sportpark Klagenfurt GmbH*. Abgerufen am 22. 11 2009 von <http://www.woertherseestadion.at/>
- Sprenger, R. (2009). *Mythos Motivation*. Frankfurt/New York: Campus Verlag.
- Standards Australia. (2004). *AS/NZS 4360:2004 Risk Management*.
- Stöger, R. (2007). *Wirksames Projektmanagement (2. Auflage)*. Stuttgart: Schäffer-Poeschel.
- The Committee of the Spolnsoring Organizations. (2004). *COSO*. Jersey City.
- UEFA. (Juni 2007). Statuten. *Statuten der UEFA*. Nyon, Schweiz.
- Vanini, U. (Nr. 8-9 2005). Methoden der Risikoidentifikation. *WISU-Wirtschaftsstudium*, S. 1028-1032.
- Voigt, K.-I. (1992). *Strategische (Planung) und Unsicherheit*. Wiesbaden.
- Welters, K. (1989). Delphi-Technik. In N. Szyperski, & (Hrsg.), *Handwörterbuch der Planung (HwPlan)* (S. 262-269). Stuttgart.
- Wildemann, H. (2004). *Risikomanagement*. Abgerufen am 05. 12 2009 von <http://www.tcw.de/publications/view/139>.
- Willke, H. (2001). *Systemisches Wissensmanagement*. Stuttgart: Lucius & Lucius Verlagshandelsgesellschaft mbH.
- Zenger, G. (September 2006). Der fliegende Fußballfan. *Diplomarbeit*. Hamburg: Diplomica Verlag.

GENERAL ECONOMICS

ASPECTS OF DEVELOPMENT SPORT TOURISM IN ISTRIA

Zoran Jeremić, univ.spec.oec.¹, Đankarlo Milokanović, bac.oec.²

¹Visoka poslovna škola Višnjan, Croatia, jeremic_zoran@net.hr

²Visoka poslovna škola Višnjan, Croatia, d.milokanovic@manero.hr

ABSTRACT

Since the travelling motivated by sport and sports recreation has steadily been increasing, tourism and sport are considered complementary parts of the leisure industry. As regards guests staying in an area, sport and sports recreation have always been perceived as integral parts of the travel business. But in the last twenty years the role of sport and sports recreation in the destination selection has changed from being first a mere supporting facility and trip complementation to gradually becoming one of the key factors and motivations in the destination choice. Hence the role and the importance of sports tourism in the overall development of tourism are ever more pronounced, and there is a need for the study of tendencies and trends of this phenomenon. The role and importance of sport tourism in Istria as the Croatian most developing tourist region is more and more pronounced in the overall development of the tourism as well. Therefore, the aspects of the development of sport tourism in Istria should be taken into consideration. This article deals with all these facts and their impact on the tourism development.

JEL Classification: L83

Key words: sport tourism, sport recreation, motivation, tourist destination, Istria

1. INTRODUCTION

Tourism and sport are complementary parts of the leisure industry and therefore travel motivated by the engagement in sport and recreation has been constantly increasing. In tourist travel, sports and recreation have been always perceived as the stay of guests in a touristic area. But in the last twenty years sport and recreation have become one of the fundamental factors and motives while considering

a tourism destination. By studying the relationship between sport and tourism the focuses are directed toward describing and defining the travel related to sport activities; a broadly defined sports tourism involves travel outside the usual place of residence motivated by participating in various forms of recreation and sporting events, and visits to famous sports venues. Therefore, the role and the importance of sports tourism in Istria, the strongest Croatian tourism region, have a growing importance in the overall tourism industry. In the second part of this article there are given general facts about the relationship between tourism and sport, while in the third part there are processed general facts about tourism and sport tourism in Istria. The main results of this study are formulated in the last part of this work, i.e. in the conclusion.

2. GENERAL FACTS ABOUT SPORT TOURISM

For further discussion about sport tourism it is necessary to define the relationship between tourism and sport and to determine the definition of the sport tourism.

2.1. Relationship between tourism and sport

Since the ancient times, when the people travelled to the sporting events of that time, tourism and sport have been interconnected. Tourism and sport are two forms of interconnected activities (Bartoluci & Čavlek, 1998, 69). Of course, the role of sport and sports recreation in the destination selection has changed from being first a mere supporting facility and trip complementation to gradually become one of the key factors and motivations in the destination choice. Today's modern sports tourism has not only an observing function, because millions of athlete tourists are actively involved in dealing with various sports activities while travelling and staying in a receptive field. Thus, in modern times a new relationship and concept of tourism and sport is developed, that makes a selective type of tourism and that is sports tourism. Sport is a very important activity within tourism and tourism is one of the fundamental characteristics of sport (Weed, 2008, 44). A crucial role in this new relationship between tourism and sport have certainly played the changes in the socio-economic relations, as travel and sports became available to wide variety of people, while this approach has become a central way of life philosophy. Beside accepting that sport and travel could be available to anyone, the other key value of changing was that sport and travel become the central aspects of the people's lives. (Bull & Weed, 2004, 12). By studying the relationship between sport and tourism

the focuses are directed toward describing and defining the travel related to sport activities; a broadly defined sports tourism involves travel outside the usual place of residence motivated by participating in various forms of recreation and sporting events, and visits to famous sports venues. In accordance with that, the model of sports tourism can be explained from several points of view as for example being engaged in various sports activities as a center of interest or the analysis of economic and other impacts of sport tourism.

2.2. Definition of the sport tourism

Since the purpose of this article is to explain and prove the possibilities of the further development of the sport tourism in Istria, it is necessary to put into the focus the sports activities that the tourists deal with during the holiday and stay in a tourist destination. Therefore, the sports tourism must be considered and explained in terms of dealing with a variety of sports activities, because they are the essence of the phenomenon itself. The base model explanations of sports tourism is shown in the figure as follow:

Figure 1: Model of the sport tourism regarding sport activities of the sport tourist

SPORT TOURISM	
In the sports tourism individuals and/or groups of people travelling with the primary aim of active or passive participation in any competitive sports or recreational character. Sport is in fact the main motivation for travel and tourism element can enhance the overall travel experience.	
Hard definition of the sport tourism	Soft definition of the sport tourism
Passively or actively participate in competitive sporting event, for example, athletes are going to the Mediterranean Games or fans are going at a basketball game, etc.	Primarily active participation in sports and recreational activities, for example, skiing at Bjelolasica or playing tennis in Istria, etc.
„TOURISM SPORT“	
In “sport tourism” main activity is not sport but any other activity. Active or passive participation in sporting activities is in this case a secondary activity.	
Hard definition of the “tourism sport”	Soft definition of the “tourism sport”
Passive or active participation in sporting activities where this activity is a secondary activity that enriches the experience of travelling, for example, going on summer holiday with visiting the Umag Tennis tournament, etc.	The tourists are accidentally engaged in some form of sport or recreation, for example, going to the conference with a visit to a fitness centre, etc.

Source: adapted from Gammon, S. & Robinson, T.: Sport and tourism: A conceptual framework, Journal of Sport Tourism, 4(3), Routledge, Abingdon, 1997., pr. 8-24.

The model of the sport tourism is therefore made of two components - sports tourism and tourism sport. The main difference between those two components is that in the first component sport and sport activities are the primary activity, while in the second component sports and sporting activities are secondary activities during the holiday. Sports tourism can play an important role in the overall tourism industry of a country because of direct and indirect economic effects. The direct effects are reflected through the direct economic profit through rental or use of various sports facilities and equipment by the tourists, then through a variety of sports schools and organization of the sport tournaments and sporting events. From the standpoint of the development of sports tourism in Istria, indirect economic effects are also very interesting. They are following factors: motivation for the choice of tourist destination, extension of the tourist season, overcoming the seasonal nature of tourism, increasing the extra board consumption, improving the quality and diversity of tourist attractions, etc. (Bartoluci, 2007, 90-91). Indirect economic impacts of sports tourism, can greatly contribute to better effects and impacts of tourism. During the evaluation of the overall economic effects of sport tourism in a tourist destination should definitely take into consideration, because sport and recreation have become one of the main factors for the development of modern tourism, and tourist travels motivated by sport have been constantly increasing. Beyond this, sports-oriented tourists belong to the category of population with solid financial and economic basis, so they belong to the category of tourists with better purchasing power. As for those tourists sport is an integral part of life and life philosophy, the existence of adequate sports infrastructure and the possibility of practicing sport in particular tourism destination is one of the fundamental factors and motives for going on a tourist trip and select a particular tourist destination. The next characteristic of sports-oriented tourists is precisely that they often travel in pre and post season and more times in a year, so the development of sports tourism in a tourist destination can significantly affect the reduction of extreme seasonality of tourist arrivals. One of the distinct characteristics of a tourism demand is its seasonal character (Pirjavec, 1998, 74). It is believed that the motive of sport and recreation present during the post-season and therefore the presence of this offer in the tourist destination affect extension of tourist season finale in helping to alleviate the seasonal nature of tourism (Čavlek, 2011, 302). Finally, definition of sports tourism is that sports tourism is one of the selective forms of tourism, where the sport activities or visiting of the sports events are primary or secondary activities and the motive of the travel.

3. SPORT TOURISM IN ISTRIA

As the Croatian and Istrian tourism market is an integral part of the global tourism market, of course that the above trends and tendencies in a relationship between sport and tourism have a big impact on the functioning of the entire tourism industry in our country. Therefore, it is necessary to research influences of the sport tourism on the tourism in Istria generally.

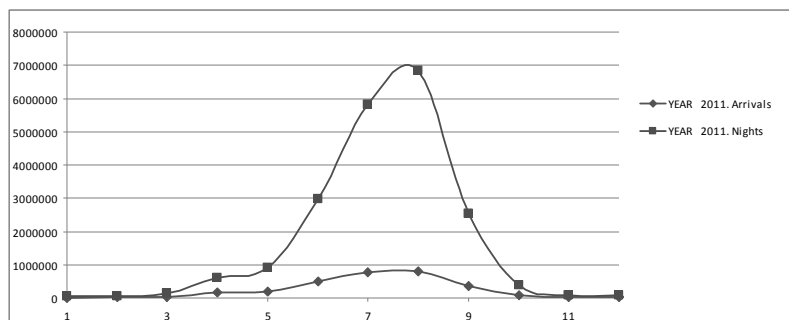
3.1. General settings of tourism in Istria as the base of the developing sport Tourism

Istria is the most developed and the most important tourist region in Croatia. From a total of 11.456.000 tourist arrivals recorded in Croatia in year 2011, Istria recorded 3.012.204 tourist arrivals, which amounts to 26.29% of the total number. Also, the number of tourist overnights in year 2011 in Croatia totaled 60.356.000 while Istria accomplished 20.646.728 stays overnight, which amounts to 34.20% of the total number (Državni zavod za statistiku¹ and Istria tourist board²,2012). The most important emissive touristic markets are German with share of 28,68 % (672.206 arrivals and 5.921.534 overnight), Slovenia 14,20 % (470.586 arrivals and 2.931.068 overnight), Austria 11,04 % (398.016 arrivals and 2.279.634 overnight) and Italian 10,56 % (413.432 arrivals and 2.180.032 overnight) of the total number of the tourist in Istria. The next important information about Istrian tourism is shown on the Graph 1 above and that is schedule of arrivals and overnight stays per months for year 2011.(Istria tourist board, 2012). The graph shows the greatest affliction of Istria tourism, which is too pronounced of seasonal tourist traffic because most of the tourist traffic is made in summer months July and August (52.30 % of tourist arrivals and 61,40 % of tourist overnight for year 2011).

¹ Source of data: <http://www.mint.hr/UserDocsImages/120209-turist-p2011.pdf> (10.02.2012.)

² Source of data: http://www.istra.hr/.app/upl_files/Istra_2011_1-12.pdf(10.02.2012.)

Graph 1: Schedule of arrivals and overnight stays per month in Istria for year 2011.



Source: made by authors

As already adduced the characteristic of sports-oriented tourists is precisely that they often travel in pre and post season, the development of sports tourism in Istria can therefore significantly affect the reduction of extreme seasonality of tourist arrivals.

3.2. Historical development of the sport tourism in Istria

The history of the development of sport tourism in Istria dates back to the period after the World War I, when the Brioni islands have developed into a fashionable tourist destination of those times. As part of this project, a golf course and polo field had been built, so that was the beginning of sports tourism in Istria. In relation to the pre-war period, golf and polo carried the Brioni guests from new markets, so the new guests come from the UK and the USA (Slamar, 2003.7). After the World War II a new era of the sports tourism in Istria has begun. In the sixties of the 20th century there started the development of tourism throughout all Istria, especially on the Western coast with the establishing of the major hotel companies. Parallel with the construction of hotels and resorts, there were built sports facilities for the tourists. An especially big progress was made in the seventies years when the large numbers of tennis courts were constructed, but also for the other sports arts. Today, Istria is a modern tourist destination which offers numerous opportunities for variety sport activities.

3.3. Development of the sport tourism in Istria – SWOT analysis

Based on the data from the Tourism Development Integrated Master Plan of Istria it is possible to present the following SWOT analysis of the development of golf tourism in Istria:

Strenghts S	Weaknesses W
<ul style="list-style-type: none"> • A favourable climate • Close of the main touristic emissive market • Long-standing tourist tradition • Sport tradition • Good security situation • Environmentally sound nature and the sea • Historical and Cultural Heritage • Geographic location 	<ul style="list-style-type: none"> • The quality of sporting infrastructure • Deficiency of staff • High indebtedness of tourism enterprises • Ratio of value for money • Poor entertainment • Hobby activities • Shopping offers • Seasonality of tourism
Opportunities O	Threats
<ul style="list-style-type: none"> • Extension of the tourist season • The political situation in the World • Improving the quality of the Istria tourist product • Improving the image of tourist destinations • Attracting a large number of sport tourists in the pre-and post season • Inability to train outdoor during the winter in emissive country 	<ul style="list-style-type: none"> • Recession in the emissive countries • Concurrent tourist destination • Tourism development lag • Loss of current regular guests • Loss of tourism image • Excessive construction capacity

Source: made by authors

Based on the results of the SWOT analysis, the conclusion is that Istria is a very suitable destination for sports tourism development. A competitive ability of tourist destinations on the world tourism market is being realized by integrating the sport offer in the development of tourist destinations. This will improve the quality of the service in the destination. According to the findings based on the development of sports tourism it can be concluded that the development of the various forms of tourism is of great significance for the overall development of tourism in Istria. The strategic management of the tourist destination Istria is responsible for further development and defining the destination on the world market. (Jeremić & Mešić, 2007, 121). Sport tourism should have an important role on the achievement of this aim.

3.4. Sport tourism possibilities in Istria

The mild Istria climate provides ideal conditions for the professional athletes and amateurs to practice nearly all events throughout the year, both indoors and outdoors.

Most important sport facilities in the sport tourism in Istria are:

- Football with lots of nature and some artificially football playgrounds. Many professional and amateur teams come for preparation in Istria.
- Tennis with more than 600 courts in Istria. One of the greatest sport events in Istria is ATP Croatian open in Umag.
- Cycling with 43 bike trails.³ Cycling Race OL ISTRIA MTB - Cannondale Parenzana attracts many local and foreign European cyclists and in 2004 Istria was the host of the two stages of the World famous race Giro d'Italia.
- Light athletics with the light athletics stadium in Pula and Poreč. Medulin is also very famous sport place for the light athletes. Istria offer many jogging and cross country tracks through the intact nature.
- Wellness, fitness centres, indoor and outdoor swimming pools are situated in every higher category hotel.
- Yachting with 14 nautical tourism harbours.⁴
- Handball with the most important centre for the preparation for handball teams in hotel Diamant in Poreč. One part of the Man World Championship played in Croatia in 2009 was played in Istria as well
- Diving with 27 diving centres.⁵ There are 23 shipwrecks as special attraction for the dives.
- Golf with new Championship golf course in Savudija and Old golf course of the Brioni islands. There are some other driving ranges in Istria.
- There are lots of possibilities for other sports and recreations arts such as: horseback riding, fishing, hunting, windsurfing, free climbing, mini golf, trekking, paragliding, hang gliding, caving, go-cart, etc.

³ Source of data: <http://www.istria-bike.com/en/biketrails> (15.02.2012.)

⁴ Source of data: <http://www.istra.hr/hr/atrakcije-i-aktivnosti/sport/ronjenje>(15.02.2012.)

⁵ Source of data: <http://www.istra.hr/hr/planiranje-planiranje/nautika> (15.02.2012.)

CONCLUSION:

The role of sport and sports recreation in world tourism has been changed from being first a mere supporting facility and trip complementation to gradually becoming one of the key factors and motivations in the destination choice. Therefore, the travelling motivated by sport and sports recreation has steadily been increasing and tourism and sport are considered complementary parts of the leisure industry. If you won't explore a possibility of the development of the sport tourism in one area it is necessary to put into the focus sports activities that deal with tourists during the holiday and the staying in a tourist destination. There are generally two types of connection between sport and tourism activities - sports tourism and tourism sport. In the first component sport and sport activities are the primary activity, while in the second component sports and sporting activities are the secondary activity during a holiday. Istria as the strongest Croatian tourism region has a long tradition in tourism and sport tourism. The research of the influences of the sport tourism on the tourism in Istria is based on the results of the SWOT analysis that shows that Istria is a very suitable destination for further development of the sport tourism and that will improve the quality of the Istrian tourist product. The mild Istria climate provides ideal condition for the professional athletes and amateurs to practice nearly all events throughout the year, both indoors and outdoors. Today, Istria is a modern tourist destination which offers tourists numerous opportunities for variety sport activities.

REFERENCE:

- Bartoluci, M. & Čavlek, N. (2007). *Turizam i sport – razvojni aspekti*, Školska knjiga, ISBN 978-953-0-30-32-3, Zagreb
- Bartoluci, M. & Čavlek, N. (1998). *Turizam i sport*, Fakultet za fizičku kulturu Sveučilišta u Zagrebu, Ekonomski fakultet Sveučilišta u Zagrebu, ISBN 953-6378-18-3, Zagreb
- Bull, C. & Weed, M. (2004). *Sports tourism: participants, policy and providers*, Elsevier Butterworth-Heinemann, ISBN 0-7506-5276-4, Oxford
- Čavlek, N. et al. (2011). *Turizam - ekonomske osnove i organizacijski sustavi*, Školska knjiga, ISBN 978-953-0-30391-1, Zagreb
- Gammon, S. & Robinson, T. (1997). *Sport and tourism: A conceptual framework*, *Journal of Sport Tourism*, 4(3), Routledge, ISSN 1477-5085, Abingdon

Jeremić,Z. & Mešić,A.(2007). Strategic management of the tourist destination Istria, Zbornik radova Interdisciplinary Management Research III, Barković, D. & Runzheimer, B. (ur), str. 112-122, ISBN 978-953-253-026-1, Poreč, 25-27.09.2006, Ekonomski fakultet u Osijeku & Hochschule Pforzheim University of Applied Sciences, Osijek

Pirjavec,B.(1998). Ekonomska obilježja turizma, Golden marketing, Zagreb

Slamar,D.(2003). Osamdeseta godišnjica prvog golf turnira na Brijunima, Tiskara Pula, Pula

Weed,M. (2008). Sport & Tourism: a reader, Routledge, ISBN 978-0-415-42687, Abingdon

<http://www.mint.hr/UserDocsImages/120209-turist-p2011.pdf>(10.02.2012.)

http://www.istra.hr/.app/upl_files/Istra_2011_1-12.pdf(10.02.2012.)

http://www.istria-bike.com/en/bike_trails (15.02.2012)

<http://www.istra.hr/hr/atrakcije-i-aktivnosti/sport/ronjenje> (15.02.2012)

<http://www.istra.hr/hr/planiranje-putovanja/nautika> (15.02.2012.)

ECONOMIC INDICATORS OF THE EUROPEAN UNION'S FIFTH ENLARGEMENT AS AN ENCOURAGEMENT FOR CROATIA

Vedran Lovrinčević, B.Sc.¹

¹PhD candidate on Faculty of Economics in Osijek, Croatia, vedran.lovrincevic@gmail.com

ABSTRACT

What can Croatia expect when it enters the community of 27 countries is the question which the paper aims to answer. How to approach the development of the economy so that selected economic indicators which are represented in the paper follow up the indicators in the countries of the fifth European Union (EU) enlargement. The fifth enlargement took place in two periods: in 2004, when Cyprus, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Malta, Poland, Slovakia and Slovenia became members and in 2007, when Bulgaria and Romania joined the EU. The aim of this paper is to present the analysis of selected indicators by synthesizing the research results as well as presenting an overview of Croatia's economic indicators and provide insight into the processes faced by the future members of the EU.

JEL Classification: O24

Keywords: EU fifth enlargement, EU trade policy, economic indicators

1. INTRODUCTION

The globalization process of expanding boundaries to ensure free trade of goods, services and capital is an on-going process. Opening own economy to international economic flows provides a great opportunity for expansion primarily in exporting businesses, but not until the country is really ready for opening its own market to global competitive environment. Europeization as a fundamental part of the globalization process represents an opportunity for Croatia to implement its own economy into world economic flows.

The European Community, which preceded the EU, was established in 1993 when the Treaty of Maastricht entered into force. Joining, *inter alia*, the established customs union which operates within the EU with no existing duties between member countries and the creation of a common trade policy towards third countries, belong to significant advantages of joining the community of EU countries¹. After theoretical considerations of trade policy, the paper presents the flow of trade between countries that became members of the EU in 2004 and 2007. Selected economic indicators like population, GDP, purchasing power and the unemployment rate will show the impact of membership in the EU. What happened with these indicators during years of membership - a closer analysis and observing the indicators will show. International trade as the totality of the exchange of resources between countries is an important factor in global business and the new global economy. Increased openness of different economies and cultures contributes to strengthening competitiveness and the pursuit of higher quality and greater trade

2. TRADE POLICY

The importance of international business can vary for several reasons such as taking advantage of cost differences, achieving the economy of scale and implementing protection of the domestic market.

According to Adam Smith, trade between the nations is based on absolute advantage. When one nation is more efficient than another in the production of one commodity but is less efficient than the other nation in producing a second commodity, then both nations can gain by each specializing in the production of the commodity of its absolute advantage and exchanging part of its output with the other nation for the commodity of its absolute disadvantage.²

After mercantilism, there was a growing awareness of the need for a liberal foreign trade and protectionism and interventionism as a type of trade policy. The basis of mercantilism were gold and silver, which represented a means of payment. Smith's theory of the absolute advantage and ability to manufacture certain products better than any other country in the world was opposed to the theory of mercantilism. Ricardo's theory of comparative advantage improved the Smith's theory by proposing that a country should engage in the most efficient production and purchase

¹ Jovanovic, M.N. : *International Handbook on the Economics of Integration*, Edward Elgar Publishing, Cheltenham Glos, 2011., page 304.

² Salvatore, D.: *International economics*, Fordham University, New Jersey, 2004., page 33

goods that other countries produce more efficiently. The Heckscher-Ohlin theorem of international trade studies the state of international trade when countries have the same amount of production factors, which enables a profitable exchange. Theories that followed were the Kravis's theory whose fundamental characteristic is the availability of goods that are traded, Linder's theory that foreign trade is primarily divided into primary and industrial products. The Vernon's product lifecycle theory should also be noted, which observes the foreign trade from the aspect of technological progress³. Probably the most widely used theory of international trade today is the Porter's theory of national competitive advantages which argues that competitive advantage will be greater if domestic demand is higher⁴. The basic principle of the internal European market is the principle of non-discrimination, which stems from Article 12 of The Treaty of Rome.

2.1. European Union's trade policy

The EU determines guidelines and policies in all sectors of the economy, civil society and foreign affairs. Members act together and in mutual respect by creating a variety of common policies such as CAP (Common Agriculture Policy), fisheries policy, energy policy, environmental and other guidelines. Promotion and establishment of easier trade between the EU and the rest of the world is one of the most important tasks of the European Commission (EC). According to The Treaty of Rome, the EC has the responsibility for negotiations regarding trade affairs on behalf of the member countries. EC is active in negotiations concerning the procedures and arrangements within the World Trade Organization (WTO) like expanding free trade or at least, reducing the high customs duties and tariffs as well as stimulating production of certain goods. Some of advantages of membership are standardized national legal regulations which lead to improved operations within the EU and encourage economic growth that provides a liberal open EU ready to invest in and protect its own production, and therefore, economy in general. Thesis that are against this kind of unified trade policy tend to elaborate on the fact that it is quite difficult to ensure uniform trade rules between different cultures and population's wealth if governments are trying to resist the changes and sometimes use their own policies. The spread of "economic" territory, which operates under

³ Baban, Lj., Marijanović, G. : Međunarodna ekonomija, Ekonomski fakultet u Osijeku, Osijek, 1998., page 1-87

⁴ Lazibat, T., Kolaković, M. : Međunarodno poslovanje u uvjetima globalizacije, Sinergija, Zagreb, 2004., page 28.

a common trade policy in the EU is established to strengthen its power outside the Community of 27 countries by ensuring growth of internal market and EU exporters which are encouraged to make themselves strong global trading partners⁵. When it comes to establishing quotas as quantitative import-export restrictions in foreign trade by the EU they are in fact an instrument which stabilizes the imbalance in external economic relations and as such can have a great impact in situations when there is no automatism between external and internal trade relations.⁶

When trading with third countries outside the EU there is a common foreign trade policy. Joint arrangements and policies are an integral part of the Common Commercial Policy (CCP). CCP is defined by standardized and uniform principles of trade policies of member countries as well as changes in tariffs and duties, trade agreements, trade liberalization measures, etc. The Union trade policy is determined and carried out by the Committee for Trade Policy (so-called Committee 133) which is actually an exponent of the Council of Europe.⁷ Each of the representatives from the member states within the Committee answers to, and is under the authority of ministers in their country of origin.

2.2. Trade balance of the Fifth enlargement

As said earlier, the fifth EU enlargement took place in two time periods, 2004 and 2007. Studying the EUROSTAT data, it is clear that Cyprus had an increase in trade deficit by 79% in 2004/2008. At first, the Czech Republic had a decrease in deficit by 41% in 2004/2005 then it increased in 2008 by two times comparing to 2005. Estonia did well when observing these parameters and made it to a surplus in 2008 of 333 mil.€ while the trade of Hungary oscillated through years and in 2008 did come back to the level of 2004. When observing the trade, Latvia had an increase in deficit until 2007 (by 30%) but also a decrease by 39% in 2008 and a surplus in 2009. Lithuania had an oscillation in trade balance in the period 2004-2008 therefore an increase in deficit by 120% in 2008 when compared to 2004. Malta had a surplus over the years and the figures from 2008 show that it managed to keep the trade balance around the level of 2004. Poland, on the other hand, initially had a decrease in trade deficit

⁵ Sbragia, A. : The EU, the US, and Trade Policy: Competitive Interdependence In the Management of Globalization, University of Pittsburgh , California, 2009. page 6.

⁶ Pertot, V.; Sabolović, D. : Međunarodna trgovinska politika, Narodne novine, Zagreb, 2004., page 173

⁷ Article 133. of Amsterdam Agreement (1999.)

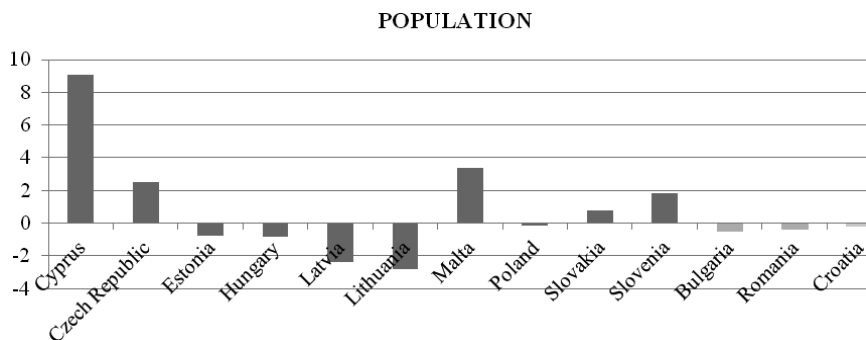
by 19% in 2005 compared to 2004 but in the 2004/2008 period in overall had an increase in deficit by 141%. Slovakia had an increase in deficit in 2004/2008 by 205% while Slovenia had a surplus over the years and the decrease in 2008 by 90% in comparison to 2004. Bulgaria and Romania had an increase in trade deficit in 2004/2008 by 141% and 78%, respectively.

The escalation of the economic recession in almost every country has resulted in reduction of trade deficit. Of all the countries that were part of the fifth enlargement of the EU only Malta has reduced the trade surplus by 74%. All other countries recorded a decrease in trade deficit, with Latvia facing the largest deficit reduction (by 112%) and Slovakia facing the minimum reduction of 33%. The presented decrease in trade deficit in the 2008/2009 period can be explained as having been caused (among other factors) by the effects of recession on observed economies. The main driving force of today's globalization is the free market system which has permeated all aspects of economic life of countries on a global level⁸.

3. RESEARCH RESULTS AND CROATIA OVERVIEW

Most of the countries of the fifth enlargement had a decrease in population. Highest decrease in population had Lithuania, followed by Latvia, Hungary and Estonia. Poland had a decrease until 2008 but in 2009 the population increased by 0.5%. The highest increase in population had Cyprus, followed by Malta, Czech Republic, Slovenia and Slovakia.

Chart 1 . : Population of the 5th enlargement countries and Croatia (in %)



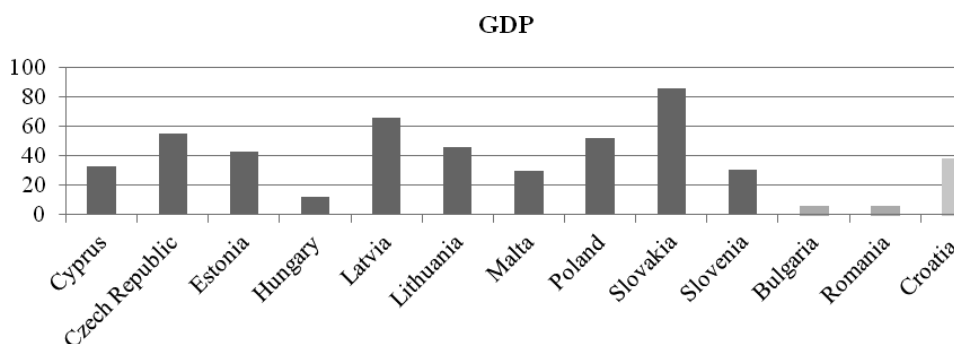
Source: Author's analysis of EUROSTAT data

⁸ Jovančević, R. : Ekonomski učinci globalizacije i Europska Unija, Mekron promet : Zagreb, 2005., page 1.

Bulgaria and Romania, being part of the second wave of the 5th enlargement naturally had lower decrease in population. Bulgaria had an increase of 0.44% in population while Romania had an increase of 0.31%. According to EUROSTAT, Croatia had a decrease in population through the observed period by 0.15%.

When observing changes in GDP, membership in the EU had positive impacts on the member's GDPs. The most striking change in GDP occurred in Slovakia (in 2004/2008 by 90% and in 2009, it decreased by 2%) with the overall increase of 92% during the observed period. Some of the highest increases in GDP were also experienced by the Czech Republic, Latvia and Poland by 55%, 66% and 52% respectively. The lowest increase of GDP during the observed period occurred in Hungary, by 12%.

Chart 2.: GDP of the 5th enlargement countries and Croatia (in %)



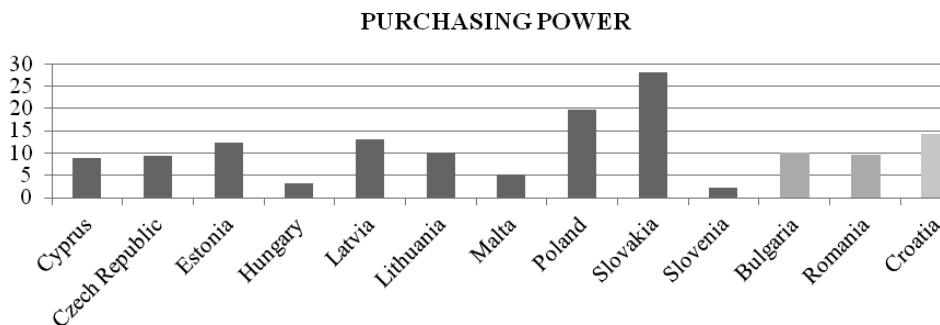
Source: Author's analysis of EUROSTAT data

Bulgaria and Romania, being part of the second wave of the enlargement, naturally did not have large increase in GDP like other countries that entered the EU in 2004, because these countries entered the EU in 2007 and therefore the observed time period is shorter. Bulgaria had an increase of GDP by 6% in 2007/2009 period and Romania had an increase by 6%. Croatia on the other hand, had an increase of GDP in the observed period by almost 40%.

Purchasing power had different impact on each country of the first stage of the 5th enlargement process. All countries had an increase in purchasing power compared to the EU average. The highest increase had Slovakia (28%) followed by Poland (20%) and Estonia (12%) while the lowest increase had Slovenia (2%), Hungary (3%) and Malta (5%). Other countries and their increase in purchasing

power are shown in the chart below. Croatia had an increase in purchasing power by slightly over 14%.

Chart 3. : Purchasing power of 5th enlargement countries and Croatia (in %)

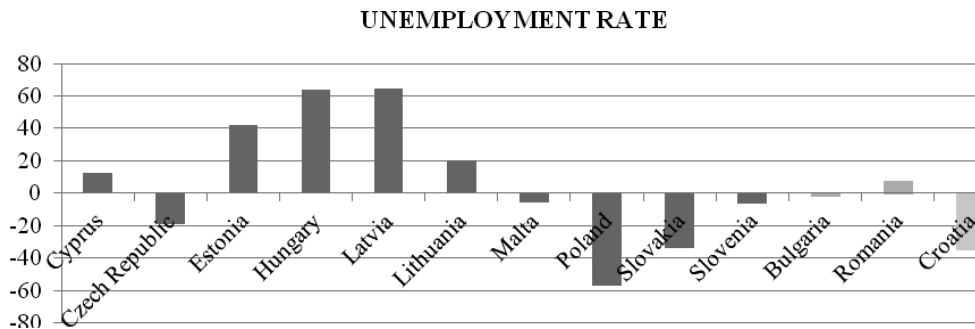


Source: Author's analysis of EUROSTAT data

In the second stage of the 5th enlargement, Bulgaria had an increase in the purchasing power as compared to the EU average by 10% and Romania had an increase by almost 10%

Due to the start of global recession in 2007/2008, unemployment rate had different impacts on the observed countries of the first stage of the 5th enlargement. Clearly, Poland has benefited from the membership in the EU the most by far. During the observed period, Poland had a decrease in the unemployment rate by almost 57%. The next two members that have greatly benefited from the membership are Poland and Slovakia (- 34%) and the Czech Republic (-19%). The highest increase in the unemployment rate had Latvia (+64%), Hungary (+64%) and Estonia (+42%).

Chart 4. : Unemployment rate of the 5th enlargement countries and Croatia (in %)



Source: Author's analysis of EUROSTAT data

When observing the second stage of the 5th enlargement, the employment rate in Bulgaria decreased by 1.5% and in Romania, it increased by 8% (7.8%). Through the observed period, Croatia had a decrease in the unemployment rate by 34%.

4. CONCLUSION

The globalization process is desirable in terms of opening national culture and economy to the international trade flows. The fact that the Regional Development Fund (RDF) within the EU represented 36% of the total EU budget (Delegation of the European Union to the Republic of Croatia) during the financial period 2007-2013, should not be ignored. The importance of regional development which can be observed as a successor of the globalization processes is important for national economies. One of the essential characteristics of the process of globalization is the growth in exports over the decades and its share in GDP. In 2004/2009 overall period there was a reduction in the deficit in trade balance (Extra/Intra trade) in some countries, while others recorded growth in deficit or reducing the surplus. Countries that registered a growth in deficit during the same period are: Cyprus (14%), Czech Republic (6%), Poland (59%) and Slovakia (105%), while Malta reduced its surplus by 75% and Slovenia by 86%. Hungary had a decrease in the deficit by 38%, Estonia and Latvia did manage to “go up” from deficit to the surplus in trade (increase by 167% and 110%, respectively). In 2007/2009 period, Bulgaria and Romania had an increase in trade deficit by 36% and 55%, respectively. When observing external trade in the 2004/2009 period, Croatia had an overall increase in the deficit by 11.4%.

Through the presented data Croatia's indicators have been “following” the ones of the 5th enlargement of the EU 5th enlargement countries in many ways. By EU-ROSTAT data Croatia did have a decrease in population by 0,15% what is still a lower decrease than Estonia, Hungary, Latvia and Lithuania had as countries of the first stage of 5th enlargement of the EU. Secondly, the increase of Croatia's GDP in the observed 2004/2009 period is higher than the one in countries of the second wave of the 5th enlargement (Bulgaria and Romania) but is also higher than the one from Cyprus, Hungary, Malta and Slovenia. It is interesting that when one observes the purchasing power it is clear that Croatia had lower increase only when comparing to Poland and Slovakia. When comparing to other countries of the 5th enlargement, Croatia had a higher increase in purchasing power. The most significant indicator in the Polish case refers to the unemployment rate which dropped

down from 19% in 2004 to 8% in 2009. That fact can be one of the pros for becoming a member of the EU. By the EUROSTAT data, Croatia had a decrease in the unemployment rate by 34% while Cyprus, Estonia, Hungary, Latvia, Lithuania and Romania had an increase in the unemployment rate.

Of course, there are many other factors and correlations that must be taken in consideration when analyzing various economic indicators and studying the benefits of the enlargement process for the candidate countries.

Consequently, looking at the economic indicators that must be accompanied by comprehensive structural reforms, Croatia will ensure its economic growth after joining the EU by paying enough attention to the production of goods intended for the common market and implementing an economic policy that will allow for the potential advantages of entering the Union to be used adequately for progress and development.

5. REFERENCES

- Baban, Lj., Marijanović, G., (1998). *Međunarodna ekonomija*, Ekonomski fakultet u Osijeku, Osijek.
- EEC, (1957.). *The Treaty of Rome*, Rome.
- EU-15, (1999.). *The Treaty of Amsterdam*, Amsterdam.
- Jovančević, R., (2005). *Ekonomski učinci globalizacije i Europska unija*, Mekron promet, Zagreb.
- Jovanovic, M.N., (2011). *International Handbook on the Economics of Integration*, Edward Elgar Publishing, Cheltenham Glos.
- Lazibat, T.; Kolaković, M., (2004). *Međunarodno poslovanje u uvjetima globalizacije*, Sinergija, Zagreb.
- Pertot, V.; Sabolović, D., (2004). *Međunarodna trgovinska politika*, Narodne novine, Zagreb.
- Ricardo, D., (1983). *Načela političke ekonomije*, CEKADE, Zagreb.
- Salvatore, D., (2004). *International economics*, Fordham University, New Jersey.
- Sbragia, A., (2009). *The EU, the US, and Trade Policy: Competitive Interdependence In the Management of Globalization*, University of Pittsburgh, Pittsburgh.

<http://epp.eurostat.ec.europa.eu/> (access: 05-23.06.2011.)

<http://www.delhrv.ec.europa.eu/?lang=hr> (access: 28.08.2011.)

MICROECONOMICS,
MACROECONOMICS
AND
MONETARY
ECONOMICS

MATURITY (MIS)MATCHING IN CURRENCY BOARD (LIKE) REGIMES

Sead KRESO, Ph.D.¹, Selena BEGOVIĆ, M.Sc.²

¹School of Economics and Business in Sarajevo, Bosnia and Herzegovina,
sead.kreso@efsa.unsa.ba

²School of Economics and Business in Sarajevo, Bosnia and Herzegovina,
selena.begovic@efsa.unsa.ba

ABSTRACT

The monetary-credit policy in Bosnia and Herzegovina functions according to the strict rules imposed by a currency board regime (CBR). The monetary-credit policy in Croatia does not have formal restrictions regarding the discretion of monetary policy (which are characteristic for countries with a CBR) and consequently has “more freedom” to influence the money supply and credit multiplication process. However, by comparing the structure of monetary institutions’ balance sheets in two countries and by calculating relevant coefficients it is evident that two countries have very similar monetary-credit dynamics. Accordingly, one may conclude that both countries de facto employ very rigid monetary-credit mechanisms. This paper also demonstrates that in both countries the problem of maturity mismatching between deposits and credits and inability to takeover the risk of maturity matching is evident. The maturity matching in the observed countries (which is essential for satisfying the time-structure of credit demand adequately) is possible only by money exchange with foreign markets. This approach is proved to be an expensive method for overcoming the maturity mismatching. By diversifying and developing the structure of local financial markets and institutions the maturity matching requirement could be achieved less costly.

JEL Classification: E51, E52

Key words: maturity (mis)matching, monetary multiplication, currency board regime, monetary-credit mechanism

INTRODUCTION

Bosnia and Herzegovina (BH) and Croatia are small, open, developing economies which are in the process of transition toward the market oriented economy, although, compared to BH, Croatia is on much higher development and income level¹. Relatively low income countries have higher needs for the (mostly long-term) investments, but usually lack necessary saving capacities. The war that “hit” the Western Balkan region in the early 1990’s lowered these capacities even more. However, after the war the whole region was intensively helped by the international community in the process of transition to the market economy and the processes of privatisation, market development, and liberalisation started. As a part of this processes foreign banks started opening their subsidiaries in the region. As of 2010, 89.9 percent of banking assets were majority foreign ownership and the five largest banks controlled 56.8 percent of the total assets of the banking sector in BH (CBBH, 2010a, p.79). The situation in Croatia is similar, with 90.3 percent of banking assets held by foreigners and six largest banks accounting for 82.1 percent of the total assets of all banks in 2010 (CNB, 2010, p. 54). In both countries the dominant banks are subsidiaries of the same (foreign) “mother” banks. Consequently, one may expect implementation of the same goals and policies through “daughter” banks in both countries, adjusted to the level of the economic development of the country. These banks have played a very important role in achieving the stability of BH’s and Croatia’s financial systems. They also contributed to the reduction in the average lending interest rates when they entered the markets. Specifically, foreign banks have increased competition in financial markets and together with a reform of the banking sector, and with the increase in lending and savings deposits, contributed to the decrease of interest rates. However, this now may be questionable since the local financial markets did not develop enough to encourage stronger competition amongst different financial institutions (banks still remain the major “players” in the financial markets in observed countries²). Therefore, these bank-dominated financial systems might function somehow in an oligopolistic way. Consequently, interest rates are still well above the interest rates in the euro-zone. Additionally, these high rates are, to a great extent, the result of the high country risk in the ob-

¹ GDP per capita in 1998 in BH was 1,433.72 USD (estimated), while in Croatia it was 4,804.42 USD. In 2010: in BH GDP per capita was 4,241.77 USD (estimated), while in Croatia it was 13,775.90 USD (estimated), (World Economic Outlook, WEO database, last accessed 15/03/2012).

² Banks hold 84.3 percent of total financial assets in BH (CBBH, 2010b, p.37) and 77.16 percent in Croatia (CNB, HANFA, 2009, as cited in Jakovčević, 2009, p.6)

served countries. According to the Standard and Poor's ratings in 2012 BH has "B/ Rating on watch negative" (rating was downgraded on November 30, 2011 from "B+/outlook negative"), while Croatia has BBB-/negative rating³. This inevitably leads to the higher level of interest rates through internationalisation of risk pricing into interest rate pricing calculation, even when loans are given from "mother" to "daughter" banks. These facts are essential for understanding the core issue of the maturity mismatch. For a country with relatively low income and high needs for investments the mismatch between the mostly short-term available resources and mostly long-term investment needs is likely to occur. On the other hand, monetary regimes in the observed countries are very rigid and impose strict rules which regulate the functioning of the financial sector. Consequently, countries that have rigid maturity matching requirements and un(der)developed financial system cannot overcome the observed disparity through the local financial markets.

MONETARY POLICIES' LIMITATIONS IN THE OBSERVED COUNTRIES AND THE MATURITY MISMATCHING PROBLEM – THE START UP ANALYSIS

One of the most important theoretical concepts of transmission mechanisms of the monetary policy is process of monetary and credit multiplication. After the introduction of modern paper/deposit/electronic money the importance and strength of this mechanism has extremely increased. However, monetary policies which function under the CBR or CBR-like have some restrictions. Namely, under a CBR, a country fixes its nominal exchange rate to some foreign currency and maintains 100 percent backing of its monetary base with the selected stable foreign currency. Moreover, the monetary authority cannot use the usual monetary policy instruments and is usually described as non-discretionary. BH's CBR deviates from the orthodox rules by using the reserve requirements as a policy instrument. After the war BH adopted a CBR which is still in use and which can be described as the strictest one which is currently in use⁴. Croatia, on the other hand, has discretionary monetary policy which can use monetary policy instruments and manage its

³ "B" is described as non-investment (speculative) credit rating with high credit risk, while "BBB-" is described as a medium credit rating with moderate credit risk (Bloomberg, Moody's Investors Service, Standard & Poor's, Mart 5, 2012, available from: <http://cbbh.ba/index.php?id=549&lang=en>, last accessed 15/03/2012).

⁴ According to this index of statutory pre-commitment calculated by Camilleri (2004) the CBA in BH is characterised as the strictest (index value of 0.93) amongst CBRs currently in use in Europe. This index includes (and assesses) seven different criteria regarding the CBR features which are associated with institutional, legal and political commitment.

exchange rate. However, since the monetary authority in Croatia focuses on the maintenance of the price and exchange rate stability the scope of monetary policy is rather limited (Baletić, 2011; Ivanov, 2011; Lovrinović and Čorić, 2011), but still more efficient than the BH's monetary policy, especially in the periods of crisis (see Appendix 1). Therefore, it is usually described as a CBR-like. Limitations under the CBR(-like) can be observed through regulation of monetary flows which are strongly related to the equivalent (or even higher) foreign reserves. As noted above, under the CBR the monetary authority is obliged to hold 100 percent coverage of the monetary base in the selected foreign currency. By analysing the ratio between foreign assets and monetary base it is evident that the Croatian National Bank (CNB), which is not formally restricted by the rigid CBR rules, has even higher coverage of its monetary base in foreign assets than BH⁵.

In order to establish (and maintain) the trust in the local currency and financial system, very rigid regulatory rules are imposed. Among a number of rules the emphasis is placed on the maturity transformation between the short-term deposits and long-term loans (this transformation is allowed to a very small extent⁶). Most deposits in transition countries, such as BH and Croatia, are short-term. On the other hand, in order to encourage development through investments, both BH and Croatia need long-term funds. As shown in Figures 1 and 2 this disparity is evident in the commercial banks' balance sheets. However, in the observed countries the financial markets are not developed enough to take over the need for transformation of short-term deposits into the required long-term loans. The transformation is further limited due to rigid rules regarding the maturity matching. Consequently, this disparity is overcome through the external financing (partially analysed by Gedeon and Đonlagić, 2009; Geodeon, 2010 and Kreso and Lazović-Pita, 2010). Namely, the excess short-term deposits are being transformed into the foreign currency and sent abroad, while long-term liabilities are withdrawn from abroad (mostly through "mother" banks). Due to rigid maturity matching requirements and un(der)developed local financial markets this "mother"- "daughter" relationship allows the

⁵ The foreign assets to monetary base ration range from 1.31 to 2.45 in Croatia and from 1.05 to 1.11 in BH, for a period 1999 - 2011; for more see Appendix 2.

⁶ In BH the entities' banking agencies pose strict regulations for maturity matching according to which 85% of resources with maturity up to 30 days must be involved in the loans with maturity up to 30 days, at least 80% of resources with maturity up to 90 days for loans with maturities up to 90 days, and at least 75% of resources with maturity up to 180 days in loans with maturity up to 180 days (until 2007 those regulations were even more rigid) (CBBH, 2009c).

increase of available funds, as well as monetary and credit multiplication in the observed countries. Accordingly, foreign banks overtake the maturity transformation risk for which they charge the interest spread (which will be discussed below). Additionally, the requirement, as well as excess, reserves held in central banks are also transformed into foreign assets and invested abroad (mostly in other countries' securities). Since both foreign assets and reserves are domestic commercial banks' resources (assets) held on accounts outside the country we observe them together against foreign liabilities (which are the sources from abroad). If we compare commercial banks foreign assets and reserves against foreign liabilities it can be seen that foreign liabilities were greater than the sum of foreign assets (FA) and reserves (R) until 1996 in Croatia and 2001 in Bosnia Herzegovina. Different year as a "turning point" in Croatia and BH is reasonable as the war was finished later and destructions were higher in BH than Croatia (see Figure 1a and 1b; pay attention on FA+R against FL, as well as on the net foreign assets, which will be discussed in the next subsection).

Figure 1a Croatia commercial banks' balance sheets (represented by the second and third bars) + total Croatia's net foreign assets (represented by the first bar) 1993-1996

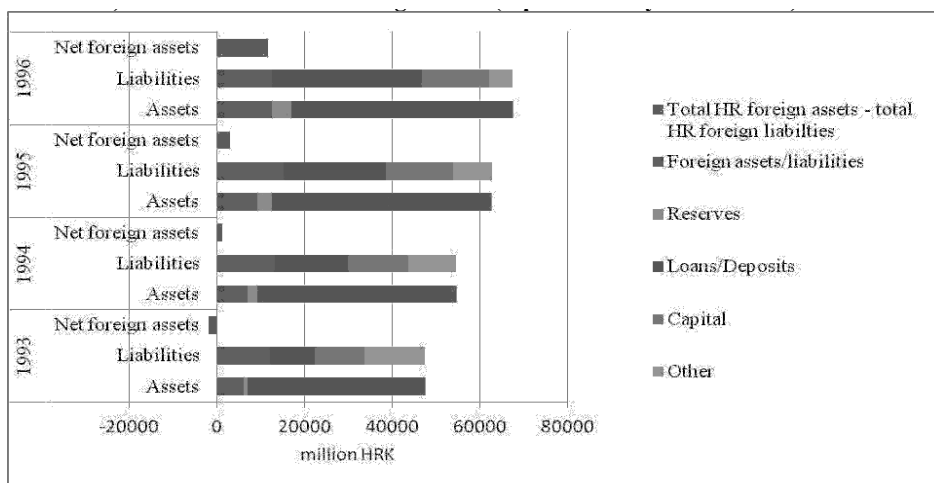
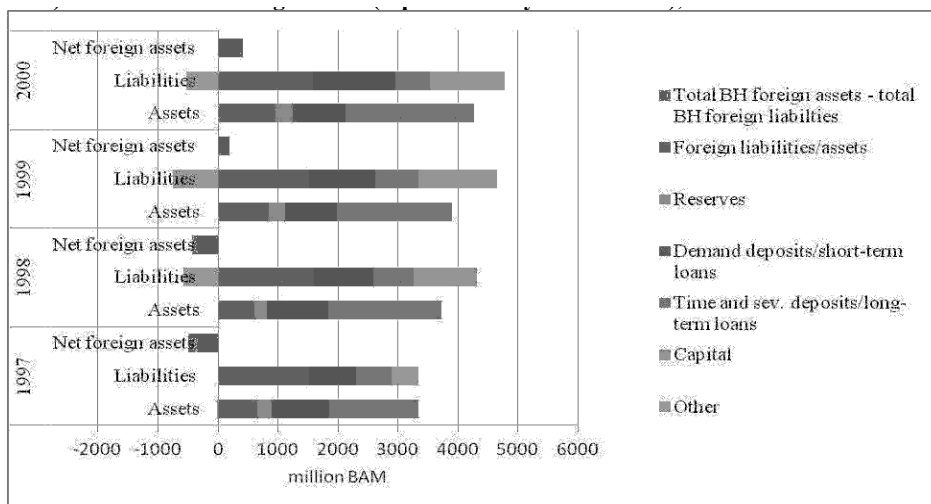


Figure 1b BH commercial banks' balance sheets (represented by the second and third bars) + total BH net foreign assets (represented by the first bar), 1997-2000



Source: Authors' figures based on the official data from the Croatia National Bank (CNB) and Central Bank of Bosnia and Herzegovina (CBBH) statistics

However, after these years, from the consolidated⁷ commercial banks' balance sheets, it can be noted that domestic banks have more assets abroad (foreign assets, FA + reserves, R) than the liabilities they receive from abroad (foreign liabilities, FL) (see Figures 2a, 2b).

⁷ For Croatia the data on short-term and long-term deposits and loans was not available from the consolidated balance sheets and therefore unconsolidated data is used (available from 1999). After comparing total deposits and loans from consolidated and unconsolidated balance sheets the deposits and loans are higher in consolidated than unconsolidated balance sheets. We noted these difference under the item „other“.

Figure 2a Croatia commercial banks' balance sheets + total Croatia's net foreign assets 2000-2010

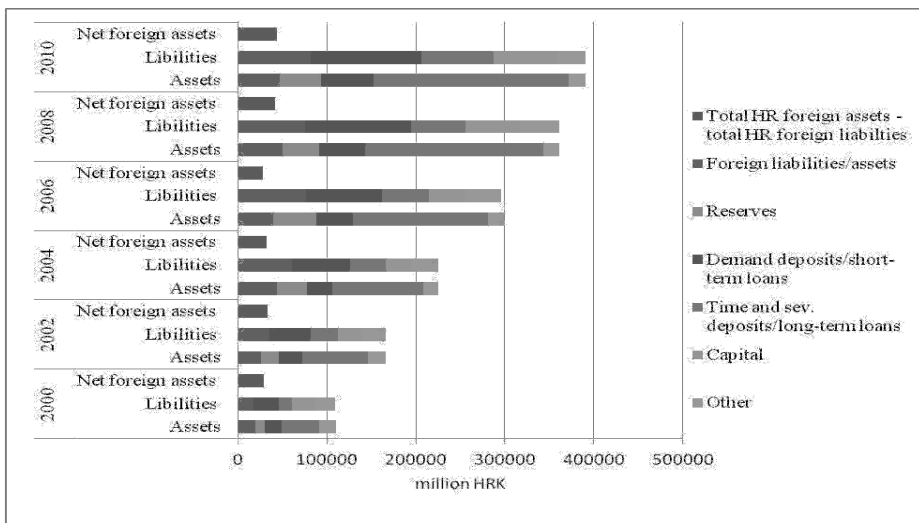
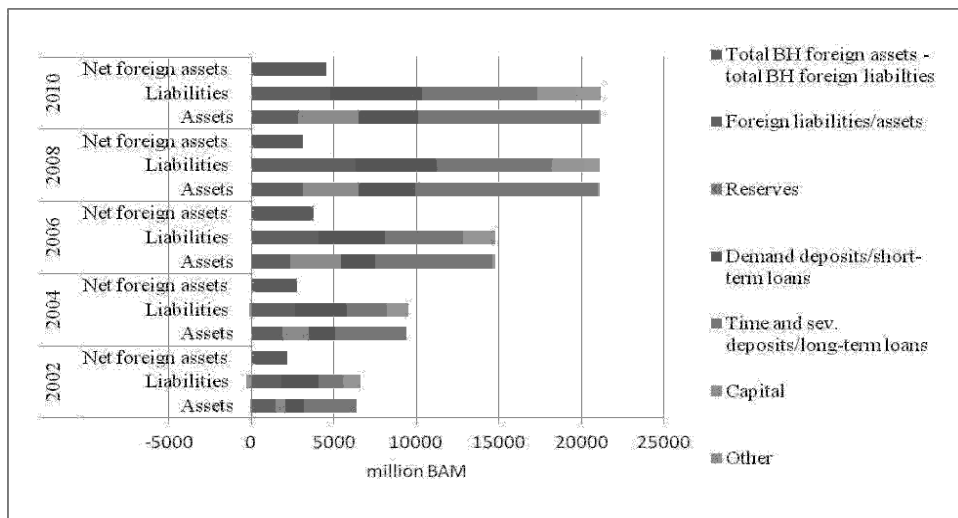


Figure 2b BH commercial banks' balance sheets + total BH net foreign assets, 2002-2010



Source: Authors' Figures based on the official data from the Croatia National Bank (CNB) and Central Bank of Bosnia and Herzegovina (CBBH) statistics

We may conclude that BH's and Croatia's commercial banks have more assets abroad compared to liabilities from abroad. However, by doing so these banks overcome the above mentioned maturity mismatch between deposits and loans. Through observing the foreign position of the commercial banks in BH it can be noted that more than 90 percent of the assets sent abroad (foreign assets) are short-term, while approximately 90 percent of the liabilities received from abroad (foreign liabilities) are long-term (data sent on request from the CBBH). Namely, by sending short-term assets abroad and receiving long-term liabilities foreign banks takeover the liquidity risk which is "paid" by the surplus/gap between sent (FA+R) and received liabilities (FL) and by paying the interest rate difference.

WHAT CAN FURTHER BE SEEN FROM THE MONETARY SURVEYS?

By analysing the countries' monetary surveys (aggregated central bank and other financial institutions' balance sheets) we showed that the CBR and CBR-like countries continuously, after the initial reconstruction phase, have positive (total) net foreign assets (NFA=TFA-TFL) (represented by the dark blue bar in the Figures 2 and 3). That is the additional price that these countries pay by investing the greater financial assets abroad as opposed to the financial liabilities received from abroad plus the interest rate difference. Although we do not have precise data on lending interest rate spread, in relations "daughter"- "mother"- "daughter" banks, based on data available we may envisage how large this spread is. Namely, in the best case scenario, the interest rates on Croatia's short-term deposits abroad range from 0.5 to 1 percent (before 2009 it ranged from 1.2 and 2.7 percent). This rate is approximated from the weighted average remuneration rate on immobilised funds in the "kuna" (Croatia's currency, HRK) and foreign currency (this rate for funds in foreign currency is 0 percent from 2009) (CNB, 2010, p.169). On the other hand, the interest rate that Croatian ("daughter") commercial banks pay on foreign liabilities is in the best case the one that Republic of Croatia pays for the loans by the Eurobonds on the EU market, which ranges between 6.5 and 6.9 percent (CNB, 2010, p.31). In BH this spread can be assumed to be similar; interest rate received for deposits given abroad is between 0.5 and 1 percent (we again used the remuneration rate on the requirement and excess reserves as a benchmark, see CBBH, 2011, p.7) while the interest rate that is paid for the foreign liabilities, according to our estimations,

is at least as high as in Croatia (since compared to Croatia, there is no currency risk in BH, but the country risk is higher)⁸.

Another essential observation is related to the relationship between the supply for and the demand of short-term funds, on one hand, and respected interest rates, on the other hand. Namely, if the supply of short-term funds is well above its demand (as is the case in both Croatia and BH) the short-term interest rate should fall. However, by depositing the short-term assets in the foreign markets their supply is being balanced with the demand, and on the other hand, though maturity transformation (by using foreign markets) the demand for long-term funds is satisfied as well. This maturity transformation is partially responsible for the high interest rate (especially for the short-term loans), which are not the result of the supply and demand for these loans on the domestic (Croatia's and BH's) market (for the interest rates on short-term and long-term loans in Croatia and BH see Appendix 3). This is, in a sense, satisfactory for the "daughter" and "mother" banks, but is not in the interest of the enterprises and households. This also suggests that the extra effort should be devoted to the rapid development of local financial markets and institutions which may increase competition and allow more efficient use of the funds within the countries⁹. The effectiveness of central bank and entire monetary system should grow with the development of financial system and with the depth of the structured finance, by transmission of the expansion effects from the financial markets to the real economy. In that sense the effectiveness of the available resources in the financial system should be increased through the higher efficacy of monetary multiplication process. In Figures 3a and 3b note the difference between the monetary multipliers m_1 (calculated as M_1/MB) and m_2 (calculated as M_2/MB) by countries. The multipliers turn out to be significantly higher in countries with more developed financial markets and institutional structures, and with more flexible monetary policies (Switzerland and Czech vs. Western Balkan countries).

⁸ This is also verified in the interviews with highly positioned managers in the CBBH and commercial banks

⁹ Financial markets are, to some (although still relatively low) extent, developed in Croatia, while in BH they are undeveloped (for the thorough analysis of the needs and potential benefits of the development of BH's money market see Čaušević, 2005).

Figure 3a: m1 multiplier by countries

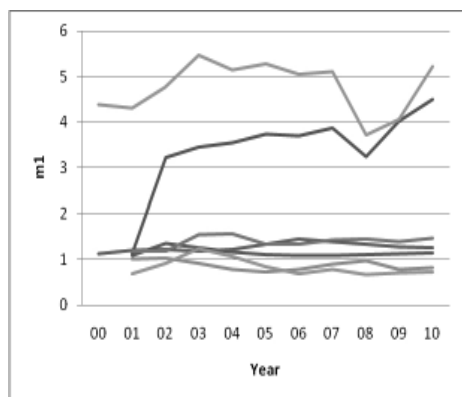
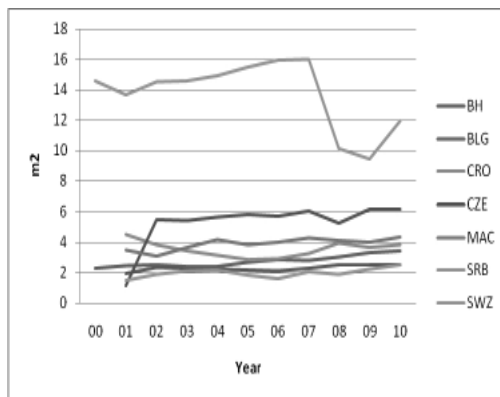


Figure 3a: m2 multiplier by countries



Source: Authors' Figures based on the official data from the World Economic Outlook database (WEO)

Although in Croatia financial markets and institutional structure are far more developed than in Bosnia and Herzegovina and its monetary policy has more flexibility than in BH the monetary-credit dynamics in Croatia are still well below more developed EU countries (as can be seen from Figures 3a and 3b).

CONCLUSIONS AND RECOMMENDATIONS

In this paper we showed that both BH and Croatia implement very rigid monetary policy framework, even though the formal regime is more flexible in Croatia than BH. Namely, both countries have over 100 percent coverage of their monetary base in foreign reserves and both countries have limited scope in using the monetary policy instruments. Accordingly, one may conclude that both countries de facto employ very rigid monetary-credit mechanisms. The paper also demonstrates that in both countries the problem of maturity mismatching between deposits and credits and inability to takeover the risk of maturity matching is evident. However, due to strict maturity matching requirements between deposits and loans and due to underdeveloped local financial markets the time-structure of credit demand is satisfied through foreign markets. This ability to deposit short-term assets abroad and to withdraw the long-term liabilities from abroad allows additional increase of the monetary and credit multiplication. This approach is proved to be an expensive method of overcoming the maturity mismatching since the total assets sent abroad (foreign assets of central bank and all financial institution) are much higher than liabilities received from abroad. Furthermore, the interest rate spread between the

foreign assets and foreign liabilities is high. By diversifying and developing the structure of local financial markets and institutions the maturity matching requirement could be satisfied less costly. Firstly, there would be no country risk costs by employing domestic funds at the local financial markets and consequently interest rates would be lower. Secondly, the competition for investing the short-term assets would be much higher which should additionally lower the interest rates. Namely, under the condition of liquid markets, companies and households would buy government and corporate bonds, treasury bills and commercial papers, potentially earning more compared to depositing money in the banks. This would increase the competition with respect to the banking sector which is currently the pre-dominant place for investing and borrowing in the observed countries.

REFERENCES

- Baletić, Z. (2011) Monetarna politika ekonomskog rasta i zaposlenosti, Novai i ekonomiski rast, in Jakovčević et al. (eds.) *Monetarna politika ekonomskog rasta i zaposlenosti*, Economic Faculty Zagreb 2011
- Camilleri, M. (2004) An Institutional Framework for Comparing Emerging Market Currency Boards, *IMF Working Paper* No. 180
- CBBH (2009) *Quarterly Bulletin 4 2009*, Sarajevo: Central Bank of Bosnia and Herzegovina (CBBH)
- CBBH (2010a) *Annual Report 2010* Sarajevo: Central Bank of Bosnia and Herzegovina (CBBH)
- CBBH (2010b) *Financial Stability Report 2010* Sarajevo: Central Bank of Bosnia and Herzegovina (CBBH)
- CBBH (2011) *Condensed Financial Statements 2011* Sarajevo: Central Bank of Bosnia and Herzegovina (CBBH)
- Čaušević, F. (2005) *Razvoj tržišta novca u BiH*, Sarajevo: Economic Institute Sarajevo
- CNB (2010) *Annual Report 2010*, Croatia: Croatian National Bank (CNB)
- CNB (2012) *Bulletin January 2012*, Croatia: Croatian National Bank (CNB)

Gedeon, S. (2009) The Political Economy of Currency Boards: Case of Bosnia and Herzegovina, *South Easter European Journal of Economics and Business*, 5(2): 7-20

Gedeon, S. and Džonlagić, Dz. (2009) Monetary Policy in Bosnia and Herzegovina Under the Currency Board Regime, *Eastern European Economics*, 47(2): 21-36

Ivanov, M. (2011) Zamke Eksterne Financijske Liberalizacije – Pogled iz Perspektive monetarnog sustava i modela privređivanja u Hrvatskoj, *Ekonomija/Economics* 18(3): 579-608, available on: www.rifin.com (last accessed: 15/03/2012)

Jakovčević, D. (2009) Utjecaj krize na hrvatski osigurateljni sector, published on the *International Symposium: Osiguranje i globalna financijska kriza*, Zlatibor, Srbija

Kreso, S. and Lazović-Pita, L. (2010) Why are Banks in Bosnia and Herzegovina Permanently Holding an Excess of Reserves?, *paper presented on the Odisay Conference, Croatia*

Lovrinović, I. and Čorić, T (2011) Monetarna pozicija Republike Hrvatske u procesu prilagodbe tečajnom mehanizmu ERM 2, *Ekonomija/Economics*, 18 (3): 647-676, available on: www.rifin.com (last accessed: 15/03/2012)

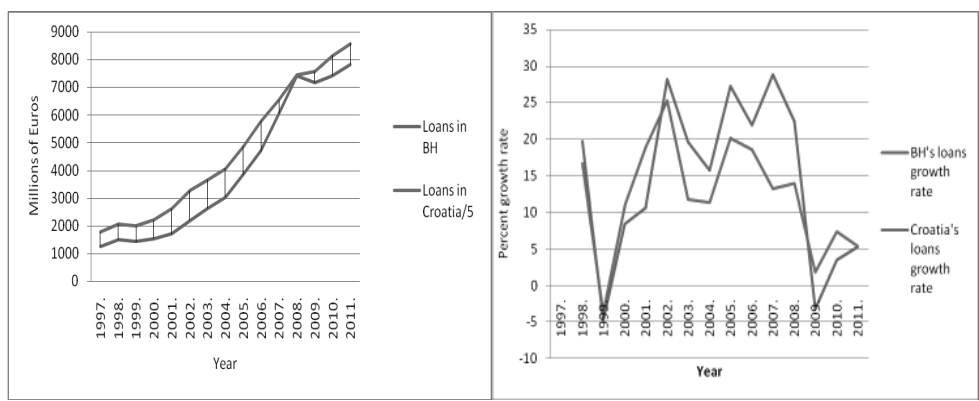
World Economic Outlook database,

http://esds80.mcc.ac.uk/wds_weo/ReportFolders/reportFolders.aspx, last accessed: 15/03/2012

Appendix 1. Loans growth rates in BH and Croatia, with emphasis on the period of global financial crisis

Even though Croatia has almost as rigid monetary policy as BH it is showed that higher level of development of financial market and economy in general and more flexible monetary policy regime (CBR-like vs CBR) enables better responsiveness of monetary policy in periods of crisis. Even though both countries showed great resistance to spreading the panics in period of crisis and high trust in the local currency and financial system stability it is evident from Figures 4a and 4b that Croatia has higher ability of monetary authority to react in the periods of crisis than BH. Regarding the supply of the economy and households with needed loans the restrictions seems lower in Croatia, when the global financial crisis “hit”.

Figure 4a: Loans growth rate in BH **Figure 4b: Comparison between the loans in and Croatia BH and Croatia***



Source: Authors' Figures based on the official data from the Croatia National Bank (CNB) and Central Bank of Bosnia and Herzegovina (CBBH) statistics; *Note: On Figure 4b loans in Croatia are divided by 5

Appendix 2

Table 1. The ratio between central banks' foreign assets and monetary base

Year	FA CBBH/MB	FA CNB/MB
1999	1.05	2.24
2000	1.07	2.45
2001	1.08	2.21
2002	1.08	1.83
2003	1.08	1.64
2004	1.08	1.46
2005	1.07	1.36
2006	1.08	1.38
2007	1.08	1.31
2008	1.11	1.34
2009	1.10	1.35
2010	1.10	1.40
2011	1.10	1.43

Source: CBBH and CNB statistics

Appendix 3

Table 2a. Interest rates on short-term and long-term loans in Croatia

Year	INTEREST RATES ON KUNA (HRK) CREDITS NOT INDEXED TO FOREIGN CURRENCY				INTEREST RATES ON KUNA (HRK) CREDITS INDEXED TO FOREIGN CURRENCY							
	On short-term credits		On long-term credits		On short-term credits		On long-term credits					
	Total average	Enterprises	households	Total average	Enterprises	households	Total average	Enterprises	Households			
1998	16.22	14.89	20.77	11.73	11.48	13.16	14.28	14.25	13.64	11.15	10.55	12.12
1999	13.52	10.55	20.83	15.14	15.31	14.16	13.66	13.54	17.21	10.81	10.46	11.65
2000	10.45	6.81	20.3	9.9	9.64	12.97	11.17	11.1	13.59	10.52	9.41	11.64
2001	9.49	5.43	18.81	11.42	10.06	13.14	9.45	9.45	11.3	9.2	7.52	10.79
2002	11.24	7.44	15.16	7.32	6.48	7.88	9.34	8.72	11.37	7.98	6.37	9.5
2003	11.8	8.02	14.89	8.51	6.14	10.69	7.21	7	8.66	7.03	5.76	8.04
2004	11.71	8.33	14.19	9.31	6.9	11.16	7.25	7.09	8.47	6.77	5.55	7.73
2005	9.99	7.71	11.26	8.75	6.48	10.35	6.52	6.34	7.91	6.07	5.18	6.98
2006	9.37	6.75	11.84	7.53	5.86	9.44	6.56	6.29	8.33	6.22	6.21	6.22
2007	9.74	7.39	12.34	7.5	6.66	8.01	6.86	6.86	6.84	6.66	6.51	6.8
2008	10.89	8.98	12.33	9.05	8.1	10.35	8.2	8.18	8.65	7.43	6.92	7.89
2009	11.22	9.29	12.68	9.77	8.27	11.33	8.48	8.41	10.23	8.11	7.31	9.02
2010	10.05	6.98	12.64	8.38	6.45	11.29	7.95	7.91	8.86	7.67	7.19	8.16

Source: CNB, 2012, p. 38, 39

Table 2b. Interest rates on short-term and long-term loans in BH

	INTEREST RATES ON LOANS IN KM (BAM) NOT INDEXED TO FOREIGN CURRENCY				INTEREST RATES ON KM (BAM) LOANS INDEXED TO FOREIGN CURR. (EUR)			
	Short-term		Long-term		Short-term		Long-term	
Year	Private enterprises and cooperatives	Households	Private enterprises and cooperatives	Households	Private enterprises and cooperatives	Households	Private enterprises and cooperatives	Households
2002	12.07	...	10.59	...	...	...	...	...
2003	10.54	...	9.18	...	...	...	...	...
2004	9.92	9.78	8.23	10.78	...	...	...	...
2005	9.03	9.32	7.69	9.91	...	...	...	...
2006	7.66	9.55	7.39	9.34	...	...	...	...
2007	7.03	10.54	7.1	9.97	7.8	10.06	7.83	8.42
2008	7.42	9.14	7.16	11.09	8.93	9.88	8.55	10.2
2009	8.1	9.88	6.8	7.87	8.62	9.81	7.74	9.56
2010	7.84	9.67	8.25	9.1	8.15	9.51	7.84	8.7
2011	7.18	9.71	7.48	8.49	7.61	9.21	7.48	8.53

Source: CBBH, official statistics, available on-line:

http://www.cbbh.ba/index.php?id=33&lang=en&sub=mon&table=aktivne_kamatne_stope_komercijalnih_banaka (last accessed: 15/03/2012)

ANALYSIS OF THE ECONOMIC GROWTH IN SELECTED EUROPEAN TRANSITION COUNTRIES

Damir Štokovac, univ.spec.oec
Visoka poslovna škola Višnjan
damirstokovac@hotmail.com

ABSTRACT

Economic growth are the first aim of the economic policy in sovereign countries. Economic policy spends most of the time in searching the means and instruments to realize high growth rates and maintain macroeconomic stability. Increased interest into analysis of economic growth can be seen from mid 80-ies of last century. On a world scale economic growth started slowing down in the first half of the 70-ies and continued during the 80-ies, with a slight improvement of the standard of living in industrially developed countries, whilst a large number of poor countries experienced stagnation. That experience, followed by a few examples in Asian countries which achieved a spectacular economic growth, encouraged economists to pay attention again to the analysis of the economic growth and to the research of factors influencing that growth. The problem of the economic growth becomes particularly actual in moments of recession and economic crises, as nowadays. The beginning of the new millennium, namely, brought another recession to the world economy and put the question on the economic growth again in the centre of interests of economic researches. The economic growth in the long run represents the synergy of numerous determinants, such as labor, capital, natural resources, technology, human resources, innovation, research and development, trade openness and etc. What measures of economic policy improve the economic growth? Why some countries are technologically advanced, while others constantly stagnate at the low level of income? These are central questions of the macroeconomic research of the long term economic growth, which fall into one of the most interesting part of economic sciences. Although the interest for the economic growth phenomena present for centuries in the economic theory and practice, is still not uniformly accept scientific attitude why some countries develop slowly and some quickly, nor are the key determinants for rapid economic development for a given national economy. Low economic growth and stagnation in former socialist European countries in the nineties of the last century made those countries take the transition way towards democracy and market economy. This paper will attempt

to identify some determinants which were of strategic importance for economic growth in selected transition economies: Czech Republic, Slovakia, Hungary, Poland, Slovenia, Estonia, Latvia, Lithuania, Bulgaria. We will chose from the pool of traditional and non-traditional determinants in the literature, and based on the availability of relevant indicators, we will try to estimate relationship between the growth rate of GDP, number of unemployment, FDI, external debt, budget deficit, trade openness and export per capita and inflation. After the theoretical review of the economic growth presented through historical reflection, we proceed with the analysis of some relevant determinants for economic growth in the above-said countries. Assessment of the current model of economic growth for selected European countries in transition will be made using quantitative methods of regression analysis (panel method), but for the two subperiods (1991.-2000. and 2001.-2009.) Based on obtained results, we will try to find the determinants, which are of strategic importance for economic growth in selected transition economies. According to the obtained results in the paper will be proposed measures necessary to implement the economic policy to accelerate the economic growth and maintain the macroeconomic astability in mentioned countries. Conclusion reflections will be presented in the last part of paper.

JEL Classification: O47

Key words: determinants of the economic growth, European transition countries, export, foreign direct investment (FDI)

1. INTRODUCTION

Low economic growth and stagnation in former socialist European countries in the nineties of the last century made those countries take the transition way towards democracy and market economy. This paper will attempt to identify some determinants which were of strategic importance for economic growth in selected transition economies: Czech Republic, Slovakia, Hungary, Poland, Slovenia, Estonia, Latvia, Lithuania, Bulgaria. We will chose from the pool of traditional and non-traditional determinants in the literature, and based on the availability of relevant indicators, we will try to estimate relationship between the growth rate of GDP, number of unemployment, FDI, external debt, budget deficit, trade openness and export per capita and inflation. After the theoretical review of the economic growth presented through historical reflection, we proceed with the analysis of some relevant determinants for economic growth in the above-said countries. As-

assessment of the current model of economic growth for selected European countries in transition will be made using quantitative methods of regression analysis (panel method), but for the two subperiods (1991.-2000. and 2001.-2009.) Based on obtained results, we will try to find the determinants, which are of strategic importance for economic growth in selected transition economies. According to the obtained results in the paper will be proposed measures necessary to implement the economic policy to accelerate the economic growth and maintain the macroeconomic stability in mentioned countries. Conclusion reflections will be presented in the last part of paper.

2. THEORY OF THE ECONOMIC GROWTH THROUGH HISTORY

The historical survey of economic growth starts with the Smith's classical theory of growth, continues with Harrod-Domar's model, goes through the neo-classical theory of growth (Solow) to reach the new (endogenous) theories of the economic growth.

Although seldom connected to the theories of economic growth, Adam Smith is among the first economists that elaborated the growth theory into details. His work *the Wealth of Nations* is the proof of an extraordinary knowledge of the mechanism of economic growth, which Smith considered to be an "integral" process at the microlevel (enterprise) and macrolevel (country). He thought that the economic growth is not conditioned just by the accumulation of capital, human capital, technology, soil, labour, export, but by the totality of those factors simultaneously. Besides the possibilities given by volume economies and specialization, Smith recognized also the importance of international exchange and free trade as engine of economic growth („*An Engine of Growth*“), (Smith,1776).

The following contributions to the theory of growth come from (Harrod,1939; Domar,1946) who, independently from one another, starting from different positions, came to the same conclusions, precisely at the turn of the 30-ies and the 40-ies of the 20th century. In the Harrod-Domar's model of growth, the growth rate of the economy is the function of relationship between the savings rate and the capital coefficient (relationship of capital and output). The implicit assumption of the Harrod-Domar's model of growth is that there are no decreasing or increasing return on capital, namely that the marginal return on capital is constant and equal to the mean return on capital.

In the 50-ies of last century, the neo-classical theory of growth was created by Robert M. Solow (Nobel Prize winner in 1987). It is also called the neo-classical model of growth or Solow's growth model. Using simple functional forms and simplified assumptions, Solow pointed at three elements that should be considered when speaking of growth: technology, capital and labour. R. Solow, using his own analysis method, came to the conclusion: less than half of productivity increase in the USA, both per inhabitant and per real rental fee can be ascribed to the increase of capital itself. Much more than half of productivity increase should be ascribed to technical changes – scientific progress, industrial improvement (*know-how*) and knowledge on managing methods and education of labourers. It means that more than one half of production increase – as recorded by statistics through history – comes from scientific progress more than from savings and accumulation (Solow, 1956).

After the neo-classical theory of growth, almost nothing important happened in the economy of growth until mid 80-ies, and than, pieces of works that followed the doctoral dissertation of Paul Romer at the University of Chicago in 1983, a lot has changed, both in theory and in empirical analysis of long-range economic growth, also new theories were developed, nowadays called "*theories of endogenous growth*". New theories of growth are connected to the names of P.M. Romer, R. E. Lucas, E. Helpman and G. Grossmann, who start from the assumption that single decision-makers learn rationally not adaptively. That means that they do not change their behaviour gradually, reacting to new information or different circumstances, but they learn new rules quickly and discontinuously. It is assumed that people in decision-making are turned towards future, expectations, not towards history, experience (Romer, 1986.; Lucas, 1988.).

The newest researches on the economic growth limits (Gerlagha R. & Keyzerb, M. A, 2001) are directed towards the improvement of individuals' creativity and their capacity to team up and achieve their ideas, and by doing so they are likely to maintain a continuous economic growth in the developed countries and an accelerated growth in the poor countries.

3. ECONOMIC GROWTH'S ANALYSIS OF THE SELECTED EUROPEAN TRANSITION COUNTRIES IN THE PERIOD 1991-2009

Under the name of transition countries it is meant the former socialist countries in the European territory that are moving from socialist and methodically

organised production to capitalist and market-oriented production. That unique historical event is named *process of transition*. Aside from complexity and multi-dimensionality that, along with economic changes directed to market economy, imply also changes in political, institutional and social functioning of those countries, the analysis of the *transition process* is complicated by the fact that in certain countries it is still ongoing¹. By foundation or by claiming their independence, the transition countries have all started building institutions that should guarantee the macroeconomic stability and the functioning of the market economy. They have significantly liberalized prices and foreign trade, as well as restructured and privatized economies at different ranges. However, the transition countries each differ in many ways. They differed at the beginning of the transformation process, but the ways that have brought to economic growth and development are significantly different. The two most famous transitional strategies are: shock therapy that implied the introduction of market economy elements all at once, and the gradual approach and gradual transition to market economy. The results of the two strategies can not be generally monitored because each of them shows both positive and negative examples. In the economic area, the first decade of transition was characterized by a sharp drop of the total economic activity, which has been stopped so far in all the countries, while some of them have already achieved a multi-year economic growth. All the transition countries have built institutions that should guarantee the functioning of the market economy. They have also liberalized prices and foreign trade, as well as restructured and privatized economies at different ranges. However, the transition countries each differ in many ways. They differed at the beginning of the transition process, but very different were also their paths of development. The depth of the crisis and the activity decrease at the beginning of the transition process, along with the speed of its subsequent recovery were also different. The crisis was, on average, deeper in the former Soviet Union. In those countries the recovery was slower than that in the Central and Eastern Europe countries.

It can be generally stated that one part of the transition countries managed to achieve macroeconomic stability and the increase in total economic activity, while other countries are still coping with inflation and occasional episodes of returning negative growth rates. It seems, namely, that the transitional factors, such as *struc-*

¹ EU members countries (except Bulgaria and Romania) are considered the former transition countries because they have completed the transition process, but hereafter it will be used the term *transition countries* for all the analysed countries in order to simplify it.

tural reforms, macroeconomic stability and initial conditions (Mervar, A., 2002) that have mainly determined economic movements in the initial stage of transition - at least for the most developed countries - start to lose their importance, whilst the so-called classic growth factors, which were discussed in the theoretical part of the dissertation, are strengthening. It should also be noted that this chapter does not analyse the individual experiences of transition economies, but try to draw a lesson from the entire transitional experience. A more detailed analysis would require an extensive introduction to the economic experiences in each country, which is not subject to that chapter. Analysis of economic growth of the selected transition countries is divided into two sub-divisions: 1991-2000 and 2001-2009, because different variables were significant for each sub-divisions and with such division regression models are more reliable and relevant. In the first research models were divided into the period before accession and after accession to EU of the transition countries, but that did not give satisfactory results and it was decided to divide the period before and after the year 2000, which was taken as the year of exit of most transition countries from transitional crisis. The models are multiple linear, using in this case the panel method because of the large number of countries, while some variables are expressed *per capita* due to different size of countries and number of residents who live in them. In the analyses are involved the following countries: Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Hungary, Romania, Poland, Slovenia and Slovakia. They have successfully come out of the transitional process for joining the integration process in Europe.

The analysis begins with the first period 1991-2000, and it is evaluated the following regression equation:

$$\text{Real GDP growth rate} = \beta_0 + \beta_1 \text{inflation} + \beta_2 \text{budget deficit} + \beta_3 \text{export per capita} + \beta_4 \text{current accounts} + \beta_5 \text{foreign direct investment per capita}$$

The evaluated function is obtained based on a sample of five independent variables: inflation, budget deficit, foreign direct investment, merchandise export *per capita* and current account balance with their correspondent parameters (coefficients). Standard error of parameter is given in table 1 beside the rated coefficient showing that the parameters β are available. In accordance with the theoretical setups, in this case as well as in the analysis of the Croatian model of economic growth, it is assumed that inflation has a negative influence on economic growth and is expected the coefficient β_1 to be negative. It is also expected the budget defi-

cit coefficient β_2 to be negative because higher long-term budget deficit has a negative impact on economic growth. Merchandise export *per capita* as a determinant of long-term economic growth should have a positive influence and the coefficient β_3 is expected accordingly to be positive. A balanced balance of payments, in particular the balance of current transactions should have positive impact on economic growth in each country. If the current account balance is positive, it is expected that its corresponding coefficient will be also positive and *vice versa*. Empirical investigations have so far shown that foreign direct investments have a positive influence on economic growth and thus the coefficient β_5 should be positive.

With such a set regression equation with the five independent variables, the results of estimation of the economic growth of selected European selected countries in 1991-2000 lie below in the dissertation. (cf table 1)

Table1: Multiple linear regression model for evaluation of economic growth in selected transition countries in 1991-2000 (panel method)

Variables	Coefficient	Standard error	t-Test	Level of reliability
Constant	-0.918551	1.430183	-0.642261	0.5224
INFLATION	-0.018692	0.003012	-6.206383	0.0000
BUDGET DEFICIT	0.000538	0.000161	3.330209	0.0013
EXPORT PER CAP.	-0.396658	0.092148	-4.304573	0.0000
CURRENT TRANS.	0.714181	0.150787	4.736368	0.0000
FDI PER CAPITA	-0.001035	0.000399	-2.593082	0.0112
_BUL--C	3.789718			
_CZS--C	-4.425799			
_EST--C	-2.741902			
_LAT--C	-0.670650			
_LIT--C	3.887508			
_HUN--C	2.511392			
_ROM--C	6.718879			
_POL--C	3.763200			
_SLO--C	0.743696			
_SLOV--C	-13.57604			
Weighted statistics				
Coeff. of determin. R ²	0.816650	Main dependent variable	-0.480853	

Adapted R ²	0.746092	S. D. Dependent variables	7.437861
Standard error regress.	4.842659	Sum of squares deviation	2251.329
F-test	12.39472	Durbin-Watson's test	1.897206
F-test's level of reliabil.	0.000000		
Non-weighted statistics			
R ²	0.790196	Main dependent variable	-0.642727
Sum of squares deviat.	2254.506	Durbin-Watson's test	1.801634

Source: calculated and prepared by the authors

Table 1 shows that only specific coefficients and their associated variables coincide with the theoretically expected signs and values, and they are the following: inflation, budget deficit and current accounts. Other independent variables (export *per capita* and foreign direct investments) are opposite to the expected signs and indicate the following deductions: export stagnated and was really falling, therefore it had a negative impact on economic growth and development. Although the last listed variable is expected to contribute to economic growth in transition countries, foreign direct investments had a negative influence in the monitored period, because in the initial transition years they were not sufficient, and those that have been made in those years have started giving results since 2000. The justification for applying the model of multiple linear regression (panel method) has to be sought in the obtained coefficient of determination R² that amounts to 0,81 which means that 81% of dependant variables variation is explained by the rated regression model, which also means that the model's level of reliability is high and that it adequately describes the model. Durbin-Watson's test amounts to 1,89 and also shows that the variables included in the model are relevant for the assessment of economic growth of the selected transition countries in the monitoring period and that among them there is no autocorrelation.

Below there is the analysis of the second transitional period 2001-2009, in which the significant variables for economic growth are those from the following equation:

$$\text{Real GDP growth rate} = \beta_0 + \beta_1 \text{unemployment} + \beta_2 \text{foreign direct investments per capita} + \beta_3 \text{export per capita} + \beta_4 \text{labour productivity}$$

The evaluated function was obtained based on the sample of the four independent variables: unemployment rate, foreign direct investments *per capita*, merchandise export *per capita* and labour productivity along with their associated parameters (coefficients). Standard error of parameter is listed in the table 2 beside the rated coefficient showing that the parameters are reliable.

According to both theory and empirical experience, it is supposed that unemployment has a negative impact on economic growth so it is expected that the coefficient β_1 is negative. It is also expected that the coefficient ISU *per capita* i.e. coefficient β_2 is positive because foreign direct investments stimulate production and generate accelerated economic growth. As a determinant of long-term economic growth, merchandise export *per capita* should have a positive impact and the coefficient β_3 is expected to be positive accordingly. Better labour productivity contribute to economic growth and development of each country, so the corresponding coefficient β_4 should be positive.

According to the regression equation, the results are assessments of economic growth for the selected European transition countries in 2001-2009 (cf. table 2).

Table 2: Multiple linear regression model for evaluation of economic growth in selected transition countries in 2001-2009 (panel method)

Variables	Coefficient	Standard error	t-Test	Level of reliability
Constant	10.23671	3.432950	1.987634	0.0258
UNEMPLOYMENT	-0.390278	0.069525	-3.478628	0.0065
FDI PER CAPITA	0.159374	0.048770	-4.121301	0.0001
EXPORT PER CAP.	0.008754	8.95E-05	3.267859	0.0021
LABOUR PRODUCT.	0.590373	0.123879	2.208076	0.0323
_BUL--C	3.243565			
_CZS--C	2.356720			
_EST--C	1.728476			
_HUN--C	-4.435886			
_LIT--C	1.378915			
_LAT--C	1.456909			
_POL--C	-3.429870			
_ROM--C	-0.498723			
_SLO--C	-1.908543			
_SLOV--C	1.656789			
Weighted statistics				
Coeff. of determin. R ²	0.892334	Main dependent variable		6.846522
Adapted R ²	0.879023	S. D. Dependent variables		6.028354
Standard error regress.	2.014678	Sum of squares deviation		124.0607
F-test	38.96342	Durbin-Watson's test		1.997455
F-test's level of reliab.	0.000000			
Non-weighted statistics				
R ²	0.836591	Main dependent variable		5.831250
Sum of squares deviat.	236.8405	Durbin-Watson's test		1.913267

Source: calculated and prepared by the authors

In the model showed in table 2, all the variables and the correspondent coefficients coincide with the expected sign, so it is not necessary to explain them closely. It should be noted that all the observed countries have significantly grown and progressed since the beginning of the transition period (except Bulgaria and Romania), therefore the signs coincide with the average theoretical assumptions of economic growth and development.

The justification for applying such a model of multiple linear regression (panel method) with the four independent variables corroborates the obtained coefficient of determination R^2 that amounts to 0,89 what means that the 89% of dependant variables variation is explained by the rated regression model, which also means that the model's level of reliability is high and that it adequately describes the model. Durbin-Watson's test amounts to 1,89 and also shows that the variables included in the model are relevant for the assessment of economic growth of the selected European transition countries in the monitoring period and that among them there is no autocorrelation.

4. STRATEGIC DETERMINANTS OF LONG-TERM ECONOMIC GROWTH OF SELECTED EUROPEAN COUNTRIES IN TRANSITION

Common strategic determinants of selected transition countries economic growth are determined on the base of the implemented regression analysis of their long-term economic growth. These strategic determinants are the following: macroeconomic stability, export, foreign direct investments (FDI) and human resources.

1) *Macroeconomic stability* - The influence of the factors that approximate macroeconomic stability, i.e. inflation and budget deficit, was significant in the initial years of transition that were characterized by a strong fall in production and the simultaneous increase in inflation in all the countries observed. By the end of the first decade of transition an increase in economic activity was achieved in almost each country, while inflation (owing to anti-inflation and stabilization programmes) successfully reduced to moderate or low levels in most countries. However, only few recorded higher levels of the entire economic activity than that which was accomplished before the start of the transition process. It could be therefore concluded that the low rate of inflation is the strategic determinant which need not necessarily be emphasized as to harm exports, especially in periods of anti-inflation programmes. Regarding the budget deficit, it is short-term positive and could be classified as a strategic determinant, but it should be kept under control so that the state had a smaller share in the GDP structure (such as in Ireland). Thus, macroeconomic stability remains an important prerequisite for long-term economic growth in the transition countries.

2) *Export* - Regression analysis showed that export had a positive impact on the economic growth in the monitored transition countries. The experience of the most advanced transition countries shows that the share of growth derived from

improved resource allocation reduces over time due to transition to market operations, and that these economies should rely more on traditional determinants of growth indicated by the neoclassical and endogenous growth theories, as well as the results of numerous empirical studies. These results show that, beside stable macroeconomic conditions in the market-oriented economic structure, the beneficial effects on long-term growth are consequences of high savings and investments, well-educated workforce, high openness of the economy, low public spending, low population growth and a stable socio-political environment.

3) *Foreign direct investments (FDI)* - In the beginning of the monitored period, this determinant was negative because of the lack of foreign investors' interest in the development of production capacities, that wanted profits in trade. Nevertheless, there are some positive examples (Hungary and Estonia), but in general they were not significant enough. The achieved level of economic growth will influence the slowdown in economic growth in the future, so we should expect lower growth rates because all the observed countries have reached a certain level of economic growth in the European Union. Therefore they should work on developing new determinants that didn't prove to be significant in the regression analysis and in the so far economic growth, but that are very important for further growth and development, such as human resources, which are closely associated with labour productivity, research and development, innovation and entrepreneurship. Investments in human capital as a conventional growth factor have not shown significant in the empirical analysis of growth in transition countries so far, which is not surprising, because the transition is the process of reallocation of resources and increasing the efficiency of the existing factors, at least in its initial phase.

4) *Human resources* - In order to reduce income differences and accelerating economic convergence with industrially developed countries, the observed transition countries should increase employment and accelerate the growth of labour productivity. To achieve these goals there are needed reforms to improve labour market flexibility, which is necessary for the efficient allocation of labour resources. Finally, it is necessary to work on disparate skills - or lack of skilled labour in relation to the needs of the economy - as they do not become obstacles to job creation, investments and growth of the companies. Human capital is not easily measured. Human Development report for 2007 observed 182 countries and by Human Development Index it classified all observed transition countries, except Romania and Bulgaria, among the top 40 countries. In order to increase HDI, the transition countries

should strengthen its system of life-long education and use the experiences of successful examples of other European economies.

CONCLUSION

Macroeconomic stability and economic growth are complex macroeconomic phenomena, therefore, even today it can not be completely explained what determinants, in what measure and in what way contribute to growth. The historical survey of theories of economic growth has shown that each of the said theories pointed out one or more determinants, which are key ones for the economic growth. Classicists pointed out natural resources, namely soil and labour, neo-classicists capital and technology, and the new theory of growth stressed human potentials.

Analysis of the economic growth of selected European transition countries is divided in two sub-periods: 1991-2000 and 2001-2009, because different variables were significant for each sub-period and such regression models are more reliable and relevant. The evaluated function for the first period was obtained based on a sample of five independent variables, namely: inflation, budget deficit, foreign direct investments, merchandise export *per capita* and balance of current transactions and their correspondent coefficients, while for the second period it was obtained on a sample of four independent variables: unemployment rate, foreign direct investments *per capita*, merchandise export *per capita* and labour productivity.

Results of the economic growth assessment in selected transition countries in 1991-2000 showed that only some determined coefficients and their correspondent variables coincide with the theoretically expected signs and values, namely: inflation, budget deficit and current transactions. Other independent variables (export *per capita* and foreign direct investments) are opposite to the expected signs and suggest the following conclusion: exports stagnated and decreased in real terms and thus it had a negative impact on economic growth and development. Although the last listed variable is expected to contribute economic growth in transition countries, foreign direct investments had a negative impact in the monitored period, because they were not sufficient in the initial years of transition, while those that were made in those years began to show results since 2000. In 2001-2009 all variables and its associated coefficients coincide with the theoretically expected sign, which means that all countries observed since the beginning of the transition have significantly grown and progressed (except Bulgaria and Romania).

Based on the implemented regression analysis of economic growth in selected European transition countries, strategic determinants of their long-term economic growth were established, which are: macroeconomic stability, export, foreign direct investments (FDI) and human resources.

REFERENCES:

- Domar, E. (1946). Capital Expansion, Rate of Growth and Employment, *Econometrica*, (April 1946)
- Easterly, W. & Sewadeh, M. (2010). In: *Global Development Network Growth Database*, Available from: <http://www.worldbank.org>
- Gerlagha, R. & Keyzerb, M. A. (2001). Limits-to-Growth theory, Coordination and Growth, Essays in Honour of Simon Kuipers, edited by G. H. Kuper, E. Sterken and E. Wester, Kluwer Academic Press, p. 219–232.
- Grossman, G. M. & Helpman, E. (1991). *Innovation and Growth in the Global Economy*, Cambridge: MIT Press
- Harrod, R. (1939). An Essay in Dynamic Theory, *Economic Journal*, (May 1939), p. 14–33
- Lucas, R. E. (1988). On the Mechanics of Economic Development, *Journal of Monetary Economics*, Vol. 22, p. 3–42.
- Mervar, A. (2002). Ekonomski rast i zemlje u tranziciji, *Privredna kretanja i ekonomska politika*, br. 92, p. 54.
- Romer, P.M. (1986). Increasing Returns and Long Run Growth, *Journal of Political Economy*, Vol. 94
- Schumpeter, J. A. (1942). *Capitalism, Socialism, and Democracy*, New York: Harper
- Smith, A. (1776). *An Inquiry into the Nation and Cause of the Wealth of Nation*, Glasgow Edition, Book IV, p. 488–498.
- Solow, R.M. (1956). A Contribution to the Theory of Economic Growth, *The Quarterly Journal of Economics*, Vol. 70, No. 1 (February 1956), The MIT Press, p. 65–94.

CROATIA IN THE CONTEXT OF THE EU STRATEGY FOR THE DANUBE REGION

Gabrijela Žalac, B.Sc.¹, Sanja Bošnjak, B.Sc.², Mario Banožić, M.Sc.³

¹Vukovar-Srijem County, Department for International Cooperation and Regional Development, Croatia, gabrijela.zalac@vk.t-com.hr

²City of Vinkovci, Department for finance, Croatia,
sanja.bosnjak@vk.htnet.hr

³Vukovar-Srijem County, Department for International Cooperation and Regional Development, Croatia, mario.banozic@vk.t-com.hr

ABSTRACT

The European Cohesion Policy, which is based on the principle of solidarity, aims at support for sustainable economic development within the territory of the entire European Union – through activities aimed at reducing development disparities between countries and their regions and strengthening regional competitiveness. (Poland Ministry of Regional Development; 2009, 100) This policy is expressed also in the new European policy of macro-regional cooperation, which was initiated back in 2007 with the Baltic Sea Strategy. Its objective is to promote territorial cooperation and interaction between regions that have different levels of economic development, and thus to achieve a synergy between diverse EU policies into a functional whole, which is suitable for a particular macro-region. Such macro-region strategies are also a tool to promote Territorial cohesion that is a new principle under the Lisbon Treaty.

Croatia can see two major advantages in supporting the policy of macro-regional cooperation and its implementation through the European Union Strategy for the Danube Region (hereinafter: EUSDR). First, this is an original political process within the EU, which coincides with the demand for active participation in different forms of regional cooperation as a political precondition in the pre-accession process. Second, our country is not immune to the unbalanced socio-economic development of its regions and thus there are concrete benefits to be drawn from

inter-regional and cross-border links, as these are ideal places to present and carry out the projects aimed at diminishing regional disparities in development.

Comparative advantages of particular regions will be recognized through the EU Cohesion Policy, which will then be fostered through fund allocation programmes and through other means, with the ultimate goal of achieving the balanced development throughout the EU. The EUSDR, or more precisely its Action Plan, is conceived as a 'live' document whose implementation will be continuously monitored and verified, and if necessary, supplemented by participating countries. This means that any elements not found in the Action Plan now can become a part of the EUSDR at some later point.

Implementation methods and structures of the EUSDR will be presented and discussed in this article. Special emphasis will be put on regions and cities along the Danube in Croatia and how to apply bottom-up approach in the decision-making process in this macro-regional strategy. The article will also position Croatia in the context of the EUSDR.

JEL Classification: P25, R11

Key words: EU Strategy for the Danube Region, European Cohesion Policy, Territorial cohesion, macro-regional cooperation, Action Plan, Croatian regions, bottom-up approach

1. INTRODUCTION

The Danube Region, the world's most international river basin, one of the largest European Union spaces now have a new opportunities to address its challenges and potential, especially to reinforce its efforts to overcome the economic crisis in a sustainable manner. Geographically it covers 14 countries, eight Member States (Germany, Austria, Hungary, Czech Republic, Slovak Republic, Slovenia, Bulgaria and Romania) and six Non-Member States (Croatia, Serbia, Bosnia and Herzegovina, Montenegro, Ukraine and Moldova).

The Danube Region is facing several challenges such as environmental threats (water pollution, floods, and climate change), untapped shipping potential and lack of road and rail transport connections, insufficient energy connections, uneven socio-economic development, uncoordinated education, research and innovation system and shortcomings in safety and security. To respond to these challenges European Council requested the European Commission to prepare and coordinate

EUSDR in order to develop the huge economic potential of the Danube River (European Commission; 2010, 3-4).

Picture 1: Territorial coverage of the Danube region



Source: http://ec.europa.eu/regional_policy/cooperation/danube/images/danube_country.png

This Strategy is based on the concept of the EU macro-regional cooperation which began 2007th the starting process of the EU Strategy for the Baltic Sea Region, now being implemented. The main objective of macro-regional strategy is to create a new framework for focused coordination of all stakeholders - the EU Member States, Non-Member States, European regions, EU institutions, relevant regional organizations, financial institutions and non-governmental sector - to achieve balanced development of a wider geographical area. (Schymik & Krumrey, 2009: 6)

The EUSDR cover a variety of EU policies (regional, transport, energy, environmental, safety, etc.) and combining them into one functional unit, while maintaining focus on the most important problems that are common across the Danube macro-region. The main principle of the EUSDR is “3 NOs” – no new institutions, no new sources of funding and no new legislation. This means that the EUSDR must be developed and implemented without increasing of financial resources and

through existing structures and institutions without new legal frameworks and instruments. (<http://www.mvpei.hr/MVP.asp?pcpid=2600>)

The EUSDR is also within the EU 2020 framework being adopted at the Spring European Council 2010. Macro-regional strategies are prime test cases of what territorial cohesion means in practical terms. In particular, cross-sector integrated approach is overarching the whole process of the strategy development.

Picture 2: European Territorial Cooperation Programmes



Source:http://ec.europa.eu/regional_policy/cooperation/danube/programmes_en.htm

2. WHAT HAS BEEN DONE ON THE EUROPEAN UNION LEVEL?

In anticipation of the adoption of the EUSDR (in June 2011) as a “European Region of security, stability and prosperity”, a series of stakeholder conferences has been held in the EU Member and Non Member States in cities along the Danube. The European Commission was seeking the contribution of all interested parties (including Member States, neighbouring countries, regions, municipalities, international organisations, financial institutions etc.) and therefore organizing a wide consultation, including a series of conferences. The main idea was to promote

networking between civil society organisations and the sharing of ideas concerning initiatives that can help to develop the EUSDR.

The European Commission operating across many policy domains and describes EUSDR in two documents: Communication from the European Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions and the accompanying Action Plan concerning the EUSDR which complements the Communication adopted in December 2010. The Action Plan is one of the outputs of the Strategy approach and it seeks to identify priorities clearly and make it explicit also who is responsible for their implementation and follow up. It also aims to assign the responsibilities to different administrative levels and actors within the Region, with the support from the other partners, notably the EU Institutions.

The structure of the EUSDR includes:

- **4 Pillars**- which are the core of the Strategy and are essential to the success of its work. That are: Connecting the Danube Region, Protecting the Environment in the Danube Region, Building Prosperity in the Danube Region and Strengthening the Danube Region.
- **11 Priority Areas** – represents the main areas where the macro-regional strategy can contribute to improvements. All stakeholders have identified 11 priority areas, which will: (1) improve mobility and multimodality, (2) encourage more sustainable energy, (3) promote culture and tourism, people to people contacts, (4) restore and maintain the quality of waters, (5) manage environmental risks, (6) preserve biodiversity, landscapes and the quality of air and soils, (7) develop the knowledge society through research, education and information technologies, (8) support the competitiveness of enterprises, including cluster development, (9) invest in people and skills, (10) step up institutional capacity and cooperation and (11) work together to promote security and tackle organized and serious crime. (European Commission; 2010, 3)
- **Actions** – projects are examples, which are able to demonstrate how the Strategy can be put in action in the short or medium term. The nature of project can vary widely, from cooperation between government agencies on a key challenge, to construction of infrastructure or the involvement of private and third sector partners towards a goal. In the EUSDR, certain projects have been identified by the Commission as particularly appropriate for rapid im-

plementation and completion: these are designated “fast track” because there is needed absolute focus on results.

2.1. EUSDR – Implementation structures

Multi-level governance, as developed by Gary Marks, defined the concept as “a system of continuous negotiation among nested governments at several territorial tiers – supranational, national, regional and local” (Bache & Flinders; 2005, 3). The notion of territorial tiers is significant and draws the attention to the fact that multi-level governance not only include national and supranational levels of policy-making to be of importance, but also regional and local levels have to be factored in when analyzing EU decisions (Piattoni; 2009, 166).

The governance of the EUSDR is built on the positive experience of the Strategy for the Baltic Sea Region. Policy Co-ordination is the responsibility of the European Commission, assisted by a High Level Group of all Member States. Non Member States are invited to the Group as appropriate. The Group is consulted on issues such as modifications to the Strategy and the Action Plan, and receive regular reports from the Commission on progress.

Once the EUSDR has been adopted in the Council the key challenge is and will of course be implementation. Priority Area Co-ordinators have been agreed for each of the EUSDR 11 Priority Areas. In each case two countries – either two Member States or one Member State and a Non Member State – took over the responsibility for driving implementation forward, in consultation with the Commission, relevant EU agencies and regional bodies. Their task is to secure agreement on a work plan for their area, with targets, indicators and a timetable.

2.2 EUSDR – Milestones

- 19 June 2009: The European Council invites the European Commission to develop a strategy for the area around the Danube.
- July 2009-December 2010: Preparation of the Strategy by the European Commission, including public consultation and consultations with participating countries.
- 8 December 2010: European Commission adopts the Action Plan and Communication for the EUSDR.

- 3 February 2011: Commissioner Hahn designates the Priority Area Coordinators.
- 13 April 2011: Adoption of the Council Conclusions by the EU Council for General Affairs
- 24 June 2011: Official endorsement of the EUSDR by the European Council and launch of the implementation phase.

(http://www.interact-eu.net/danube_region_strategy/danube_strategy/285/3928 , 3-03-2012)

3. CROATIAN POSITION IN THE CONTEXT OF THE EUSDR

Croatia as a Non Member State participating in the EUSDR will benefit from this very intense exposure to the EU way of working, and will seize all the opportunities to work alongside Member States. This could also be seen as a part of preparation for a closer relationship with the EU. While the EUSDR has no direct impact on enlargement, it may prove a valuable additional cooperation experience for candidates.

It has been argued that the EUSDR would bring a new stimulus into the EU accession process, that it would be an impulse for the non-EU countries to learn a strategic approach, to have a better understanding of how the EU works. Therefore it is of great importance that such international dialogue is recognized in Croatia. The realisation of the key objectives of the EUSDR is only possible through the equal participation of all the states of the Danube River Basin and it was an added value for Croatia in its process of accession negotiations.

In developing Croatia's contribution to the EUSDR, with the aim to determine Croatian priorities relevant for the Danube macro-region, the principle of harmonisation of national priorities contained in the relevant national sector strategies with the priorities as defined at the level of NUTS 2 regions, was applied.

The goal was to contribute to the strengthening of the overall development potential of the Croatian Danube region, by positioning this region as a connection between Danube River Basin and the Adriatic Sea and the Mediterranean, in order to achieve, through fostering trade and traffic, as well as continental tourism, a higher level of competitiveness and development of the Danube countries.

The prerequisite for a sustainable development of the Croatian Danube region is demining. It represents a crucial horizontal measure that has to be taken into consideration since it affects a broader Danube area.

The main priorities in Croatia's Danube area are:

1. Development of intermodal transport and effective connecting of the Danube region with the Adriatic coast
2. Increasing economic competitiveness through development of entrepreneurship, modernisation of agriculture and the development of special forms of tourism
3. Environmental protection, risk prevention, and renewable energy resources development
4. Human resources development.

(Croatian Working Group for the EUSDR; 2010, 3)

Listed priorities are completely in line with the National Strategic Reference Framework as well as with the County development strategies in the Croatian Danube regions. By taking advantage of all valuable know-how and experience gathered in the EU accession process and fostering the bottom-up principle, relevant structures for the elaboration and future implementation of the EUSDR have been established in Croatia.

In January 2010 Ministry of Foreign Affairs and European Integration established a Working Group for the EUSDR that have prepared "Croatia's priorities and cooperation in the Danube region" (hereinafter: NON PAPER). Working Group consists of national line ministries and regional representatives. These structures will contribute to the optimal management of comprehensive Croatian activities within the EUSDR.

In order to prepare as good NON PAPER as possible, respecting the ownership and inclusiveness principles, the Regional Working Group was also formed on a county level, comprised of the representatives of all interest groups, especially municipalities on the Danube river bank. This partnership approach resulted in joint efforts of the Croatian regions, counties and local stakeholders in planning the Croatian Pannonia development in the framework of the future EUSDR.

To maximise the opportunities that EUSDR as a new initiative provides to the regions along the Danube in Croatia, there have been conducted a series of consul-

tations with counties, towns and municipalities in the region, institutions including educational and research institutions and non – governmental organizations in order to collect the widest possible database of projects and project ideas whose implementation is believed to be necessary for continuous development of the region, hopefully, resulting in the increased well being of its inhabitants. Special attention was provided in determining transnational and/or cross- border character of each project in order to include projects with maximum macro- regional impact.

At this point is briefly addressed a few points that Croatia consider important for the future cooperation in the Danube Region. One of the priorities set for Croatia is the construction and reconstruction of railway and road infrastructure, as parts of the broader European transport network. This priority derives from the fact that good transport infrastructure is driving force of economic development in the world today.

Passing through Croatian Pannonia, the major Pan-European railway Corridor X connects significant industrial and agricultural areas. Its modernization bears a large potential for economic development, for both, Croatia and the Danube Region as a whole. On a broader scale, the importance of including all the countries of South East Europe into the wider Trans-European network should not be underestimated. The countries of South East Europe are currently assessing the possibility to develop a joint reconstruction plan of the road and railroad infrastructure in the region. This joint project would replace individual plans of each country involved. It clearly demonstrates another example of the commitment of the countries of South East Europe to regional cooperation. And as such it will be hopefully supported by the EU and all relevant financial institutions. (Čvrlićak; 2010, 2nd Freiburg Summer Academy)

Another priority set for Croatia is to revive inland waterways. Their specificity lies in the fact that most of them are rivers which follow Croatia's borders. In consequence, many projects need to be coordinated with the neighbouring countries. And this is what Croatia also consider the Danube Strategy to be – a chance to establish a coordinated cross-border and trans-national cooperation on the matters which are of importance and interest to a greater number of states.

Given the full potential of railway corridors and waterways that pass through Croatia, combined with well developed road infrastructure, it can be created a vital connection between Central Europe and the ports of the Adriatic Sea. This is not

only important to Croatia; it is also a significant added value for the whole Danube Region.

With regard to the environmental issues, Croatia is still adding up the total costs of the vast floods, and many parts of eastern Croatia have suffered substantial damage in agricultural property. Natural environment is one of the crucial assets in Croatia's economic and social capital with a direct impact on tourism. In both of these areas, environmental protection and tourism, Croatia is looking forward to great potential for encouraging cross-border cooperation. (Maleković & Puljiz; 2009, 85-110)

As for other projects, Croatia will endorse those which aim at strengthening the sector of small and medium sized enterprises and which foster innovation and new technologies, as they are the heart of economic progress. After the announcement of the Priority Area coordinators in February 2011, Croatia co-ordinate next Priority Areas together with two German regions Bavaria and Baden-Wuerttemberg:

- Preserving biodiversity, landscapes and the quality of air and soils
- Supporting the competitiveness of enterprises.

4. CONCLUSION

As a partner country within the framework of the EUSDR, Croatia organized the Vukovar Danube Conference on 29th April 2011. In line with the goal of the Strategy to improve the visibility of the Danube Region projects and to give them political support the Vukovar Danube Conference provided the EUSDR Ministers with a useful opportunity to discuss, inter alia the role Governments can play in facilitating the coordination of the Strategy Priority Areas.

It is equally important to indicate priorities relevant for the Danube River Basin, and to give an impetus to the projects ready for realization that will have an immediate and visible effect for the people of the region. The Danube is the lifeline of the region, where over a hundred million people live. It connects countries, cities and regions. It brings people and cultures together. For centuries, the traffic on the Danube has been creating jobs and generating income.

The main objective for Croatia in the EUSDR must be project-oriented cooperation. At the top of Croatian priorities are the restoration of the Port of Vukovar and multipurpose channel Danube-Sava. Having broad experience in the Danube

regional initiatives, it is very well known the importance of good cooperation of different subjects, necessary for the successful EUSDR implementation in Croatian Danube regions.

5. LITERATURE

Bache, I. & Flinders, M. (2005). *Multi-level Governance*, Oxford University, Oxford

Čvrljak (2010). The role of the Danube Strategy in strengthening the EU perspective of the South-Eastern Europe: Croatian view, *Zbornik radova sa 2nd Freiburg Summer Academy: "A new model of regional cooperation? The EU's strategical approach towards the Baltic Sea, the Danube and the Black Sea region"*

European Commission (2010). *Action Plan on the EUSDR*, European Commission, Brussels

European Commission (2010). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions*, European Commission, Brussels

Maleković, S. & Puljiz, J. (2009). *Zaštita okoliša i regionalni razvoj - iskustva i perspektive*, Institut za međunarodne odnose, Zagreb

Mine, C. & Berkkan, B. & Kjolsen, U. & Tempel, L. (2009). *Macroregional strategies in the EU*, Roskilde University, Roskilde

Piattoni, S. (2009). *Multi-level Governance: a Historical and Conceptual Analysis*, *Journal of European Integration*, Vol. 31, No. 2, str.163-180

Poland Ministry of Regional Development (2009). *The European Union Cohesion Policy Post-2013*, Warsaw

Schymik, C. and Krumrey, P. (2009). *EU Strategy for the Baltic Sea*

Region – Core Europe in the Northern Periphery?, Working Paper FG 1, Berlin

Šimić, A. (2005). *Prekogranična suradnja u Europi s posebnim osvrtom na Hrvatsku*, Ministarstvo vanjskih poslova i europskih integracija, Zagreb

Croatian Working Group for the EUSDR (2010). *NON PAPER – Croatia's priorities and cooperation in the Danube region*, Zagreb

http://europa.eu/lisbon_treaty/index_en.htm (15-03-2012)

http://ec.europa.eu/regional_policy/cooperation/danube/documents_en.htm (10-03-2012)

http://ec.europa.eu/regional_policy/cooperation/danube/programmes_en.htm
(31-01-2011)

http://ec.europa.eu/regional_policy/cooperation/danube/images/danube_country.png (17-02-2011)

http://ec.europa.eu/regional_policy/consultation/danube/consultation_en.htm
(18-02-2011)

<http://www.mvpei.hr/MVP.asp?pcpid=2600>, (3-03-2011)

(http://www.interact-eu.net/danube_region_strategy/danube_strategy/285/3928 ,
3-03-2012)

<http://www.regio-hr.com/politikarh.php> (2-03-2011)

INTERNATIONAL ECONOMICS

ECONOMIC GROWTH: CHALLENGES, OPPORTUNITIES AND MAIN DETERMINANTS

LUȚAȘ Mihaela¹, MIHUȚ Ioana Sorina²

¹ Professor, Faculty of Economics and Business Administration, Department of Political Economy, "Babeș-Bolyai" University, Cluj-Napoca, Romania, mihaela.lutas@econ.ubbcluj.ro

² Ph.D. student, Faculty of Economics and Business Administration, Department of Political Economy, "Babeș-Bolyai" University, Cluj-Napoca, Romania, ioana.mihut@econ.ubbcluj.ro

ABSTRACT

The process of economic growth is one of the most controversial and complex aspect of the current economies, that requires a multitude of definitions and at the same time interpretations. Despite that, the role of this concept in characterizing the level of performance of an economy requires a profound analysis that would be suitable to the requirements of economic theories and not only. Due to the complexity of this process, the economic growth is determined by a variety of factors including political, institutional, cultural and social factors. Given the multitude of factors involved in the process of economic growth, this study is taking into account those who enable the understanding of this concept through an objective reference to those elements that have a decisive role in what concerns the economic growth of a country.

JEL Classification: F4

Keywords: economic growth, determinant factors, economic growth models

MAIN DETERMINANTS OF ECONOMIC GROWTH

When talking about the determinants of the economic growth process worldwide is hard to nominate the main ones, because they differ from country to country, being determined by the socio-economic background.

The literature offers a broad classification of these factors each being supported by strong arguments. In this paper we used a classification of the key determinants of economic growth that permit an objective reporting to those elements that have

a defining role in the economic evolution of a country. Determinant factors can be classified into two broad categories: economic factors including natural resources, human capital, openness of an economy, technological progress and financial direct investments and non-economic factors including along others socio-political ones. Economic factors in turn can be divided into endogenous factors this category incorporating natural resources and human capital, exogenous factors such as foreign direct investment and a category that includes elements of both exogenous and endogenous factors and these are technological progress and openness of the economy. In this study we will concentrate on one of the economic which is the foreign direct investments.

In the early development of modern theories of growth in the 1950s and 1960s (see Samuelson, Swan) natural resources did not occupy a primary role. Since the late 1960s interest in natural resources and environment has become more and more present. Late '70s began with the reconfiguration of the neoclassical growth model, with the acknowledgement that macroeconomic policy recommendations would be incomplete without reference to the components of sustainable development. Effects stemming from the impact of natural resources on economic growth can be divided into three main components: economic growth generated by the depletion of natural resources, economic growth generating pollution / degradation of natural resources and not least the trade, economic development and environment. Representative studies in this area were the ones elaborated by Dasgupta and Heal (1974), Solow (1974)¹, Stiglitz (1974)² and Hartwick (1977).³

The second endogenous economic factor is the human capital. The concept of human capital was introduced in economics by Nobel laureate Theodore Schultz in his work in 1961 where he developed the necessity of the investments in education in order to increase agricultural productivity in the U.S.A. According to Gary Becker (1964)⁴ human capital is represented by all monetary and non-monetary activities that influence future monetary income of an individual. Both authors

¹ R. M. Solow (1974)-" On the Intergenerational Allocation of Natural Resources", Massachusetts Institute of Technology, Cambridge, MA, USA.

² Joseph E. Stiglitz (1975)- "A Neoclassical Analysis of the Economics of Natural Resources", Columbia Business School - Finance and Economics; National Bureau of Economic Research

³ Hartwick, John M (1977). "Intergenerational Equity and the Investing of Rents from Exhaustible Resources," American Economic Review, American Economic Association

⁴ Gary S. Becker (1964)-" Human Capital. A Theoretical and Empirical Analysis, with Special Reference to Education," The Journal of Political Economy, Volume 70

argue that improving the human component of productivity can be generated by higher investment in education.

Table 1. Differences between different economic growth models that include human capital

Specification	Solow Model	Lucas Model	Romer Model
Human capital is accumulated by	Reinvestment of a percentage of income	Directing free time for obtaining new qualifications	Is not modeled
Role of the human capital	Input for production function	Input for production function of Y and H	Input for production function of Y and A
Economic growth is determined	Inside de model	Inside de model	Inside the model
Determinants of long run economic growth	Exogenous technological change	Accumulation of Human capital accumulation	Human capital stock

Source: Adaptation from Florian Schütt (2003)-The Importance of human capital for Economic Growth , Bremen University, Institute for World Economics and International Management.

The first economic factor that includes both elements of exogenous and endogenous component is the technological progress. According to Solow, Swan and Verbeek⁵, technological progress is a key component in what concerns economic growth. In developed economies the impact of technological progress on economic growth reached a rate of 60-70% in comparison to other determinants such as net exports, or openness ratio.

Another mixt exogenous-endogenous factor is the openness ratio. It influences economic growth through a variety of channels such as: exploitation of competitive advantage, technology transfer, increase of scale economies and increased competitive exposure. The literature on this subject is extremely broad, representative stud-

⁵ Qifan Wang, Yang Xin Nong (1985) – “Studying Tehnological Progressand its impact on Economic Growth in China”, Shanghai Institute of Mechanical Engineering

ies in this area being the elaborated by Dollar and Edwrad (1992)⁶ , Rodriguez and Rodrik (2002)⁷.

In the category of exogenous factors that influence growth we find FDI. In the studies elaborated by Borensztein, De Gregorio and Lee in 1998 all concluded the fact that FDI have a positive effect on economic growth when the economy has a skilled workforce that allows efficient combination of capital to work. Alfaro et al in 2003 found that foreign direct investment and the portfolio ones promotes growth in economies with developed financial markets. Alfaro, Chanda, Kalemli-Ozcan, Sayek (2006)⁹ have made the assumption that only countries with relatively well developed financial markets have substantial infusion of foreign direct investments. Effects generated by foreign direct investments can be also negative, but only if it is intended to protect industries (Encarnation and Wells, 1986).¹⁰ In order to highlight the impact of FDI on economic growth is necessary to take into account a number of determinants, among which education, macroeconomic stability, political environment and the opening ratio of the economy.

FOREIGN DIRECT INVESTMENTS IN ROMANIA

In the previous sections we made a short presentation of the key determinants of the economic growth process and the main channels through which they contribute to the improvement of the economic activity. Next we focus on the impact of one of these factors, namely foreign direct investments on the economic growth process in Romania. Developing countries, including Romania were recommended by international organizations to consider access to foreign direct investments as a primary external source when focusing on economic growth. Studies that deal with the interconnectivity analysis of economic growth and foreign direct investments

⁶ Sebastian Edwards (1992)- "Trade orientation, Distortions and Growth in developng countries" Institute for Policy Reform

⁷ Rodriguez, F., Rodrik, D., (2001)- "Trade policy and economic growth: a skeptic's guide to the cross-national evidence. In: Bernanke, B.S., Rogoff, K. (Eds.), NBER Macroeconomics Annual 2000. MIT Press, Cambridge.

⁸ Borensztein, E. & De Gregorio, J. & Lee, J-W (1998)- "How does foreign direct investment affect economic growth?1," Journal of International Economics, Elsevier, vol. 45

⁹ Alfaro L., A. Chanda, S. Kalemli-Ozcan and S. Sayek (2003) - "FDI and Economic Growth: The Role of Local Financial Markets." Journal of International Economics

¹⁰ Dirk Willem te Velde(2006)- "Foreign Direct Investment and Development An historical perspective", Overseas Development Institute

have revealed that these are superior to any other sources of inputs in an economy, being less volatile and provide not only capital but also guaranteeing access to technology and know-how. Whatever type of investment is used, it contributes to promoting growth and economic development, reducing disparities between the economies. In what concerns investments in Romania, our country was in the recent years in a privileged position, except 2010, enjoying a large volume of investment flows and becoming one of the main recipients of FDI from Central and Eastern Europe. If we consider the source of these investments, over 80% of them have the starting point Europe. The main investors in Romania, contributing with a percentage of over 50% are represented by the Netherlands (20.7%), Austria (17.8) Germany (12%)/

Table 2. FDI MAIN SOURCES

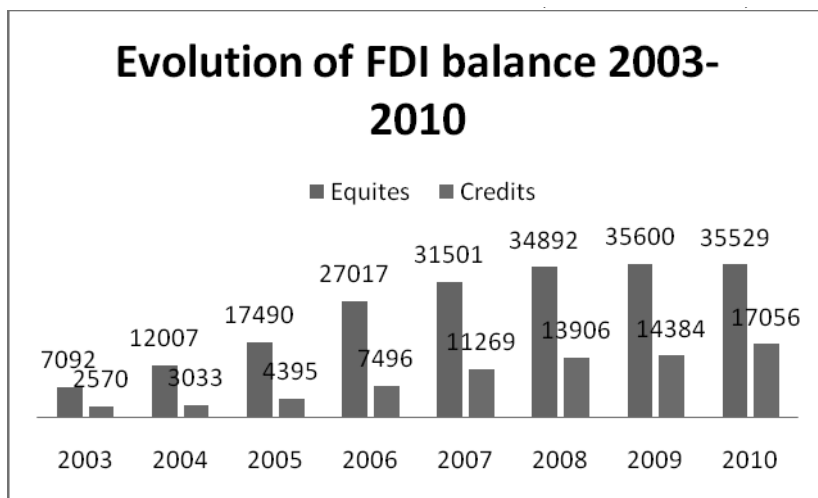
Country	Millions euro	% From TOTAL
Total from which	52 585	100
Netherlands	10 903	20,7
Austria	9 346	17,8
Germany	6 398	12,2
France	4 384	8,3
Greece	3 016	5,7
Italy	2 808	5,3
Cyprus	2 550	4,9
Switzerland	2 021	3,8
USA	1 349	2,6
Spain	1 064	2
Luxembourg	989	1,9
Czech Republic	972	1,8
Belgium	864	1,6
Hungary	717	1,4
Great Britain	627	1,2
Turkey	615	1,2

Source: Authors interpretation based on NBR dates.

If we analyze the situation of the final balance of investments at 31. decembrie.2010, the registered value was 52.585 billion euro with the following structure:

- 35.529 billion euro equity, including reinvested earnings (67.6%).
- 17.056 billion net credit received from foreign investors (32.4%).

Figure 1. .Evolution of final balance 2003-2010 (millions euro)



Source: Author's calculation based on NBR dates

The balance of FDI registered a continuously increasing trend since 2003 with a significant value in 2006, due to the fact that it was the year previous to Romania integration in the EU. In those years the global economy was experiencing positive rates of growth, reflected in a multitude of macroeconomic indicators including FDI.

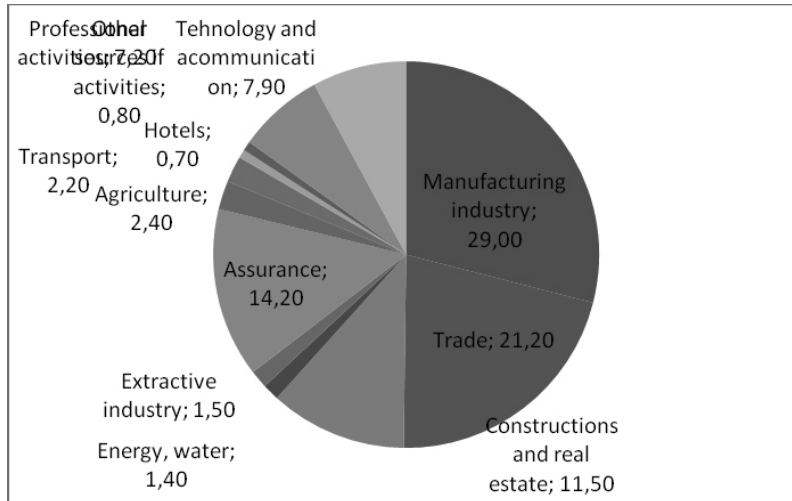
Regarding the main types of FDI in Romania, three components are considered to be more representative namely:

Greenfield – establishment of new enterprises by or with foreign investors

Mergers and acquisitions- full or partial takeover of enterprises by foreign investors from the residents

Corporate development- increase in the capital of foreign investors in FDI enterprises

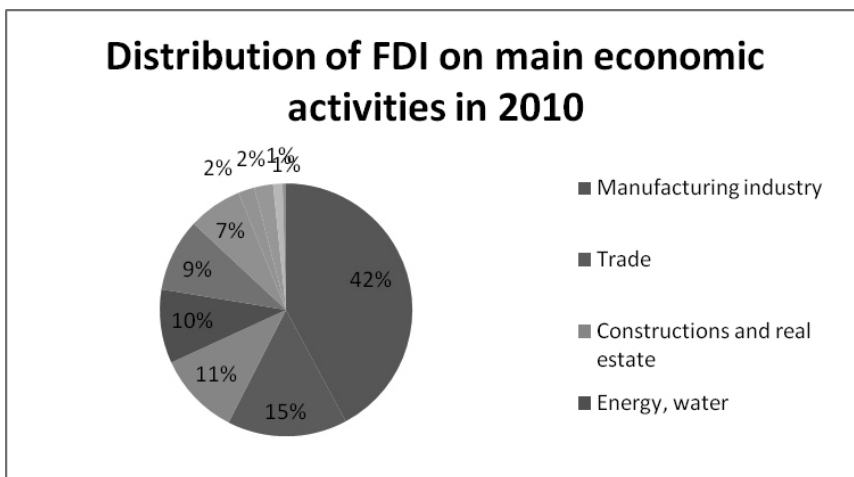
Figure 2. FDI in Greenfield enterprises- structure for main economic activities at 31. Dec.2010



Source: Author’s calculation based on NBR dates

In what concerns the main sectors of foreign direct investments they are mainly located in manufacturing (39% of total), followed by trade with 14%, construction and real estate 9.7%. In the opposite corner are situated the in hotels and restaurants with only 1%.

Figure 3 Distribution of FDI on main economic activities in 2010



Source: Authors calculation based on NBR dates

METHODOLOGY

In order to test the connection between foreign direct investments and economic growth in Romania we will use econometric modeling in E-views program. Data incorporated in this modeling correspond to the range 1996-2010 and are annual. We will test the relationship between the growth rate of FDI, as independent variable from ISD and the GDP growth rate as dependent variable from GDP. The connection between the mentioned variables will be tested by using a simple regression.

The model equation can be written: $Y_t = a_0 + a_1 X_t + e_t$

where: - Y_t is the dependent variable, in our case GDP growth rate

- a_0 free term

- a_1 independent variable parameter

- X_t dependent variable, in our case growth rate of FDI

- e_t residuals

After explaining the variables the models equation is:

$$GDPgrowthrate = a_0 + a_1 FDIgrowthrate + e_t$$

The results obtained after the modeling are included in the table below

Dependent Variable: GDP Growth

Method: Least Squares

Date: 03/10/12 Time: 07:39

Sample (adjusted): 1 15

Included observations: 15 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.124095	1.709031	0.072611	0.9432
FDI	0.141085	0.062966	2.240674	0.0431
R-squared	0.278604	Mean dependent var		3.013333
Adjusted R-squared	0.223112	S.D. dependent var		4.928614
S.E. of regression	4.344141	Akaike info criterion		5.899099
Sum squared resid	245.3303	Schwarz criterion		5.993506
Log likelihood	-42.24324	F-statistic		5.020622
Durbin-Watson stat	1.398313	Prob(F-statistic)		0.043144

Source: Authors calculation using E-views program

After modeling the model equation is:

Economic growth rate= $0.1240948581 + 0.1410852827 \cdot \text{FDI growth rate}$

In pursuance of the simple linear model it can be seen that the value of R^2 is 0.27 which means that the rate of economic growth in Romania is not very strongly influenced by the growth rate of foreign direct investment, but there is a positive correlation between those two. Although the number of statistical observations is not very large, the model developed is very representative for testing correlations between economic growth and foreign direct investment at the macroeconomic level and especially for the Romanian economy

CONCLUDING REMARKS

The economic growth process is without any doubt a very complex topic on which no clear conclusion can be elaborated. Studying the differences existing in the growth rates over the years and in the different economies require a very extensive documentation. Promoting economic growth is considered to be one of the most important economic policies and remains a decisive factor when developing a long-term perspective. Particularly important is also the aspect concerning the main drivers of growth that come to complete the framework of what economic growth means and to explain its complexity. In what concerns foreign direct investment, analyzed in Romania for the period 1996-2010 we can say that there is a moderate connection between economic growth and the FDI.

Recent trends in global economy proved that FDI flows are orienting towards emerging economies, like the ones of China, India, Brazil so that in the near future Romania should concentrate its economic growth on other factors such as net exports, structural funds and a high rate of internal saving.

Taking into consideration all these aspects, we can say that economic growth and its determinants remains a debated subject that requires a continuous study and adaptation to the new economic condition in order to highlights the new trends in the field.

BIBLIOGRAPHY

- Agnès Bénassy-Quéré, Benoît Coeuré, Pierre Jacquet, Jean Pisani-Ferry (2010). *Economic policy: theory and practice*, Oxford University Press
- Alfaro L., A. Chanda, S. Kalemli-Ozcan and S. Sayek (2003). *FDI and Economic Growth: The Role of Local Financial Markets*. *Journal of International Economics*

- Barro, R. (1997). *Determinants of Economic Growth: A Cross-Country Empirical Study*, MIT Press
- Becker Gary S (1964)- Human Capital. A Theoretical and Empirical Analysis, with Special Reference to Education,” *The Journal of Political Economy*, Volume 70
- Borensztein, E. & De Gregorio, J. & Lee, J-W (1998). How does foreign direct investment affect economic growth?1,” *Journal of International Economics*, Elsevier, vol. 45
- Dirk Willem te Velde (2006). *Foreign Direct Investment and Development An historical perspective*, Overseas Development Institute
- Edwards Sebastian (1992). *Trade orientation, Distortions and Growth in developing countries* Institute for Policy Reform
- Gene M. Grossman & Alan B. Krueger, (1994). *Economic Growth and the Environment*, NBER Working Papers 4634, National Bureau of Economic Research
- Grossman, G. and E. Helpman, (1991). *Innovation and Growth in the Global Economy*, Cambridge: MIT Press
- Qifan Wang, Yang Xin Nong (). *Studying Tehnological Progress and its impact on Economic Growth in China* , Shanghai Institute of Mechanical Engineering
- Phelps, E. S. (1966) .*Models of Technical Progress and the Golden Rule of Research*, *Review of Economic Studies*, Vol. 33
- Rodriguez, F., Rodrik, D., (2001). Trade policy and economic growth: a skeptic’s guide to the cross-national evidence. In: Bernanke, B.S., Rogoff, K. (Eds.), *NBER Macroeconomics Annual 2000*. MIT Press, Cambridge.
- Romer Paul (1990). *The Origins of Endogenous Growth* , *The Journal of Economic Perspectives*, Vol. 8, No. 1
- Ross Levine; David Renelt (1992). *A Sensitivity Analysis of Cross-Country Growth Regressions*, *The American Economic Review*, Vol. 82, No. 4.
- Florian Schütt (2003)-*The Importance of human capital for Economic Growth* , Bremen University, Institute for World Economics and International Management-*The first economic factor that includes both elements of exogenous and endogenous component is the technological*
- Stiglitz Joseph (1975). *A Neoclassical Analysis of the Economics of Natural Resources*, Columbia Business School - Finance and Economics; National Bureau of Economic Research
- Solow Robert (1956). *A Contribution to the Theory of Economic Growth* *The Quarterly Journal of Economics*, Vol. 70

FOREIGN DIRECT INVESTMENT THEORY: THE MAIN DETERMINANTS OF FDI THEORY

Josip Romić, univ.spec.oec.

ABSTRACT

Due to globalization, foreign direct investments have a prominent role in the implementation of national competitiveness. Foreign direct investment recipient countries are usually motivated by the social benefit of the FDI, which is seen through the application of various technologies, knowledge and management skills as well as their effect on the rest of economy. Foreign direct investment theoretical studies help us in better understanding of economic agents as well as their contribution at micro and macro level.

The purpose of this study is to explain the basic motivations that cause a firm to invest abroad, to identify main trends in FDI theory and to explain how these theories were developed.

JEL Classification:F21

Keywords: the theory of foreign direct investments, foreign direct investments

INTRODUCTION

Foreign direct investments (FDI) have increased in importance as a considerable source of financing as well as inducing common benefit for national and international economies. Numerous economists, like J. Dunning, S. Hymer, R.Vernon consider FDI the accelerator of the economic growth in all countries. Regarding macro perspective, it represents the generator of employment, high productivity, competitiveness and technological spillover.

Foreign direct investment advocates share the opinion of the conventional economic theory about foreign direct investments as an important source of external financing, as well as their positive effects on home economies. The benefits are the transfers of knowledge, skills, innovative approaches, organizational and manage-

rial practise like the development of human resources, opening the access to foreign markets and the acceleration of economic growth by means of increasing GDP rate of growth and creating market institutions (Moran et al.; 2005), (Baban & Leko, 1997).

Foreign direct investment opponents pay attention to "potential" risks like undesirable effects of possible input import which harms balance of payments on current accounts of a recipient country, hinder the development of "young" domestic industries, the loss of economic independence etc. (Vasquez Galan; 2006), (Gorg & Greenwood; 2002). Many scientists have tried to explain the FDI phenomena, like Blomstrom, Smarzynska, Caves, Hanson, Lipsey... However, there isn't a generally accepted theory, but everyone agrees with Kindleberg and his „American Business Abroad“ where he characterized the world as a perfect competition where foreign direct investments will no longer exist. If markets have no barriers and if they are effective with respect to trade or competitiveness, international trade is the only means to participate in international trade.

FOREIGN DIRECT INVESTMENT THEORY

Foreign direct investment theory is developed through the explanation of motives and attitudes of foreign investors and the motives and attitudes of national companies or governments, their expectations and measures to attract foreign direct investments, as well as a number of exogenous factors which influence the course of longterm investments (Babić & et al.; 2001, 2). According to the definition, foreign direct investments are explained as longterm investments in economic subject which is situated abroad in relation to the investor. Respectively, according to the IMF definition, foreign direct investments can be explained as a situation when a certain non-resident investor comes into possession of 10% or more of resident's proprietary stock where foreign investor has a majority interest in reaching decisions concerning company management, although he hasn't got majority proprietary stock in the company (UNCTAD, 2007; De Anne, 1991).

From macroeconomic point of view, FDI is a form of capital flows over border from the donor country to host country.

The first attempt of the FDI explanation was Ricardo's theory of comparative advantages. But, FDI cannot be explained by that theory because it is based on two countries, two products and a perfect mobility of factors on a local level. Ricardo's

theory of comparative advantages¹ wasn't able to explain the growing FDI share so other models were used like portfolio theory² which was also unsuccessful because it explains the achievements of foreign investments in portfolio but it doesn't explain foreign direct investments (Hosseini H.; 2005, 530-531). Robert Mundell has tried to explain the FDI through a model of international trade³, involving two countries, two goods and two identical production functions. Neither Mundell's model could explain international production through FDI, because investments incorporated were portfolio investments or short-term investments (Mundell; 1957).

According to the explanation of Japanese researchers Kojima and Osawa, FDI appears when there is a lack in production and the international trade is based on comparative advantages (Kojima & Osawa; 1984).

FDI theory is based on motives and the attitudes of providers i.e. multinational companies and countries which stimulate the export of goods and services by means of foreign direct investments, as well as the motives and the attitudes of companies made by FDI, recipient countries and their governments (Babić et al; 2001, 2). It can be explained by Heckscher-Ohlin theory⁴.

THE MOTIVES OF FDI SUPPLIERS

The motives of FDI suppliers are next (Babić et al; 2001):

1. Portfolio optimization of foreign companies

According to portfolio theory (Babić et al; 2001, 2), the main motive for the investment is a wish of portfolio owner to maximize its value, respectively, expected portfolio yield with a small risk. According to that approach, foreign direct investments are possible if the expected yield of foreign assets (FDI investments) is lower

¹ Country need to specialize in the production and the export of goods and services in which it has relative advantage or relative lower costs, and to import goods and services in which it has relative higher costs.

² It deals with the criteria of optimal variety of investor's possessions. Although this refers to variety of financial instruments, it can refer to assets i.e. real property.

³ The totality of merchandise trade of different countries' residents on a global level.

⁴ Relative redundancy of production factors influences the creation of comparative advantages in the production of goods which are intensively used and relatively redundant production factors. The implication of this model is that relatively redundant production factors are cheaper considering other economy so the competitive production of goods is possible.

than domestic assets when the correlation between expected yield of domestic investments and those abroad (in the form of direct investments) are less than one or even negative, which means, if a yield lowers in a country, yield abroad grows.

2. Externalities or market imperfections

This is another group of FDI motives, which are internalized or eliminated with the help of foreign investments by associating subsidiaries to parent company. The internalization theory (Graham; 1995) was developed by Buckley and Casson in 1976. It tries to explain the growth of multinational companies and their motivations to achieve FDI. Buckley and Casson claim that multinational companies are organizing their internal activities to develop specific advantages, which are then to be exploited. Hymer is the author of the concept of firm-specific advantages and demonstrates that FDI take place only if the benefits of exploiting firm-specific advantages outweigh the relative costs of the operations abroad. Multinational enterprises appear due to market imperfections that led to a divergence from perfect competition in the final product market (Hymer; 1976). There are two types of externalities (Babić et al; 2001, 2):

- Technological; it consists of decreasing average fiscal costs of capital intensive industries and the increase in production due to FDI (for example, the production of new goods which sale is to be increased in order to lower the total expenses of research and development).
- Externalities due to imperfect capital markets; they are used along with FDI to additionally increase the effects of parent company (npr. transfer of technology, knowledge and managerial skills).

3. The theory of industrial organization

According to the theory, the expected income of the subsidiary made by foreign direct investments is higher than the income of a domestic company which is licensed due to market vicinity, lower costs, possible winning of larger part of market and other favourable conditions in the market (Babić et al; 2001, 2).

Hymer emphasises how a specific firm, to spread its activities abroad, needs some specific advantages in relation to local opponents like advanced technology, trademark, patents, managerial and marketing knowledge. The possession of those assets is necessary to restore the advantage of local providers like knowledge of local

market, consumer preferences and local business customs. Buckley and Casson in the work from 1976 (Babić et al; 2001) claim that, to exploit specific advantages on international level, it isn't necessary for a company to own the company in another county and manages its business. Benefits can be used by means of export and licence agreement with local companies on foreign markets. According to their theory, for a company to become multinational, except the possession of intangible specific property, the existence of a so called internal economies is also needed. Internalization is applied to evade high costs of certain transactions in the market.

According to Vernon's production cycle theory, there is an explanation of certain types of foreign direct investment made by U.S. companies in Western Europe after the Second World War in the manufacturing industry. Vernon believes that there are four stages of production cycle: innovation, growth, maturity and decline. According to Vernon, in the first stage the U.S. transnational companies create new innovative products for local consumption and export the surplus in order to serve also the foreign market. According to the theory of the production cycle, after the Second World War in Europe has increased demand for manufactured products like those produced in U.S.A. Thus, American firms began to export, having the advantage of technology on international competitors. In the first stage of the production cycle, manufacturers have the advantage by possessing new technologies, as the product develops also the technology becomes known. Manufacturers standardize the product, but there are companies that will copy it. Therefore, European firms have started imitating American products that U.S. firms were exporting to these countries. US companies were forced to perform production facilities on the local markets to maintain their market shares in those areas. This theory managed to explain certain types of investments in Western Europe made by U.S. companies between 1959 and 1970.

The theory of exchange rates on imperfect capital markets tried to explain FDI. Initially the foreign exchange risk has been analysed from the perspective of international trade. Itagaki (1981) and Cushman (1985) analysed the influence of uncertainty as a factor of FDI. In the only empirical analysis made so far, Cushman shows that real exchange rate increase stimulates FDI made by USD, while a foreign currency appreciation has reduced American FDI. Cushman concludes that the dollar appreciation has led to a reduction in U.S. FDI by 25%. However, currency risk rate theory cannot explain simultaneous foreign direct investment between countries with different currencies. The sustainers argue that such invest-

ments are made in different times, but there are enough cases that contradict these claims.

In the attempts to answer the questions why, how and where to reach foreign investments, Dunning connects partial theories which try to explain FDI motives into so called OLI theory. According to this theory, the motive to initiate FDI is present when three necessary conditions are fulfilled: **First**, "O" for ownership advantages. This refer to intangible assets, which are, at least for a while, exclusive possesses of the company and may be transferred within transnational companies at low costs, leading to either higher incomes or reduced costs. But transnational operations performed in different countries face some additional costs. Therefore, to succesfully enter a foreign market, a company must have certain characteristics that would triumph over operating costs on a foreign market. These advantages are the property competencies or the specific benefits of the company. The firm has a monopoly over its own specific advantages and using them abroad leads to higher marginal profitability or lower marginal costs than other competitors. (Dunning; 1973,1980, 1988). There are three types of specific advantages: 1) Monopoly advantages in the form of privileged access to markets through ownership of natural limited resources, patents, trademark; 2) Technology, knowledge broadly defined so as to contain all forms of innovation activities; 3) Economies of large size such as economies of learning, economies of scale and scope, greater access to financial capital.

Second, "L" for location. When the first condition is fulfilled, it must be more advantageous for the company that owns them to use them itself rather than sell them or rent them to foreign firms. Location advantages of different countries are key factor to determining who will become a host country for the activities of the transnational corporations. The specific advantages of each country can be divided into three cathegories: a) The economic benefits consist of quantitative and qualitative factors of production, costs of transport, telecommunications, market size etc.; b) Political advantages: common and specific government policies that affect FDI flows; c) Social advantages: includes distance between the home and home countries, cultural diversity, attitude towards strangers etc.

Third, "I" for internalization; Supposing the first two conditions are met, it must be profitable for the company the use of these advantages, in collaboration with at least some factors outside the country of origin (Dunning 1973, 1980, 1988). This third characteristics of the eclectic paradigm OLI offers a framework

for assessing different ways in which the company will exploit its powers from the sale of goods and services to various agreements that might be signed between the companies. As cross-border market internalization benefits are higher the more the firm will want to engage in foreign production rather than offering this right under license, franchise. Eclectic paradigm OLI shows that OLI parameters are different from company to company and depend on context and reflect the economic, political, social characteristics of the host country. Therefore, the objectives and strategies of the firms, the magnitude and pattern of production will depend on the challenges and opportunities offered by different types of countries.

4. Capital costs rationalization

Multinational companies set up subsidiaries abroad because the debt is a cheaper way of financing than ownership. Therefore they rather invest abroad by means of direct investments, rather than pay the dividends (Babić et al; 2001, 3).

Direct investments can be used as a strategic goal. In this way, by using direct investments, it is easier to reach foreign markets through recipient country. That is market oriented direct investment. Factor oriented direct investments allow for access to raw materials, technology or cheaper work and other production factors.

THE MOTIVES OF FOREIGN DIRECT INVESTMENT RECIPIENTS

The motives of foreign direct investment recipients consist of the comparison between social benefits and costs which caused foreign direct investments and the attempt to increase social benefits. Foreign direct investment social benefits or gains are seen through different positive influences. Foreign multinational company's income, which is being assessed, secures higher national budget. On the other side, one of usual fiscal measures to attract foreign direct investments is the exemption from taxation in a longer period. Further on, there is a possibility of new workplaces as well as transfer of knowledge, technology and managerial skills. Also, it is important to exploit the comparative advantages of local economy with the economy of foreign investor and it can be a notable factor for a domestic production to enter the world market. The entrance of foreign companies into production sector can strengthen the competition, which improves business activities of the rest of the sector. The other important motive of recipient countries is the fact that foreign direct investments don't include the external debt of the country, so those countries have an additional motive to raise even more direct investments consider-

ing capital and financial account of balance of payments. Potential social costs of foreign direct investments can be caused by employment reduction due to workforce rationalization in a taken company, or, on a micro level, due to unsuccessful domestic companies' removal (Graham & Krugman; 1995). Further on, distortion can occur in the work market, which means, the amount of "good" business can be decreased and the amount of "bad" business can be increased (the differences in workforce payments with equal abilities or professional qualification are changed due to foreign direct investment and the imperfection in the work market). On a macro level, it can come to deterioration in the balance of payments of the home country if the companies made by foreign direct investments have more import than export. For example, from their centers abroad (Babić et al; 2001, 3-4).

Foreign direct investment opponents often express their fear from the rise of the influence of multinational companies on economic policy and the country's stability, as well as reaching monopoly relationship between multinational company and a recipient country.

The motives of recipient countries are social benefits of the FDI, like transfer of technology, knowledge, skills and their spillover, and their positive influence on economic growth, employment, external trade, investments and environment protection in a home country.

CONCLUSION

Empirical results show that FDI doesn't have one theoretical explanation. Foreign direct investment theory is developed from the explanation of motives and behavior of foreign investors from one side, and the motives and behaviour of national companies or governments from the other side, their expectations and measures to attract foreign direct investments as well as a number of exogenous factors that influence the course of longterm investments. According to the characteristics, we can divide FDI on foreign investments that influence on new production and foreign investments which invest into pre-existing production to increase its efficacy or to take over the company. Foreign investors' motives consist of: portfolio optimizing, externalities exploitation in investment markets, transaction internalization by means of FDI, using multinational companies' advantages over other companies, the exploitation of specific characteristics of a recipient country. Multinational companies' motives are included in Dunning's OLI paradigm. According to OLI theory, the motives for foreign investments occur when there are ownership

advantages due to possession of intangible assets, when there are advantages out of private production as well as internalization advantages. Receptient motives consist of expected social benefits coming from the FDI. Receptient countries are usually motivated by economic and social benefits coming from foreign direct investments, like the application of various technologies, knowledge and managerial skills and their spillover on the rest of economy. Foreign direct investment also have a positive influence on external trade, growth, employment and investment into domestic economy. Respectively, it can improve the quality of workforce and human capital through the training of employees in new technologies and the processes of production.

LITERATURE:

Babić, A., Pufnik, A., Stučka, T.: Teorija i stvarnost inozemnih izravnih ulaganja u svijetu i u tranzicijskim zemljama s posebnim osvrtom na Hrvatsku, Hrvatska narodna banka, listopad 2001 OECD (2003), Checklist for Foreign Direct Investment Incentives, OECD:Pariz<http://www.oecd.org/dataoecd/45/21/2506900.pdf> (12.08.2010)

Blomström, M.(2002), The Economics of International Investment Incentives, OECD, <http://www.oecd.org/dataoecd/55/1/2487874.pdf> (14.08.2010)

Blomström, M., Kokko, A. (2003)The Economics of Foreign Direct Investment Incentives,<http://ideas.repec.org/p/nbr/nberwo/9489.html> (14.08.2010.)

Borenstein, E., De Gregorio, J. and Lee, J-W (1998), How does foreign direct investment affect economic growth? , *Journal of International Economics*

De Anne, J.: Foreign Direct Investment: The Neglected Twin of Trade, Occasional Paper 33, Group of Thirty, Washington DC, 1991, dostupno na: http://www.group30.org/pubs/pub_0324.pdf (02.02.2010)

Dunning, J. H. (1973): “The determinants of international production”, *Oxford Economic Papers* 25.

Dunning, J. H. (1980): “Toward an eclectic theory of international production: Some empirical tests” in *Journal of International Business Studies* issue 11.

Dunning, J. H. (1988): “The Eclectic Paradigm of International Production: A restatement and some possible extensions”, in *Journal of International Business Studies* issue 19 (Spring).

- Hadžović, M.: *Direktna strana ulaganja*, Sarajevo, 2002.
- Duce1, M: *Definitions of Foreign Direct Investment (FDI): a methodological note*,
2003., <http://www.bis.org/publ/cgfs22bde3.pdf> (12.08.2010)
- Hosseini H. (2005): "An economic theory of FDI: A behavioural economics and historical approach", *The Journal of Socio-Economics*, 34,p 530-531.
- Hymer, S., 1976 (1960 dissertation): "The International Operations of Nation Firms: A Study of Foreign Direct Investment", Cambridge, MLT Press.
- Kindleberger C.P. (1969): "American Business Abroad", *The International Executive* 11, p.11–12.
- Kojima, K., Osawa, T. (1984): "Micro and macro-economic models of foreign direct investment". *Hitosubashi Journal of Economics*.
- Konings, J., (2001), *The effects of foreign direct investment on domestic firms*, *Economics of Transition*
- Lipsey, R. E., (2002) *Home and Host Country Effects of FDI*, National Bureau of Economic Research (NBER) at New York
- Moran, T.H, Graham, E.M. & Blomstrom, M., (2005) *Does Foreign Direct Investment Promote Development?*, Institute for National Economics, Washington, D.C., ISBN paper 0-88132-381-0

COMPARATIVE ANALYSIS OF THE INTERNATIONAL AND ROMANIAN MARKET FROM THE PRICE VOLATILITY AND RISK PERSPECTIVE

Flavius ROVINARU, Mihaela ROVINARU, Larisa Nicoleta POP¹

¹Faculty of Economics and Business Administration, Babes-Bolyai University
Cluj-Napoca, Romania

ABSTRACT

The events and turbulences experienced by the global economy in the recent years offered new connotations to the phenomenon of price volatility on the world commodity markets. Therefore, new implications from the price risk perspective emerged. The sudden and significant price fluctuations reverberated across the internal markets all over the world, affecting their statuses and putting under uncertainty and risk the economic situations of producers, consumers and traders, from private to national level. The Central and Eastern European countries, due to the processes they are traversing in the recent decades, manifest an amplified responsiveness to external shocks. Consequently, Romania experienced the international commodity markets turmoil in a severe manner. The purpose of this paper is to describe, model and analyze the price volatility experienced at the international level and on the Romanian market in the recent years. After establishing the corresponding models, the paper compares the estimated conditional variance on the two markets, emphasizing the situation of the Romanian market.

JEL Classification: E30, E37, Q02.

Keywords: price volatility and risk, international commodity markets, Romanian market, conditional variance.

INTRODUCTION

While some decades ago, the major uncertainties regarding the commodity price evolutions were concentrated around fears like the ones expressed in the Prebisch-Singer hypothesis, nowadays, those fears, even if real, appear to be insignificant, as

the concerns have been redirected towards an aspect far more overwhelming: their volatility. The volatility of prices increased over time, and particularly since the 1970s, as just between 1972 and 1999 were experienced as many major price fluctuations as there were experienced between 1899 and 1971 (Cashin & McDermott; 2002, 15). Even though the commodities markets were already notorious for their price volatility, the events that the world economy experienced in the years 2000s offered new connotations to this phenomenon. In these years, prices reached historical peaks just to crash dramatically some months later and very soon to restart their rise. All these movements on the international markets reverberated across the internal markets all over the world, affecting their statuses. The Central and Eastern European countries, due to the processes they are traversing in the recent decades, manifest an increased responsiveness to external shocks, and accordingly, Romania experienced the international commodity markets turmoil in a severe manner.

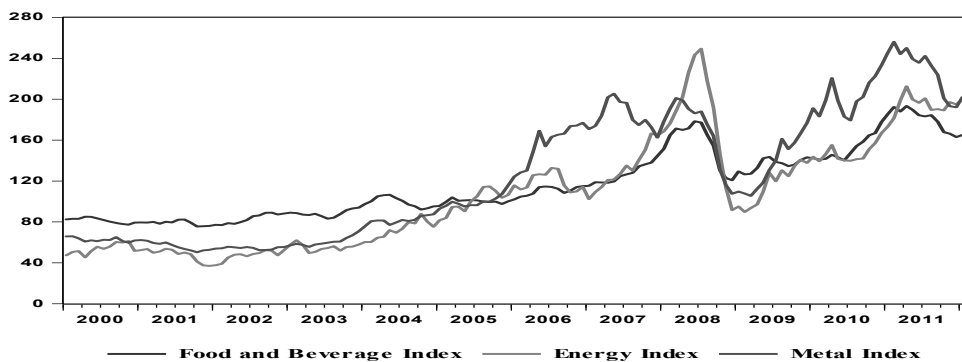
This paper aims to model and present, by comparison, the volatility experienced at the international level and on the Romanian market in the recent years. The rest of the paper is structured as follows. The second section depicts, based on a literature review supported by some empirical evidences, the turbulences that the commodity markets experienced in the recent years, turbulences that determined new perspectives regarding the commodity price volatility. Further, the third section aims to illustrate and compare the volatility experienced at the international level and on the Romanian market, using the GARCH models to express the conditional variance. Consequently, this section offers a methodology description with an accent on the GARCH models and an empirical illustration in which the econometric models are applied for the analysis of two price series: the price series of combustible (fuel) on the Romanian market and the one at international level. Some conclusions finalize the paper in the last section, where, in accordance with the obtained results, it is offered a comparison between the conditional volatility on the two markets.

THE COMMODITY MARKETS TURBULENCES OF THE NEW MILLENNIUM – LITERATURE REVIEW AND EMPIRICAL EVIDENCES

In the first decade of the new millennium, the commodity markets have experienced profound turbulences and high volatility, with prices reaching historical peaks just to crash dramatically some months later and very soon to restart their rise. Starting from 2002, the international prices of all major commodity groups rose gradually. The burst of the housing bubble augmented the speed of increase from early 2007 to mid-2008, leading the IMF to diagnose the ‘broadest and most

buoyant commodity price boom since the early 1970s' (IMF; 2008, 5). Thus, headline inflation increased considerably above common definitions or perceptions of price stability (Gnan; 2009, 21). The boom reached its peak at the middle of 2008, as the crisis that has just started to spread caused sharp commodity price declines. These movements are illustrated by the following graphs (Figure 1), which present the general trend of prices on a monthly basis for some major commodity groups.

Figure 1. Commodity Price Indices (US Dollar Terms) Monthly Data (2000-2012)



Source: Authors' illustration based on data released by IMF, 2012.

The graphs in Figure 1 emphasize all the stages of the turmoil: the blooming period experienced during the price boom which started in 2002 and peaked in the midst of 2008, the following collapse at the installation of the global crisis, the turning point and the restart of the increase despite the still going global recession, and the instabilities of the following years. Since the moment that the economic and financial crisis started to spread worldwide, the fluctuations on the commodity markets became more acute. The price volatility has been significant: fuel prices experienced drops by about 70%, metals prices by 50%, even food and beverages prices, that are generally known to oscillate less under the global cyclical conditions, also fell by about 30% (IMF Primary Commodity Prices Database; 2012). Although the world economy was still severely troubled by the crisis, the commodity prices stopped their major fall by the beginning of 2009 and restarted their rise. The rebound continued into 2010 as the global economy started to recover. As a result, in comparison with a year earlier, energy prices increased by 60% in the first quarter of the year, metals by 62% and agricultural prices by 19% (IMF Pri-

mary Commodity Prices Database; 2012). Triggered by the Euro debt crisis, commodities experienced a sharp decrease during the summer of 2010, due to concerns about economic growth and weakening commodity demand. However, despite the recovery, the 2010 and 2011 prices continue to fluctuate significantly as the world economies continue to struggle with other forms of turbulences, like for example the sovereign debt crises and all the turbulences in the Euro area.

THE VOLATILITY OF COMMODITY PRICES – THE ROMANIAN AND THE INTERNATIONAL MARKET

The considerable turmoil on the international markets reverberated across the internal markets all over the world, affecting their statuses. The Central and Eastern European countries, due to the processes they are traversing in the recent decades – the post-communist transformations, market externalizations, globalization and European Union integration – manifest an increased responsiveness to external shocks. With the outbreak of the global crisis, the vulnerability of these markets has been brought once again to the front, as almost all these countries have accumulated major economic imbalances and have been experiencing sharp recessions. This aspect is supported by the Romania's experience. In order to illustrate how the world prices instability reverberated across the Romanian market, we chose to model the volatility of the combustible prices on the two markets from January 2001 onwards.

1. METHODOLOGY

Numerous methods for estimating price volatility and price risk can be identified in the economic literature, from rather simple ones (like unconditional standard deviation or the coefficient of variation) to more complex ones (such as the ARCH model and its extensions). A series of drawbacks may be identified in the mentioned simple approaches, causing an exaggeration of uncertainty and related price risk while computing the volatility. These aspects are mainly due to the fact that the unconditional standard deviation and the coefficient of variation do not distinguish between the predictable and unpredictable components of price series, intrinsically assuming that market participants behave in a naive way, not having the ability to detect regular features of the price process (Figiel & Hamulczuk; 2010). Moreover, the simple approaches treat volatility as constant over time. These particular shortcomings make the Generalized Autoregressive Conditional

Heteroscedasticity (GARCH) model (Bollerslev, 1986) a more adequate approach. This is due to the fact that GARCH model has the merit of accounting for both the predictable and unpredictable components in the price process, while considering time varying conditional variances, and consequently, only the stochastic or unpredictable component when modeling volatility (Jordaan et al.; 2007). According to Engle (2001), applications of the GARCH approaches are widespread in situations where the volatility of prices is a central issue, as the relatively high volatility implies two problems: the autocorrelation of the residuals and the heteroscedasticity. The latter refers to a situation in which the variances (σ_t^2) do not have a constant evolution in time, being conditioned by its own lagged values (σ_{t-1}^2) (revealed by the GARCH-terms) and by the lagged values of standardized errors (with the ARCH-term $\left(\frac{\varepsilon_{t-i}}{\sigma_{t-i}}\right)$) (Pop & Ban; 2011, 515).

Studies using ARCH model and its extensions are commonly encountered in modeling stock market prices. With regard to commodity prices, it can be mentioned the early ones of Aradhyula and Holt (1988) which applied the GARCH method to modeling meat production. More recently, Jordaan et al. (2007) measured and compared the conditional volatilities for the prices of some crops traded on the South African Futures Exchange using the ARCH or GARCH approach, depending on which of the two approaches was relevant statistically, while Figiel and Hamulczuk (2010) tested for conditional volatility analyzing monthly wheat procurement prices in Poland. Regarding the Romanian market, this kind of approach in commodity price modeling is limited; to our knowledge, only Pop and Ban (2011) used EGARCH for modeling the price of wheat, in order to estimate the volatility and the price risk, both on Romanian and on the international market.

In its general form, a GARCH(p,q) model includes two equations: one for the conditional mean (1) and the other for the conditional variance (2).

$$X_t = \mu + \varepsilon_t \quad (1)$$

$$\sigma_t^2 = \omega + \sum_{i=1}^p \alpha_i \cdot \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \cdot \sigma_{t-j}^2 \quad (2)$$

The coefficients of ARCH-terms (α_i) reveal the volatility of previous periods of time and this volatility is measured with the aid of squared residuals from the equation of mean. The coefficients of GARCH-terms (β_j) show the persistence of passed shocks on the volatility. However, for the price series that we analyzed, we observed that the asymmetrical GARCH models perform better compared to the symmetrical ones. This conclusion is also consistent with the findings of Pop and

Ban (2011). The symmetrical models assume that both the positive and negative shocks have a similar impact on volatility. In reality, it was demonstrated that for certain financial series, their volatility is significantly higher after negative shocks ($\varepsilon_t > 0$) compared to its level after positive ones ($\varepsilon_t < 0$) (the leverage effect). This effect is included in the extended model called EGARCH with the aid of an asymmetric coefficient, γ_i . Consequently, the AR(k)-EGARCH(p,q) model, elaborated by Nelson (1991), has the following structure:

$$X_t = \pi_0 + \sum_{i=1}^k \pi_i \cdot X_{t-i} + \varepsilon_t \quad (3)$$

$$\log(\sigma_t^2) = \omega + \sum_{i=1}^p \alpha_i \cdot \left[\frac{\varepsilon_{t-i}}{\sigma_{t-i}} - E\left(\frac{\varepsilon_{t-i}}{\sigma_{t-i}}\right) \right] + \sum_{l=1}^r \gamma_l \cdot \frac{\varepsilon_{t-l}}{\sigma_{t-l}} + \sum_{j=1}^q \beta_j \cdot \log(\sigma_{t-j}^2) \quad (4)$$

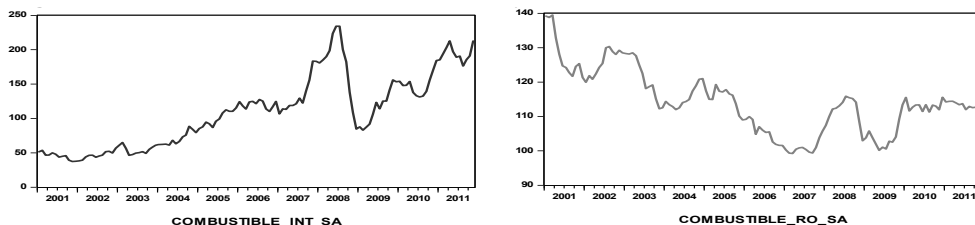
where the residuals from (3), ε_t , follow a GED or a normal distribution and the $\log(\sigma_t^2)$ is the logarithm of conditional variances.

2. EMPIRICAL RESULTS

In our empirical investigation, we analyzed the evolution of price indices for Romanian combustible market, offered by the Romanian National Institute of Statistics (RNIS) and the corresponding ones at the international level, from the International Monetary Fund (IMF), Primary Commodity Prices Database. We used monthly data between January 2001 and November 2011, and we performed the analysis using the program *Eviews 7.1*.

A series of steps required by the statistical analysis of time series were initially implemented. We eliminated the seasonal component using the multiplicative moving average method. The graphs in Figure 2 show the combustibles price evolution on the Romanian and international market, seasonally adjusted.

Figure 2. Combustible Price Indices (January 2001 – November 2011) (2005=100)



Source: Authors' illustration in *Eviews 7.1* – data released by RNIS and IMF, 2012.

Further, we operated with the logarithmic price ratios of the two series ($\ln(P_t/P_{t-1})$), also called price returns (Figiel & Hamulczuk, 2010), due to their better statistical properties (Sironi & Marsella; 1997, 159). The descriptive analysis of the combustible price return series, both on Romanian and international market, revealed that its volatility is not constant in time, indicating the presence of heteroscedasticity, aspect that makes our data appropriate for a GARCH modeling. In order to detect the serial autocorrelation, we analyzed the autocorrelation (ACF) and partial autocorrelation function (PACF) estimated for a number of lags varying from 12, 24 to 36 and the calculated Q-statistics indicated the presence of this phenomenon.

Table 1 presents other descriptive statistics, which show especially that the log returns of combustible prices do not follow a Gaussian distribution (as shown by skewness, kurtosis and Jarque-Bera test).

Table 1. Descriptive Statistics of Combustible Price Indices

Measure	LN_COMB_RO_SA	LN_COMB_INT_SA
Mean	-0.001696	0.010839
Median	-0.001295	0.026552
Maximum	0.049963	0.173544
Minimum	-0.053432	-0.316278
Std. Dev.	0.017965	0.085940
Skewness	-0.280357	-1.183232
Kurtosis	3.632320	5.194120
Jarque-Bera	3.868744	56.41087
Probability	0.004515	0.000000

Source: Authors' calculations in Eviews 7.1.

Further, we tested the non-stationarity of the time series, as they need to be stationary in order to not obtain spurious regressions. In Table 2 we showed the results of ADF test, at the national and international level. For the logarithmic series, the calculated value of the t-Statistic shows that these series are not stationary. Consequently, we constructed the first order differences which proved to be stationary.

Table 2. Testing the Non-Stationarity of Combustible Price Indices

Null Hypothesis: the series has a unit root

	t-Statistic	Prob.*		t-Statistic	Prob.*
LN_COMB_RO_SA	-8.489175	0.7662	DLN_COMB_RO_SA	-9.805376	0.0000
LN_COMB_INT_SA	-8.102145	0.9332	DLN_COMB_INT_SA	-17.06787	0.0000

*MacKinnon (1996) one-sided p-values.

Source: Authors' calculations in Eviews 7.1.

Further, we estimated the models for each of the two variables both for the conditional mean and conditional variance. Equations were estimated using the maximum likelihood. Based on the information criterion minimization (especially Schwarz) and on the residual test, we chose the appropriate number of lags. Combined models ARIMA-EGARCH with a GED distribution were selected.

For the Romanian market, we considered the most appropriate model to be the following (the z-Statistics and the probabilities are given in parentheses):

$$d \ln comb_{Ro,t} = 0.477 \cdot d \ln comb_{Ro,t-1} - 0.327 \cdot d \ln comb_{Ro,t-2} - 0.893 \cdot d \ln comb_{Ro,t-12} + \varepsilon_t \quad (5)$$

[5.06]
[-3.82]
[-28.76]
(0.000)
(0.000)
(0.000)

$$\log(\sigma_t^2) = -14.411 + 0.353 \cdot \left| \frac{\varepsilon_{t-1}}{\sigma_{t-1}} \right| + 0.271 \frac{\varepsilon_{t-1}}{\sigma_{t-1}} - 0.626 \cdot \log(\sigma_{t-1}^2)$$

[-9.87]
[1.17]
[1.66]
[-3.65]
(0.000)
(0.02)
(0.09)
(0.000)

For the international market, the appropriate model is:

$$d \ln comb_{Int,t} = 0.810 \cdot d \ln comb_{Int,t-1} - 0.6880 \cdot d \ln comb_{Int,t-2} - 0.833 \cdot d \ln comb_{Int,t-12} + \varepsilon_t \quad (7)$$

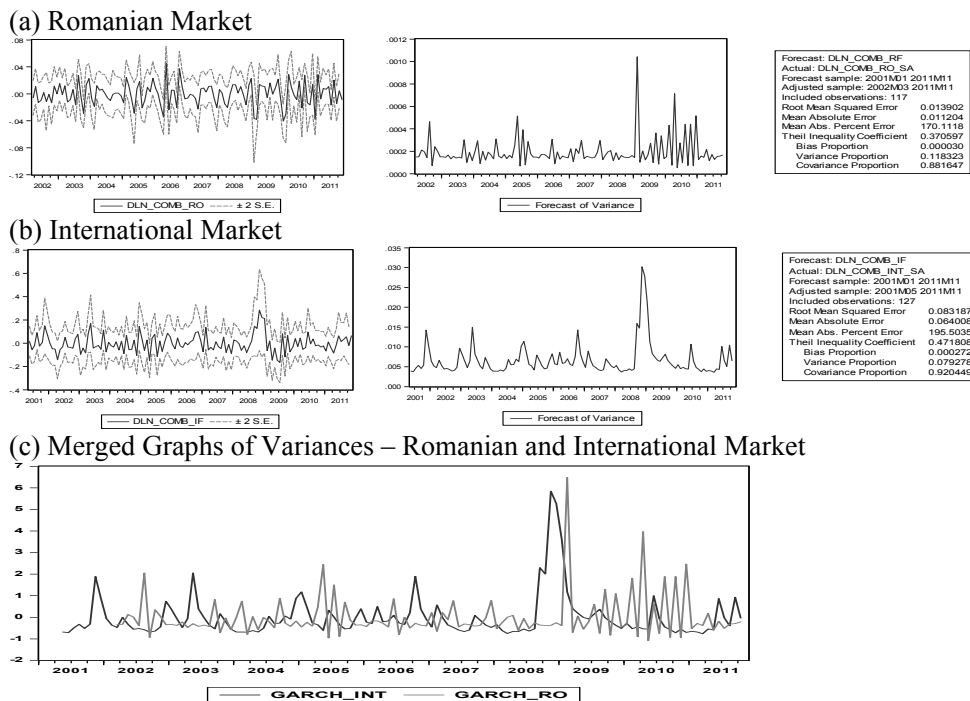
[9.74]
[-5.98]
[-9.75]
(0.000)
(0.000)
(0.000)

$$\log(\sigma_t^2) = -2.263 + 0.37 \cdot \left| \frac{\varepsilon_{t-1}}{\sigma_{t-1}} \right| - 0.16 \frac{\varepsilon_{t-1}}{\sigma_{t-1}} + 0.61 \cdot \log(\sigma_{t-1}^2)$$

[-14.0]
[1.37]
[-1.48]
[2.17]
(0.015)
(0.008)
(0.001)
(0.029)

Based on the estimated equations, we generated the series of conditional volatility, in order to compare for the period January 2001 – November 2011 which of the two markets was more volatile. The results are given in Figure 3, both for the conditional volatility at the international and national level.

Figure 3. Combustible Price Volatility, Monthly Data from January 2001 – November 2011 (2005=100)



Source: Authors' calculations and illustrations in Eviews 7.1.

As shown in Figure 3, the estimated values of conditional variances show an increase of volatility since 2008 on the both markets. If until 2007, the Romanian market volatility follows the international one with a time lag of approximately six months, after this date the time lag diminishes. Consequently, after 2007-2008 the Romanian market appears to be more influenced by the situation on the international one, following the “peaks” generated by different world events, always on step behind. The main reason for this higher synchronization is the fact that, joining the European Union in 2007 and opening its markets, Romania became more receptive at the international shocks. Consequently, in the midst of the crisis the volatility on both markets was very acute. Even though at the international level the situation ameliorated since 2009, the volatility on the Romanian market remained significant.

CONCLUSIONS

Comparing the evolutions of volatility for the two combustible markets, we can affirm that until the installation of the crisis and in the midst of it the volatility on both of the two markets was following a similar trend. However, in the following period, especially on 2009 and 2010, the volatility on the Romanian market has become more acute, while the international situation ameliorated. This aspect comes as a proof of the fact that Romania continued to experience more severely the consequences and reminiscences of the crisis; moreover, it has been also facing a period of turbulences and internal problems that deepened the volatility context in comparison with the international one. Conveniently, the year 2011 brought more stabilization for the combustible prices. However, the new fluctuations on the international market will be most probably soon reverberated across the Romanian one raising problems both at national and private lever from the price risk perspective.

REFERENCES

- Aradhyula, S.V. & Holt, M. T. (1988). GARCH time-series models: an application to retail livestock prices. *Western Journal of Agricultural Economics*, 13, 365-374, ISSN 0162-1912.
- Bollerslev, T. (1986). Generalised autoregressive conditional heteroskedasticity. *Journal of Econometrics*, 51, 307-327, ISSN 0304-4076.
- Cashin, P. & McDermott, C. J. (2002). The Long-Run Behavior of Commodity prices: Small Trends and Big Variability, *IMF Staff Papers*, 49(2), 175-199, ISSN 1934-7073.
- Engle, R. (2001). GARCH 101: the use of ARCH/GARCH models in applied econometrics, *Journal of Economic Perspectives*, 15(4), 157-168, ISSN 1307-1637.
- Figiel, S. & Hamulczuk, M. (2010). Measuring price risk in commodity markets, *Olsztyn Economic Journal*, 5(2), 380-394, ISSN 1897-2721.
- Gnan, E. (2009). Energy, Commodity and Food Price Volatility: What Policy Responses?, *CESifo Forum* 1/2009, ISSN 1615-245X.

IMF. (2008). World Economic Outlook Update: Global Slowdown and Rising Inflation, Washington DC, available at: <http://www.imf.org/external/pubs/ft/weo/2008/update/02/pdf/0708.pdf> (accessed 15-01-2012)

International Monetary Fund (IMF). 2012. Primary Commodity Prices Database.

Jordaan, H., Grové, B., Jooste, A. & Alemu, Z.G. (2007). Measuring the price volatility of certain field crops in South Africa using the ARCH/GARCH approach, *Agrekon*, 46 (3), 306-322, ISSN 0303-1853.

Nelson, D.B. (1991). Conditional Heteroskedasticity in Asset Returns: A New Approach, *Econometrica*, 59(2), 347-370, ISSN 1468-0262.

Pop, L.N., Ban, I.M. (2011). Comparative Approach of Measuring Price Risk on Romanian and International Wheat Market, *World Academy of Science, Engineering and Technology (WASET)*, Special Journal Issue 77(May), 512-517, ISSN 2010-3778.

Romanian National Institute of Statistics (RNIS), 2012, Tempo On-line Database.

Sironi, A., Marsella, M. (1997). *La misurazione e la gestione dei rischi di mercato: Modelli, strumenti e politiche*, Il Mulino, ISBN 88-449-0082-3, Bologna.

AGENCIES FOR FOREIGN INVESTMENT PROMOTION - POSSIBLE INSTITUTIONAL SUPPORT FOR STRUCTURAL REFORMS AND ECONOMIC GROWTH

Mladen Vedriš, PhD, Associate Professor,
Head of Department of Economics, Faculty of Law, University of Zagreb,
Trg Maršala Tita 14, 10000 Zagreb, Croatia

Ozren Pilipović, PhD, Assistant Professor,
Department of Economics, Faculty of Law, University of Zagreb,
Trg Maršala Tita 14, 10000 Zagreb, Croatia
E-mail: opilipovic@pravo.hr

Nenad Rančić, PhD, Assistant Professor,
Department of Economics, Faculty of Law, University of Zagreb,
Trg Maršala Tita 14, 10000 Zagreb, Croatia
E-mail: nrancic@pravo.hr

ABSTRACT

The aim of this paper is to point out a) the importance of institutional infrastructure in fostering economic development for sustainable and lasting growth, and b) to determine analytically the role and importance of action by agencies to encourage foreign investment as a vital instrument in achieving structural changes that encourage new inflows and contribute to the acquisition of new technologies. At the same time, these agencies raise the level of efficiency of national economy and generate increased competitiveness in the domestic and export markets. Special attention was given to the methods of analyzing the structure of agencies from several transitional countries, which will be considered as reference points for the Republic of Croatia. Establishing their methods of operation and actual results may stimulate the creation of new institutional infrastructure in the Republic of Croatia in the year before its entry into the European Union and in a situation in which the country faces additional pressures regarding the competitiveness of its existing economic structure. All this creates the obligation and need to study options for creating a more efficient institutional infrastructure.

1. INTRODUCTION

An analysis of the causes and fundamental factors of modern economic growth of developing countries that have achieved remarkable success in the last century, as well as the basic ingredients of longevity and growth of large, mature market economies, is impossible without careful study of the role of social institutions. They represent the base upon which the economic superstructure has been developed and for which the institutional basis, depending on its quality, can act as an outstanding support for economic expansion or stagnation, positive restructuring and strengthening the competitiveness of the national economy, or cause structural problems and disorders. Although neo-classical doctrines of the 19th and 20th centuries provided indispensable analytical tools for the short-term economic phenomena and processes of developed market economies, for in-depth analysis of the economic development of successful small open economies of Europe and Asia and of the challenges faced by transition economies in Europe in the 1990s, the institutional analysis of economic phenomena and processes is crucial in explaining the underlying causes of their successes and problems. These small, successful economies, which after the Second World War, embarked on the road of economic development, as well as those transition economies that appeared after the collapse of the Soviet Union, have moved resolutely to overcome economic and social backwardness, without properly developed and regulated markets and market institutions, which had already existed for centuries in large, developed economies and without which it is almost impossible to conduct contemporary neo-classical economic analysis.

One of the essential ingredients of economic growth and indicators of openness, but also of the desirability of a country as a partner in the international trade, is foreign direct investment (FDI). FDI is usually defined as international investment by one country with the aim of establishing a *lasting interest* in the enterprises in the economy of another country. *Lasting interest* implies a long-term relationship of direct influence on the management of an investor's direct investment in selected companies. Direct investment includes an initial transaction between two entities and all subsequent transactions between them and among affiliated enterprises, regardless of their formal status. Direct investment is said to be established when an investor acquires at least 10% of ordinary shares or voting rights in a foreign company (OECD, 2003 and UNCTAD, 2004). Precisely because of their contribution

to economic growth and development¹, particularly in job creation, the transfer of technology and managerial skills, increasing exports, and a stimulating effect on domestic investment, productivity, and competitiveness in the global market, FDI strengthens the need for studies of the factors that contribute to the choice of a country as a destination for investment. Because of their perceived contribution to the national economy, FDI regularly figure prominently in the overall economic development strategy and policy of a country. Therefore, special attention must be paid to institutional factors, most of which emphasize the stability and efficiency of the legal system and domestic legislation (especially regarding the protection of property and taxes), the absence of corruption, the size and market development and market mechanisms, and the quality of physical infrastructure, because they are largely influenced by public authorities, the creators of economic policy, and their existence and quality often have a crucial influence on the perception of a country as a desirable destination for FDI. The state, despite neoliberal understandings that give priority to private initiative and free enterprise, is still perceived as a key element of the national institutional infrastructure that in conjunction with central and local governments plays a critical role in attracting and retaining FDI. This fact implies the need for planned, systematic and meaningful institution-building, and taking into consideration best practice proven by standardized, globally successful models and solutions related to issues of foreign direct investment at the local, national, and increasingly, supranational level - within the framework of global and regional economic and political integration. To facilitate access to external capital flows, government organizations, both central and local, charged with attracting foreign direct investment, primarily act through specialized agencies to reduce administrative and regulatory obstacles, adapt to global regulatory trends in this area, and provide on-the-ground support in the daily operations of foreign investors.

The aim of this paper is to show the structure and operation of agencies for promoting foreign investments in Central and Southeastern Europe especially in Poland, Estonia, Slovakia, Serbia, Romania, Bulgaria, Macedonia and Croatia. The study's main purpose is to demonstrate a lack of such institutional structures in Croatia, especially in terms of the organization and operation of a quality agency for investment promotion and, at the same time, to uncover and emphasize the

¹ For further details see Borensztein et al. (1998) based on empirical analysis of FDI flows from 69 developed countries over the last two decades. It emphasizes the positive impact of FDI on technology transfer, provided that the destination country has a level of human capital adequate to enable its absorption.

best institutional arrangements that currently exist in countries that are Croatia's greatest rivals in attracting foreign direct investment, so that it might be used in the future for the establishment and operation of such a development agency in this country

2. INSTITUTIONS - DEFINITION AND DETERMINATION

Institutions are the rules of the game in a specific community, which they enforce upon individuals. They restrict the freedom of individual behavior within it, and in this way they influence the relationships between individuals, i.e. all social, political and economic relations in society, reducing the influence of uncertainty and acting to build a stable (but not necessarily efficient) structure within which interactions take place between people, thus contributing to the evolution and historical development of society. Although the influence of institutions on social life in general and on economic relations as well is significant, economic history and theory have not given them sufficient attention, primarily because of a lack of appropriate analytical instruments (North, 1990, p. 3-4) since “[i]nstitutions are impossible to see, feel or measure. They are creations of the human mind.” (North, 1990, p. 107). However, this does not diminish the problem of adequate evaluation of their significance and role in society: “Do institutions really matter? Do regulations, customs and rules have an influence on economic activity? Can the government affect the economy?” (North, 1990, p. 107). Finding answers to these and similar questions related to the emergence and development of institutions and their short and long-term impact on economic life, particularly on issues of economic growth, will not disappear if they are excluded from economic analysis. On the contrary, the examples of European and Asian countries that have achieved remarkable successes in this area in the twentieth century, as well as those who betrayed the expectations of economic and social development, further emphasize the importance of the role of institutions.

North defines institutions as the rules of behavior that structure human relations – one person's opportunity is a constraint on someone else (North, 2003, p. 13) – thereby reducing the effect of variable uncertainty in everyday life, including economic transactions. Also, there is a complex system of interrelationships between political, economic, and cultural institutions, which is essential to bear in mind when studying each of them (politics, economics and culture, i.e. social capital). In studying the development of and changes in institutions, a momentum

for change that can go from the economic or cultural sphere and be accepted as policy or a political reform initiative provides deeper cultural and economic changes. Sometimes, as in the case of post-socialist countries transitioning to capitalism, simultaneously pressing against this change, it is difficult to distinguish drivers from those who follow, particularly in the relationship between politics and economics, which are often linked to formal and informal goals, to actors and interests. Examining institutions by reason for their creation, they can be grouped into four basic categories (Acemoglu, 2003, p. 10-13):

- 1.) Maximizing efficiency - within a social infrastructure institutions are formed that increase the economic efficiency of society as a whole, regardless of the manner of subsequent distribution of goods and services that are produced among the members of the community.²
- 2.) Facilitating and enabling “rent seeking” - unlike the previous case, participants in economic relations in a society can act in the direction of the origin and development of institutions, not necessarily with the aim of maximizing the economic efficiency of society as a whole, but their own gain, which can be achieved at the expense of other members of the community because not all members of society are always involved in the development of institutions, so only those particular interest groups at a particular moment, in fact, have a decisive influence on political power in society.
- 3.) Minimizing the cost - an institution created in the pursuit of solving economic problems of efficiency and minimizing costs and maximizing output of society will be influenced by the shape of the variable cost, i.e., they will develop such other institutions in which the benefits of their creation and their development and optimal functioning, outweigh the costs of their production and action.³
- 4.) Accidental consequence of interactions in society - institutions do not arise due to the rational action of participants in economic relations in a society, whether in order to maximize efficiency and welfare for all, or the promo-

² See also Coase (1960).

³ The same view is shared by Demsetz (1967) and North (1990).

tion and maximization of their own particular interests, but as an accidental consequence of other social relationships.⁴

Also, several possible classifications of institutions with respect to their direct or indirect effect on the economy as an essential foundation for economic progress and the development of a capitalist society regularly emphasize the institution of private property, fair and efficient financial and legal systems, and the limited but supportive role of government, or the executive branch.⁵

Under this criterion Acemoglu distinguishes between three types of institutions (Acemoglu, 2003, p. 9):

Economic institutions – affect the rules that regulate economic activities in society such as the level of security of property rights (property and other proprietary rights and status of natural and legal persons), freedom of contract (civil and commercial contract law) etc.

Political power – may alter business conditions and economic institutions, and has a redistributive function, through which it also influences economic relations (the state); and

Political institutions – the rules about arrival and dismissal of political power, which define the formal, *de jure*, limits of its influence (constitution, election laws, separation of powers).

According to Rodrik all institutions that are relevant to society and its economy can be classified into five different groups (Rodrik 2000, p. 4):

- Property rights,
- Regulatory institutions,
- Institutions for macroeconomic stability (the central bank and finance, particularly fiscal, system),
- Institutions for social security

⁴ Tilly (1990) emphasizes that the modern state and its institutional infrastructure (especially fiscal and administrative system) were developed to finance war expenditures, because only war could ensure its survival.

⁵ Therefore we can conclude that today prevails a sort of compromise between liberal and interventionist approach in economic policy of development, since the democratic regimes does no by itself guarantee economic success, which is not a priori excluded in totalitarian regimes.

- institutions for conflict resolution in society – contribute to the achievement and maintenance of social cohesion.

3. INSTITUTIONS AND ECONOMIC DEVELOPMENT

There is an established belief that the mechanism of economic development in economic theory is relatively well-researched and developed, and it is possible to find examples of successful development strategies, particularly in the 20th century. The main problem arises in implementation because it requires a certain level of social organization, which is lacking in most Third World countries. (Thurrow, 2003, p. 183)

Countries that have not been able to adequately organize and develop (to ensure a stable political environment, to achieve a high level of the rule of law, to have an educated population, and to build the basic physical and institutional infrastructure, etc.) simply are not able to achieve the desired rate of economic growth. Without creating a favorable business environment there is no development of the business sector, which is the creator of the new value and wealth of any country. Moreover, the shortcomings of institutional infrastructure have a negative effect on overall economic performance of national economies, especially in productivity (Hall and Jones, 1991) and growth (Olson et al., 2000), which is certainly an obstacle to increasing the competitiveness of a national economy.

There are many aspects of social (institutional) infrastructure. According to Romer, for example, it is divided into three basic groups (Romer, 2001, p. 144): The first refers to features of the government's fiscal policies such as tax treatment of investment choices or the allocation of government spending between investment projects and other forms of consumption, which directly affects the overall allocation between investment and consumption. For example, if the government sets the tax rates too high, there is a rent-seeking incentive in the form of tax evasion and the growth of the informal economy. The second group relates to factors (policies and institutions) that shape the environment for making personal decisions. For example: in a country ruled by organized crime or experiencing a civil war incentives for investment and other activities that increase output will be very low. The same is true in the case of an inefficient judiciary, or when there is no adequate anti-monopoly legislation. The last group of policies that constitute the social infrastructure consists of state rent-seeking activities such as bribery of public officials, or any abuse of power for private benefit.

As evidence of the existence of links between social and institutional infrastructure, we can investigate the level of GDP by groups of countries, such as the difference between West and East Germany, North and South Korea, Hong Kong and China. In these pairs of countries, many variables that affect GDP were similar: climate, natural resources, initial levels of physical and human capital, cultural attitudes towards savings, work, entrepreneurship, and yet their output per worker is dramatically different (Romer, 2001; p. 145). The weakness of this evidence is that these are isolated examples, based on which one can not draw general conclusions.

Empirical studies that connect the various elements of social infrastructure and GDP (growth rates and levels) comprise another group of evidence. Relevant here are the investigations begun by Barro that included measures of political stability as well as assessment of institutional quality in cross-country analysis of long-term growth (Barro, 1991). He analyzed data for 98 countries for the period from 1960 to 1985, in which he used as the dependent variable the average growth rate of GDP in that period; independent variables included were: initial GDP, initial average number of years of schooling, government consumption, market distortions and existing investments. He showed that there is a positive correlation between political stability and economic growth. His research is significant because it produced an econometric model that became the basis of numerous subsequent models in this field of analysis. The specificity of this work is that it used as an indicator of institutional quality using objective measures – the number of revolutions and assassinations.

To assess the quality of institutional infrastructure Mauro introduced subjective indicators of commercial agencies established for international investors (Business International (BI), International Country Risk Guide (ICRG), and Business Environment Risk Intelligence (BERI)). Mauro used three indicators (Mauro, 1995): (1) Corruption (2) an index of the efficiency of a bureaucracy, and (3) an index of political stability. He established a positive and statistically significant relationship between investment and economic growth. In his work he noticed a problem of causality since its parameters represent an average for the period from 1980 -1983, and investment and growth was measured for the period from 1960 to 1985, which might indicate that a growth effect on the observed indicators and not vice versa. He has tried to solve endogeneity by using ethno-linguistic fragmentation as instrumental variables and concluded that the efficiency of a bureaucracy leads to higher investment and growth.

Unlike the previous works Brunetti, Kisunko and Weder (1997) used data obtained from the study of attitudes of private businesses to construct an index based on the rules of credibility (credibility of rules index), which measures expectations about the frequency of shifts and changes in government policy, protection from criminal activities, judicial unpredictability, and the frequency of additional payments (bribes) required for business. This approach is particularly interesting when considering the problem of FDI since in addition to the usual risks that arise in international trade, foreign investors run to additional risk of expropriation and nationalization, which is particularly pronounced in authoritarian or dictatorial regimes.⁶ For the sample of 41 countries, and including initial GDP levels and level of education (independent variables), the model showed a statistically significant correlation between the index and growth and investment in the period 1983-1994.

On the other hand, Gastanaga et al. (1998) have empirically demonstrated that corruption, a slow and inefficient bureaucracy, and inadequate protection of contractual arrangements are associated with lower levels of FDI relative to GDP. Wei (2000) investigated the effects of corruption on bilateral FDI trends in a sample of 12 countries that provide and 45 countries that receive foreign direct investment and concluded that raising the tax burden on multinational companies has the same effect as increased levels of corruption, thus reducing the amount of foreign direct investment due to increased operating costs.⁷ Furthermore, the relevant scientific literature⁸ indicates a correlation of FDI with the quality of human capital and institutional infrastructure of the recipient country. Therefore, it is not surprising that the focus of empirical research is on finding the optimal environment for FDI: "...legal, regulatory and political institutions that provide transparency, security and stability of foreign and domestic investors as well as social infrastructure, such as education, which increases the ability of the local labor force..." (Zarsky and Gallagher, 2003, p. 5).

The problem of causality between institutions and economic growth was also addressed by Chong and Calderon (2000). They showed that it exists in both directions and that good institutions stimulate growth, which in turn leads to the adop-

⁶ See Harms and Ursprung (2002).

⁷ According to this analysis, a change in the level of corruption from the position of Singapore to the level in Mexico would have the same impact on FDI as a rise in tax burden for 50 percent.

⁸ See for example Mody and Srinivasan (1998) and Gliberman and Shapiro (2002).

tion of good institutions. The results were obtained by observing the growth rate of per capita GDP between 1972 and 1995 using Gewek's causality testing method since it permits testing of linear feedback effects between institutional quality and economic growth. Unlike other studies, they used time series analysis. As a source of data they took BERI indicators of implementation of a contract, the possibility of nationalization, the quality of infrastructure and bureaucratic delays and an additional indicator that was a combination of others. They found that the impact of institutional reforms on growth is greater in poor countries, and that it takes longer to achieve this effect.

4. INVESTMENT PROMOTION AGENCIES – THEORY

Investment promotion agencies are usually government bodies⁹ (either central or local government) whose main mission is to promote and attract foreign direct investments¹⁰ (Morriset, Andrews-Johnson, 2004). Their success in attracting FDI depends on: a) their relations with the central government; and b) the quality of private sector participation in the work of these agencies (Cohen, 2007).

According to most authors, the four main goals of investment promotion agencies are:

1. *Image building* with the purpose of presenting a country as an attractive site for international investment. It is usually associated with image building include advertising, good PR, etc.
2. *Investor facilitation and investor services* refer to a range of services provided in a host country that can assist an investor in analyzing investment decisions, establishing a business, and maintaining it in good standing. Activities in this area include information provision, “one-stop-shop” service aimed at expediting approval process, and assistance in obtaining sites, utilities, etc.
3. *Investment generation* entails targeting specific sectors and companies with a view to creating investment leads. Activities include identification of poten-

⁹ Sometimes they are organized as non-profit organization that operates on the basis of a chamber of commerce.

¹⁰ Gilpin makes an interesting observation about the FDI: “in the ideal world of the neoclassical economist firms would not invest abroad. Furthermore, a firm's behavior is determined almost entirely by market signals and that, therefore, the nationality of firm and whether it is operating domestically or internationally is of slight importance” (Gilpin, 2001, p.279).

tial sectors and investors, direct mailing, telephone campaigns, investor forums and seminars, and individual presentations to targeted investors. Investment generation activities can be done both at home and overseas.

4. *Policy advocacy* consists of the activities through which the agency supports initiatives to improve the quality of the investment climate and identifies the views of the private sector on that matter. Activities include surveys of the private sector, participation in task forces, policy and legal proposals, and lobbying. (Morriset, Andrews-Johnson, 2004, p. 7).

What are the benefits of the FDI for the host country? There are two opposing views of FDI. One believes that FDI is beneficial to the source country, and the other view is that it actually is not that beneficial to the source country. There are many reasons to favor a pro or anti-FDI stance taken by economists, political scientists and the general public.

Economists generally consider FDI to be beneficial for the host country because it contributes to economic growth through technology transfers and the inclusion of the host country in the global economy (especially the global production chain). Mody, for example, praises FDI in this way: "FDI is thrice blessed. It brings scarce capital where capital is needed and productive. It stimulates the domestic market for corporate control and hence serves to discipline managers. It is the bearer of knowledge to enhance productivity, potentially to the levels of international best practice." (Mody, 2007, p. 1).

Carković and Levine think that the economic rationale for providing special incentives to attract FDI is the potential benefits in the form of positive externalities that take form of technological spillovers. (Carković and Levine in Moran (ed.), 2005.

Many economists (Cohen, 2007, Moody, 2007) argue that FDI is beneficial to the host and the source country. First of all, multinational corporations (MNCs) are successful companies that must be competitive at the domestic level before they become competitive at the global level (competitive in terms of quality and prices). If an MNC sets up a foreign subsidiary, it is in its best interest to make sure that the subsidiary has the best possible managerial practices and to organize its production to capture the advantages of economies of scale. The foreign subsidiary is usually under close parental supervision. The attraction of FDI and MNCs usually points to a good domestic economic and political situation and a good climate for

investing in selected countries. *The Economist* characterized FDI as being more than “mere ‘capital’”; it is a uniquely potent bundle of capital, contacts, and managerial and technological knowledge.” (The Economist, February 24, 2001, p. 80). The best MNCs bring to host countries technology they could produce themselves or acquire on the global market (Gilpin, 2001). The host country could benefit from the technological and organizational spillovers that could occur between the MNCs and local firms.

Financial FDI also can be beneficial to the host country’s economy. Without FDI there would be no investments and new jobs. In countries that have large budget deficits and low domestic savings FDI can also help earn hard currencies by utilizing exports of MNCs.

Neuhaus defines three channels through which FDI has an impact on economic growth:

- 1). Direct Transmission (through “greenfield investments”)
- 2). Indirect Transmission (through “ownership participation”)
- 3). Second-Round Transmission (through “technology spillovers”) (Neuhaus, 2006, pp. 43-44)

The impact of direct transmission of FDI on a host country’s economy is pretty simple to explain. greenfield investments simply increase the GDP of host countries (at least in the short run). Indirect transmission causes restructuring of domestic firms into foreign ownership and they function more efficiently due to this fact. Second-round transmission through “technology spillovers” depends on the quality of FDI and on the host country’s ability to absorb and use new technology. If this does not happen, there will be no economic growth. It is hard to imagine that space research could happen in a developing country.

FDI can be classified by the method of establishing a foreign subsidiary of an MNC. There are greenfield and brownfield investments. Greenfield investment occurs when an MNC establishes a totally new company, or part of itself, in the host country and builds up a service or manufacturing industry virtually from scratch (thus, the name greenfield investment is akin to something that is being built on virgin soil). This is a welcome type of FDI for the host countries since it provides employment for the labor force and possible technological spillovers for similar industries. Brownfield investment occurs through the merger and acquisition of existing companies or by privatization of state-owned enterprises. This kind of FDI

does not necessarily provide jobs and economic growth, and it often involves a period of restructuring, during which jobs are lost. It can also lead to less competition since the companies targeted for acquisition are usually competitors of the MNC. These forms of FDI are only “good” if the domestic company is facing bankruptcy and the loss of jobs. To this type of FDI I would add non-equity forms of FDI such as: subcontracting, licensing and franchising arrangements. This type of FDI does not necessarily involve capital flows from abroad. But it can contribute to the development of the host country’s business sector.

Based on IMF criteria, we can speak about FDI when at least ten percent of a foreign subsidiary is owned by a parent company from another country. If the share of ownership is less than ten percent, then we have a portfolio investment.

The eclectic paradigm of John Dunning, developed in 1977, is one of the most famous theories dealing with MNCs and FDI. The cornerstone of the theory is the so-called OLI paradigm. O stands for ownership, L for location and I for internalization. Cantwell and Narula think that this paradigm has been the most important and influential in explaining the rise of foreign investment. (Cantwell, Narula, 2003).

In his eclectic theory Dunning managed to unite the theory of industrial organization, or how a company can achieve competitive advantage over other firms; the theory of the firm, or why a company chooses one organizational mode over another to create, use, and enhance its competitive advantages – the so-called transactions cost perspective; and the theory of location, which explains how firms choose where to locate overseas value adding activities. The “extent, ownership, and pattern” of MNC activity depends on the configuration of three variables/conditions being satisfied at any given moment (Cohen, 2007; Cantwell, Narula, 2003).

Ownership advantages are intellectual property rights and other non-physical rights, which can be transferred in full from the home country to overseas branches. These are:

- a) products and production processes that are protected by patents, trademarks, copyrights, and trade secrets.
- b) marketing and organizational skills and the advantages of “common governance.” According to Dunning, common governance is comprised of the size of the established reputation of a company. All of these facts afford the company favored access to finance, labor, natural resources, etc.

Ownership advantages, whatever their exact mix, must provide a company with market power and/or cost advantages sufficient to outweigh the costs of setting up one or more subsidiaries in foreign countries and the burdens of succeeding there. (Cohen 2007; Dunning, Nardala, 2002)

Location specific advantages come into consideration only if the first two parts of the OLI paradigm have been successfully satisfied. Location advantages can come into being due to political factors such as: import barriers that rule out exporting (access to local and regional markets), or due to geographical features that cause prohibitive transportation costs or overly long shipping times. They can take the form of pull factors like cheap or free real estate, low (skilled) labor costs (India), financial incentives for incoming FDI (tax exemptions), and not to forget natural resources like oil, gas, gold, iron, etc. Location comes into play because some of the production factors like a cheap labor force and natural resources are simply not movable.¹¹

In the end FDI is neither a blessing for a country nor a curse upon it. If a country has a well-ordered economic and political system, it will probably attract the best FDI possible, and it will be able to have a stronger bargaining position with the MNC. If, on the other hand, the country does not have a well-ordered economic and political system, it will be easier for MNCs to reap additional benefits for themselves. In other words, the efficiency of FDI depends on the skills of the government to provide the best conditions for economic development.

Table 1. FDI inflows in millions of dollars/source UNCTAD.org

Country/Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Poland	9445,315	5701,165	4122,764	4587,717	12874,42	10293,37	19603,24	23560,76	14838,7	13697,78	9681,292
Slovakia	1932,282	1583,814	4141,863	2159,974	3030,455	2428,59	4692,656	3580,762	4686,821	-49,6775	525,5051
Serbia	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2955,296	1958,844	1328,558
FYR Macedonia	215,0567	447,1317	105,5746	113,3262	323,6694	96,02169	432,5767	692,5102	585,7688	201,3962	293,2147
Bulgaria	854,8752	944,4447	1057,683	893,388	1090,398	1186,077	1864,398	2233,887	4049,951	5725,415	4859,975
Romania	1056,753	1157,931	1140,652	2196,304	6435,591	6482,863	11366,87	9921,466	13909,99	4846,89	3573,297
Estonia	391,5762	539,5094	288,9633	928,4735	957,5487	2868,847	1797,285	2724,645	1731,131	1838,04	1539,378
Croatia	1050,854	1313,184	1070,92	1989,07	1179,088	1825,492	3472,802	5035,372	6179,178	2911,247	582,605

¹¹ Castells makes a good argument in favor of the mobility of the labor force. He thinks labour mobility exists either for highly educated and skilled workers like physicians, engineers, and university professors, or for low skilled manual workers (Castells, 2001).

5. INVESTMENT PROMOTION AGENCIES – EXAMPLES FROM THE TRANSITION COUNTRIES

5.1. Poland

The Polish Information and Foreign Investment Agency (PAIZ) helps investors enter the Polish market and find the best ways to utilize the opportunities available to them. It also guides investors through all the essential administrative and legal procedures that involve a project and helps them establish business links with potential local partners (PAIZ official website, 2012)¹². Poland had to start attracting FDI quite early in its transition period since it was faced with a large foreign debt burden that had to be repaid. The government could no longer borrow capital from the international markets that was needed to start a new investment cycle (Bandelj, 2008; Balcerowicz, 1995). PAIZ was founded in June 2003 by merging the Polish Investment Agency¹³ and the Polish Information Agency. Poland's great asset was its large diaspora in the United States and the founding of the Polish-American Economic Forum in 1992 helped promote American investment in Poland (Bandelj, 2008).

Poland also set up free enterprise zones. The first of these zones, Euro Park Mielec, opened in 1995 with a twenty-year life span. Investors enjoyed ten years of corporate tax relief (depending on the investment and exports) and a fifty per cent cut in corporate tax in the second decade. In 1996, the government approved the establishment of a special enterprise zone in Katowice. A free economic zone in Suwalki was soon to follow. Also in 1996, the Polish government created three more economic zones (Lodz, Legnica and Walbrzych), and another four were opened by the end of 1997. On 26 May 1999, Poland announced a temporary ban on issuing new permits after pressure from the EU, which said that the (seventeen) special investment zones broke competition rules and should eventually be closed. Poland then ordered each of those zones to stop issuing permits to new investors. The Ministry of the Economy proposed to limit the access to the zones for new investors from 2001, and no new investment permits were issued from 2002 onwards. But

¹²It should be said that many regional consultative centers are active in Poland, which by cooperating with PAIZ, help in the realization of investment projects. (<http://www.paiz.gov.pl/regions/coi>, visited 20.3. 2012)

¹³ This agency was founded in 1992 as state run enterprise under the supervision of treasury to help attract FDI to Poland. The Polish information agency was founded in 1991 to create a positive picture of Poland abroad. (http://www.paiz.gov.pl/about_us/paiiiz, visited 20.3.2012).

the existing FDI's like General Motors, which had located a car plant in the Gliwice zone, were allowed to stay on under the present terms.

According to PAIZ, foreign investors can operate in special economic zones by using the following benefits, and they can also access the regional European funds

- a) tax exemption (CIT or PIT)
- b) a site fully prepared for development by the investor at a competitive price
- c) free assistance in dealing with formalities in connection with the investment
- d) exemption from property tax (on the territory of certain duchy) (PAIZ official website, 2012)

An income tax holiday in the special economic zones is considered publicly financed regional aid for economic development of the poorest EU regions and as a means for attracting investment and creating new jobs.

The costs that can lead to a grant of regional aid in SEZs are: a) the costs of new technologies; b) the costs of newly employed workers.

There is also a possibility of using the both types of aid simultaneously, but only if the joint amount of aid granted is not greater than the aid allowed in the counties concerned (PAIZ official website).

State aid to an investor can be obtained only in the following industrial sectors: the automobile industry, electronics, the aviation industry, R&D, and biotechnology. Poland is obviously directing investments to those industrial sectors that it considers to be of strategic importance for its economic development.

5.2. Slovakia

The Slovak Investment and Trade Development Agency (SARIO) is a government-funded organization that operates under the supervision of the Ministry of Economy of the Slovak Republic. Its main objectives are to improve the living standard of Slovakian citizens and to reduce regional development differences in the country. (SARIO Official Website, 2012).¹⁴ The agency was founded in 2001. SARIO provides the following services: legal and all other kinds of assistance in obtaining all required administrative permits; help in choosing the best possible investment location and in connecting a potential investor with local partners; a

¹⁴ Regional development agencies are also present in Slovakia and they work closely with the Slovak ministry of regional development.

wide range of consulting services that aim to make investment in Slovakia easier (SARIO Official Website, 2012).

Slovakia was far less successful than the other Central European countries in attracting FDI in the 1990s. Perhaps this lack of FDI had something to do with the fact that Slovakia was led at the time by Vladimir Meciar, whose regime was a semi-democratic, semi-authoritarian dictatorship.

With the establishment of SARIO, the new democratic government tried to change the negative picture of Slovakia as a not particularly attractive place for FDI. It managed to change the investment picture of Slovakia and the country transformed itself from an ugly duckling to a beautiful swan, especially in the automobile industry.

Under the Investment Act Slovakia offers state aid and access to EU funds to potential investors in the following economic sectors: a) industrial production, b) technology centers for R&D, c) shared services centers, and d) tourism. The conditions that must be met to be eligible for state aid eligibility in all four economic sectors are: aid in start-up of new enterprises or expanding the existing enterprise if the investor covers at least of the 50% of the investment value; work on the project cannot start unless the Ministry of Economy gives its approval and grants the state aid at the same time (the statutory time limit for reaching a decision is 90 days); the investment plan must be submitted in Slovak; the project must be completed within 36 months after the government approval; and the beneficiary of the aid may only be a legal entity registered in Slovakia. All investment types must meet certain criteria to be eligible for state aid. There is a minimum amount of investment that must be used to acquire modern technology and for employee education. The amount of state aid is also connected with the location of the investment – there is little or no state aid for investments in the Bratislava region due to its higher level of economic development. (SARIO Official Website, 2012)

5.3. SERBIA

The Serbian Investment and Export Promotion Agency (SIEPA)¹⁵ is a government organization that is committed to helping foreign investors and buyers, while

¹⁵ There are regional development agencies that operate in Serbia and that are financed by the EU. They operate under the jurisdiction of the Ministry of Economy and Regional Development and they must obtain a permit for their activities.

raising Serbia's profile in the eyes of international business decision-makers. SIEPA was created in 2001 by the Government of the Republic of Serbia. Its mission is to support foreign companies investing in Serbia and Serbian companies who export and do business worldwide (SIEPA official website, 2012)

SIEPA makes it easier for potential foreign and domestic investors to do business in Serbia by providing "one-stop-shop" services with a statutory time limit of five days for the registration of legal business entity. (SIEPA official website, 2012)

SIEPA offers the following services to export-oriented businesses: a) identifying local partners and suppliers, including meeting facilitation, b) maintaining investment and exporter databases, c) delivering sector analyses and studies, d) helping Serbian exporters service international markets, e) assisting in the promotion of domestic products at international exhibitions, and f) an effective cost-sharing development grant program that enhances the competitiveness of Serbian companies (SIEPA official website, 2012)

On the other hand, the range of services offered to those who wish to invest or reinvest in Serbia include: a) assistance with company establishment (registration, work permits, office space etc.); b) identifying locations for greenfield projects; c) finding existing facilities for brownfield investment; d) organizing site visits; e) matchmaking with joint venture partners; and f) facilitating contacts with national and local authorities (SIEPA official website, 2012).

Serbia also has free zones in which the investors are exempt from paying VAT and custom duties on the import of raw materials and goods that are used in producing goods for exports. There are currently eight such free zones – Pirot, Subotica, Zrenjanin, Novi Sad, Kragujevac, Šabac, Užice and Jug. (usz.gov.rs/en/official site, 2012)

Depending on the investment location, investors are entitled to cash grants from the Serbian for every new job that they create. The government of Serbia has approved more 164.1 million euros, which has resulted in the creation of 33, 239 new jobs and which means that every new job has been supported by an average of 4, 200 Euros. (SIEPA official website, 2012)

What really makes Serbia attractive for FDI is the beneficial free trade agreement that Serbia has with Russia (the only country outside the Commonwealth of Independent States that has it). All the goods must be produced in Serbia (the free trade agreement stipulates that goods for exports to the Russian market must have

50% local content produced in Serbia) with an average import duty for the Serbian goods of only 1%.

5.4. MACEDONIA

Invest Macedonia is the Macedonian government institution that supports foreign investment in the Republic of Macedonia. Its mission is to attract new investment projects and to help expand existing investments in Macedonia, as well as to provide support to Macedonian exporters. Its aim is to win new investment projects for Macedonia and to support the expansion of the existing base of overseas companies in the country (Invest Macedonia official website, 2012)

The agency provides the following services for potential foreign investors: a) statistics and data that help foreign investors objectively evaluate Macedonia as a location for their investment project. b) guided tours in Macedonia for prospective investors to help them find a suitable location for their investment; c) help in dealing with central and local government authorities to expedite approvals, and where necessary, to enable rapid start-up of an investor's operations; d) help in finding suitable Macedonian partners to further investment goals; e) help in expanding the scope and scale of production in Macedonia; and f) a variety of services (with strict confidentiality when required). (Invest Macedonia official website, 2012)

The agency also offers one-stop-shop services where the permits required for starting up a business can be obtained in less than 4 hours (Invest Macedonia official website, 2012).

Macedonia has a corporate and income tax rate of only 10 % (flat tax) while there are two rates of VAT the normal one of 18 % and a preferential one of 5%.

5.5. BULGARIA

InvestBulgaria Agency (IBA) is a Bulgarian government investment promotion agency that operates under the jurisdiction of the Ministry of Economy, Energy and Tourism. It was established in 2009 to promote Bulgaria as an attractive location for FDI (SG No. 18/5 March 2010). The agency offers its services free of charge. (InvestBulgaria Agency official website, 2012)

According to Article 11b of the Investment Promotion Act (SG No. 18/5.03.2010), the agency performs the following functions: a) provides information services to investors; b) performs investment marketing, presentation, and advertising abroad

investment opportunities in Bulgaria; c) provides individualized administrative services to investors according to the procedures established by this Act; d) prepares an annual plan to attract and service investors and presents a report to the Minister of Economy, Energy and Tourism for approval not later than 31 December of the previous year; the plan for the current year shall be updated on a quarterly basis; e) prepares an annual report on investments in Bulgaria and on the conditions for investment promotion, and presents the report to the Council of Ministers via the Minister of Economy, Energy and Tourism; f) prepares quarterly reports on activities in connection with the annual plan, and presents the reports to the Minister of Economy, Energy and Tourism; g) hosts an Internet site providing information on: (1) the investment climate and business climate in Bulgaria; (2) areas and industrial zones for investment by functional region, with an economic and investment profile of the functional region; (3) standard forms for the award of an investment class certificate and for eligibility for [investment] promotion measures according to the procedure established by the act; (4) other information.

Bulgaria also offers investment incentives with lower corporate and income tax and with the availability of EU funding for foreign investors which operate in Bulgaria.

5.6. ROMANIA

The Romanian for Trade and Invest Agency is a public agency in charge of foreign trade and promoting foreign investment. The forerunner of this agency was the Romanian Trade Center, whose goal was to assist Romanian enterprises in entering foreign markets. In 2002, the Romanian Investment Agency was established to attract FDI. In 2009, the two agencies were merged into the Romanian Trade and Invest Agency. (Romania Trade and Invest Agency official website, 2012)

This agency provides the following services: a) help with greenfield projects; b) help with the national legal and regulatory framework - incentives and major state aid schemes for investments; c) detailed information about suitable locations and on-site visits for FDI projects that have been submitted; d) arranging meetings with local authorities and prospective partners in investment projects; e) assistance with investment project development and post-implementation; and f) providing data on FDI flows in the national economy. (Romania Trade and Invest Agency official website, 2012)

The agency also provides “one-stop-shop” services as a means for easier registration of companies in Romania.

5.7. ESTONIA

The Estonian Investment Agency (EIA) is a part of Enterprise Estonia. It is a government agency whose goal is to promote foreign investment in Estonia and to assist international companies in finding business opportunities there. (EIA official website, 2012). Its goal is to promote a competitive business climate in Estonia so that Estonian companies become competitive at a global level. Estonia is unique among the transition countries in Eastern and Central Europe – it offers no tax incentives for attracting FDI because it would be in contrary to the prevailing liberal market ideology in the country.

EIA provides the following services in three fields both to foreign and domestic investors: 1) information services and investment preparation: a) general information enquiries; b) organizing site visits and fact-finding missions; c) identifying potential partners in Estonia; d) assistance with developing market entry strategies; e) identification of specific investment opportunities; (2) consulting and project management: a) site search; b) advice on project financing; c) negotiations with relevant authorities; d) assistance in project implementation; (3) post-investment services: a) assistance with EU grant applications; b) supply chain development; c) establishing university linkages; d) cluster development (EIA official website, 2012). All of these services are provided free of charge.

5.8. CROATIA

The Croatian Agency for the Promotion of Exports and Foreign Investment (APIU) was established by the Croatian Government in August 2002. During the 1990s, the majority of FDI in Croatia took the form of brownfield investment through the privatization process. Under the provisions of this regulation the tasks of this agency were to:

1. provide support to Croatian exporters when exporting goods and services, finding and connecting with foreign buyers of goods and services;
2. inform exporters about export conditions and access to foreign markets, to inform exporters of tenders including those financed by international financial institutions;

3. educate exporters about new international trade practices in international trade and access to international financial and other organizations and institutions;
4. support exporters at international trade fairs and exhibitions, market research and feasibility studies for the export of goods and services or foreign investment projects;
5. organize economic and trade delegations and missions abroad;
6. develop and prepare promotional publications and other presentations of Croatian export capabilities;
7. harmonize and coordinate promotion of economic activities and boost exports in cooperation with other government bodies and other institutions (Croatian Chamber of Commerce, Croatian Association of Employers);
8. promote and represent the Croatian economic interests Croatian abroad;
9. provide consulting services (NN 102/2002, visited <http://narodne-novine.nn.hr/default.aspx> 20.3. 2012).

The activities performed by the APIU are similar to activities performed by other agencies examined in this paper, but the question is why agencies from competing countries have been more successful in their work. During the period when this agency operated (2002-2010), Croatia, with the exception of trade and tourism, was not able to attract any major investments in the manufacturing industry¹⁶, and it seems that the foreign investment in tourism, trade and financial services were more a consequence of comparative advantages and certain features of the Croatian economy than a conscious role of this agency. We leave the question of the absence of actual political and administrative support for the agency's efforts in attracting foreign direct investment for future studies since a declaratory support always existed.

Since APIU has never had a significant practical role, its abolition in 2010 did not cause great turmoil or generate the interest of the professional and general public. The Ministry of Economy, Labor and Entrepreneurship tried to take over its role, which can be viewed as institutional step backwards, and return to the practice

¹⁶ For more in-depth analysis of the volume and structure of FDI in Croatia see <http://www.hnb.hr/statistika/hstatistika.htm>

of the 1990s, when the same job of attracting foreign investment was assigned to the ministry.

The lack of institutional infrastructure necessary to attract foreign direct investment at the national level in Croatia has been replaced by a large number of regional development agencies. These agencies usually operate at the level of counties and cities. Their work is regulated by Croatian Agency for Regional Development, which issues permits for their operation and oversees their activities.¹⁷ Some of the goals of the regional development agencies are: a) promotion of investments in a region, b) identification of comparative and competitive advantages of the region, c) assistance in promotion and branding of the region, d) assisting regional businesses in the field of education, and e) assistance to local government and entrepreneurs in obtaining resources from EU funds.

Since these agencies are locally operated and mostly successful in their endeavors, the apparent lack of a national agency to attract foreign direct investment has not been felt too much. As a matter of fact, we can even pose a question: Is a national agency for attracting foreign investment to Croatia necessary? If the experience of other countries can teach us anything, a well established, organized and managed national agency is the condition *sine qua non* for serious efforts in attracting foreign direct investment – but only if they have the full political and administrative support at all levels of government from the central to the local. A major problem in Croatia has emerged since work in this area is now being conducted by the Ministry of Economy, and for several important reasons. One of the most important is that the various ministries in the Croatian government “traditionally” have had a relatively low level of cooperation with each other. One form of attracting FDI in other countries (at least those that are members of the EU) is to provide potential investors with access to EU funds that are allocated to economic development of economically underdeveloped regions. Usually, the procedure to access these funds is managed by a Ministry of Regional Development and European Affairs of certain countries that works with the national Agency for Regional Development (all EU members must have such an agency), cooperating with a central investment agency, to obtain the documentation required by interested investors. So instead of two

¹⁷ In the Republic of Croatia there are 17 regional county agencies with the task of promoting local opportunities for FDI, of which the most active are the Regional Development Agency of Slavonia and Baranya, the Regional Development Agency of Bjelovarsko-Bilogorska County, the Regional Development Agency of Šibensko-Kninska County, the Regional Development Agency of Zagreb County and IDA d.o.o., the Istrian Development Agency.

complexly structured and inert ministries: economy and regional development, the de facto work in the field is performed by two specialized agencies for regional development and investment promotion. Such an institutional structure significantly reduces administrative procedures and time required to obtain information that is often crucial to an investor's decision whether or not to invest in a particular country. If Croatia wants to be competitive in attracting foreign direct investments, it must offer foreign investors access to EU funds under equal conditions as domestic investors.¹⁸ Having thus formulated the strategy of attracting foreign investment, the key will be the quality and flow of communication between the Croatian Ministry of Regional Development and EU funds, the national development agency and the Ministry of Economy. This, in turn, may be made more effective by establishing and operating an efficient agency for promoting foreign investment.

CONCLUSION

Finally, it is possible, like D.C. North, to conclude that institutions are the rules of behavior that structure human relations: "one man's opportunity is another man's constraint." (North, 2003, p. 13), thus reducing the effect of variable uncertainty in everyday life, including economic transactions. Institutional infrastructure is developed over a long period of time and it is impossible to create or change it in the short term. Also, there is a complex system of interrelationship between political, economic, and cultural institutions, which is essential to bear in mind when studying each of them (politics, economics and culture, i.e. social capital). In studying the development and change of institutions, it is possible that the impetus for change starts from the economic or cultural sphere and is accepted by the political one as an initiative to provide deeper cultural and economic change. Sometimes, as in the case of post-socialist countries in the transition to capitalism, these changes occur simultaneously and it is difficult to distinguish drivers from those that follow, particularly since politics and economics are often formally and informally linked with common goals, actors and interests. The interaction of formal (constitutions, laws, subordinate legal acts) and informal (unwritten norms of various behaviors, customs, traditions) institutions and the mechanisms of implementation determine the condition and quality of institutions in society. The problem of efficient implementation of institutions is particularly important for

¹⁸ In Poland, Estonia and Slovakia foreign investors are treated equally as domestic ones in terms of access to EU funds with access to those funds for over eight years.

Croatia, which since its independence has faced the imperative of building its own institutional infrastructure.

In regard to the activities of the Agency for Promotion of Foreign Investment we can conclude that previous attempts did not meet the essential prerequisites for success, as they were elaborated in the first part of this work. This is particularly obvious in lack of support from key government bodies essential for the implementation of certain structural measures _____, and fostering collaboration with the local community. This refers mainly to problems caused by delays in the development of spatial planning documents and obtaining a series of approvals. Also lacking is consistent measure of the _____. There is a special issue related to education and ensuring a permanent stream of an educated population, important to certain aspects of investing.

We have to change our tax system to compete with other countries that use competitive tax rates to become more attractive investment destinations (and thus have low cost labor forces).

Table 2. Taxes and tax rates in selected countries.

Country	Income tax rate	Corporate tax rate	VAT rate
Poland	18%, 32%	19 %	5 %, 8%, 22 %
Slovakia	19%	19%	10 %, 20 %
Serbia	12 %	10 %	8 %, 18%
FYR Macedonia	10%	10%	5%, 18
Bulgaria	10%	10%	9 %, 20 %
Romania	16%	16%	9 %, 24 %
Estonia	22%	22%	9%, 20%
Croatia	15%, 25 %, 35 %	20 %	10 %, 25 %

This is a consequence of the conviction in the past two decades that economic development is something that happens by itself. There is a conviction that the Croatia is an attractive investment location because of its comparative advantages – its coastal and continental position that connects the Mediterranean with Central Europe – so it is not necessary to create additional competitive advantages that will attract investors in relation to other locations and investment options . The absurdity of such an attitude is visible through: a) the dominant presence of brownfield investments (the financial sector, the food processing industry, the IT sector, and the tourism sector) and b) a very modest participation of greenfield investments,

which are in inverse proportion compared to other transition countries, where, in accordance with their efforts, success was achieved in important sectors of the national economy, namely the industrial sector (Slovakia, Czech Republic Hungary), the agricultural sector (Poland, Bulgaria), and the tourism sector (Bulgaria, Cyprus).

The Republic of Croatia, a year before full membership in the EU, has yet another chance to evaluate its potential (geographical location, transport position, industrial tradition and infrastructure, educational facilities, etc.) with the understanding of the need to create an institutional framework for attracting and encouraging investment. In this case it means (re) establishment and ongoing support (this time) for the Agency to promote foreign investment with a clear focus on greenfield investments and a combination of measures in vertical and horizontal industrial policy, coordinated with a policy of regional development and possible sources of additional funding (EU structural and cohesion funds). The latest news is showing that the government of Croatia has managed to see the institutional deficiency in the area of investment promotion and it has drafted a law by which a new Investment and Competition Agency will be established. The hope is that this one will prove to be far more successful than its predecessors.

LIST OF DIRECT QUOTATIONS

- Gilpin, R.: *Global Political Economy*. Princeton University Press, 2001, p.279.
- The Economist, February 24, 2001, p. 80.
- Mody, A.: *Foreign Direct Investment and the World Economy*. Routledge, 2007, p. 1.
- Morriset, Andrews-Johnson: *The effectiveness of promotion agencies at attracting foreign direct investment*, World Bank Occasional Paper 16, 2004, p. 7.
- North, D. C.: *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990, p. 107.

BIBLIOGRAPHY

- Acemoglu, D.: *Lecture Notes for Political Economy of Institutions and Development*, 2003., <http://www.econpapers.lib.tk/acem23302/pdf>, posjećeno 05.01.2006.
- Bandelj, N.: *From Communists to Foreign Capitalists: The Social Foundations of Foreign Direct Investment in Post-socialist Europe*, Princeton University Press, 2008.

- Balcerowicz, L.: *Post-Communist Transition: Some Lessons (Thirty-First Wincott Lecture)*, Institute of Economic Affairs, 1995.
- Barro, R. J., *Economic Growth in a Cross-Section of Countries*, Quarterly Journal of Economics, 106 (2), 1991.
- Borensztein, E., Gregorio, J., Lee, J.: *How Does Foreign Direct Investment Affect Economic Growth?*, Journal of International Economics 45(1), 1998.
- Brunetti, A., Kisunko, W., Weder, B.: *Institutional Obstacles for Doing Business*, Working Paper, No. 1759, World Bank, 1997.
- Chong, A., Calderon, C.: *Causality and Feedback between Institutional Measures and Economic Growth*, Economics and Politics, 12(1), 2000.
- Coase, R.: *The Problem of Social Cost*, Journal of Law and Economics, Chicago, 3, 1960.
- Cohen, S.D.: *Multi-national Corporations and Foreign Direct Investment*, Oxford University Press, 2007.
- Demsetz, H.: *Toward a Theory of Property Rights*, American Economic Review, Menasha, 57, 1967.
- Dunning, John H.: *Global Capitalism, FDI and Competitiveness - Essay Selections*. Edward Elgar Publishing, Inc. 2002.
- Gastanaga, V. M., Nugent, J.B., Pashamova, B.: *Host Country Reforms and FDI Inflows: How Much Difference Do They Make?*, World Development, 26, 7, 1998.
- Gilpin, R.: *Global Political Economy*. Princeton University Press, 2001.
- Globerman, S., Shapiro, D.: *Global Foreign Direct Investment Flows: The Role of Governance Infrastructure*, World Development, 30, 11, 2002.
- Hall, R., Jones, C. I.: *Why Do Some Countries Produce So Much More Output Per Worker than Others*, Quarterly Journal of Economics, 114, 1, 1999.
- Harms, P., H. W. Ursprung, H. W.: *Do Civil and Political Repression Really Boost Foreign Direct Investments?*, Economic Inquiry, 40, 4, 2002.
- Mauro, P.: *Corruption and Growth*, Quarterly Journal of Economics, 110(3), 1995.
- Mody, A.: *Foreign Direct Investment and the World Economy*. Routledge, 2007.
- Mody, A., Srinivasan, K.: *Japanese and US Firms as Foreign Investors: Do They March to the Same Tune?*, Canadian Journal of Economics, 31, 4, 1998.

- Moran, T. H.: *Foreign Direct Investment and Development*. Institute for International Economics, 1998.
- Morriset, Andrews-Johnson: *The effectiveness of promotion agencies at attracting foreign direct investment*, World Bank Occasional Paper 16, 2004.
- North, D. C.: *Institutions, Institutional Change and Economic Performance*, Cambridge, Cambridge University Press, 1990.
- North, D., C.: *Institucije, institucionalna promjena i ekonomska uspješnost*, Masmedia, Zagreb, 2003.
- Neuhaus, M.: *The impact of FDI on Economic Growth: An Analysis for Transitional Countries of Central and Eastern Europe*, Physica Verlag, 2006.
- OECD: *The Sources of Economic Growth in OECD Countries*, Paris, OECD, 2003.
- Olson, M., Sarna, N., Svamy, A. V.: *Governance and Growth: A Simple Hypothesis Explaining Cross-country Differences in Productivity Growth*. Public Choice, 102, 3–4, 2000.
- Rodrik, D.: *Institutions for High-Quality Growth: What They Are and How to Acquire Them*, Studies in Comparative International Development, 35(3), 2000.
- Romer, D.: *Advanced Macroeconomics*, McGraw-Hill, New York, 2001.
- Tilly, C.: *Coercion, Capital and European States, AD 990-1990*, Cambridge MA, Blackwell Publishers, 1990.
- Thurow, L.: *Fortune Favors The Bold*, New York, HarperCollins, 2003.
- UNCTAD: *World Investment Report 2004: The Shift Towards Services*, New York and Geneva: United Nations, 2004.
- Wei, S.-J.: *How Taxing Is Corruption on International Investors?* Review of Economics and Statistics, 82, 1, 2000.
- Zarsky, L. and K. Gallagher, K.: *Searching for the Holy Grail? Making FDI Work for Sustainable Development*, WWF-UK Workshop on International Investment Frameworks for Sustainable Development: Framing the Debate, London, March 10, 2003.

LEGAL TEXTS

Uredba O OSNIVANJU AGENCIJE ZA PROMICANJE IZVOZA I ULAGANJA (NN 102/2002)

Investment Promotion Act Bulgaria (SG No. 41/2009)

INTERNET SOURCES

Economist.com

EIA official website <http://www.investinestonia.com>:

<http://www.investinestonia.com> <http://www.investinestonia.com/en/about-the-agency/> visited 16.3.2012

Romania Trade and Invest Agency official website (<http://www.romtradeinvest.ro/>):

<http://www.romtradeinvest.ro/index.php/Despre-noi/history.html>, visited 14.3.2012)

<http://www.romtradeinvest.ro/index.php/Servicii/assistance-support.html>. visited 14.3.2012

SIEPA official website (<http://www.siepa.gov.rs/site/en/home/>):

http://www.siepa.gov.rs/site/sr/home/1/investirajte/brza_registracija/ visited 10.3.2012

http://www.siepa.gov.rs/site/en/home/1/about_siepa/our_services/ visited 25.3.2012).

Invest Macedonia official website (<http://www.investinmacedonia.com/>):

<http://investinmacedonia.com/Default.aspx?item=menu&itemid=720&themeid=328>, visited, 29.3. 2012

<http://investinmacedonia.com/Default.aspx?item=menu&themeid=328&itemid=328> visited 29.3.2012

<http://investinmacedonia.com/Default.aspx?item=menu&themeid=313&itemid=706> visited 29.3.2012

PAIZ official website (www.paiz.gov.pl):

http://www.paiz.gov.pl/about_us/paiiiz, visited 15.3.2012

http://www.paiz.gov.pl/about_us/paiiiz, visited 15.3.2012

http://www.paiz.gov.pl/investment_support/investment_incentives_in_SEZ, visited 26.3. 2012

SARIO official website (<http://www.sario.sk/?home>):

<http://www.sario.sk/?home>.visited . 19.3.2012)

<http://www.sario.sk/?why-invest-in-slovakia>.visited 19.3. 2012

http://www.sario.sk/userfiles/file/sario/pzi/statna/Handout_incentives_eng_2011.pdf visited. 26.3 .2012

Invest Bulgaria Agency official website (<http://investbg.government.bg/>):

<http://investbg.government.bg/index.php?idx=1> visited 13.3. 2012.).

<http://www.investinestonia.com/>

<http://narodne-novine.nn.hr>

<http://www.hnb.hr/statistika/hstatistika.htm>

<http://www.usz.gov.rs/index.php?lang=en>

unctad.org

FINANCIAL ECONOMICS

EVALUATING THE ATTRACTIVENESS OF NEW MEDICAL TECHNOLOGY VENTURES - AN ANALYSIS OF VENTURE CAPITALISTS' PRODUCT-RELATED INVESTMENT CRITERIA

Sonja Keppler and Timo Keppler
Comenius University Bratislava, Faculty of Management

ABSTRACT

Venture capitalists' (VCs) investment criteria have been evaluated by numerous researchers worldwide during the past 40 years, mainly focusing on identifying global criteria referring to all sorts of ventures, independent of industry, geography or stage of the venture. The most important criteria discussed in literature so far comprise quality of the management team, market and market growth, unique selling proposition (USP) of the product, risk, returns, exit, strategy and competition.

In this paper, product-related criteria for medical technology ventures located in the German-speaking part of Europe shall be investigated. To obtain data for this research, 39 VCs and industry experts from Germany, Switzerland, Austria and Israel have been interviewed and asked about their investment behavior and their investment criteria for medical technology ventures. The results suggest that VCs want to see a product with a clear USP satisfying an unmet medical need. Innovation is a must, either in the form of a disruptive technology or a significant improvement of an existing technology. A product without any technological USP but offering a significant cost reduction is not attractive to most VCs. However, cost reduction as an additional characteristic of an innovative medical product is regarded as a plus. The fulfillment of the customer need is also relevant to VCs, i.e. patients and doctors must both benefit from the product. Most VCs do not require CE-certified products, but would like to see working prototypes and relevant clinical data providing proof of concept. Furthermore, VCs clearly prefer medical products showing a high probability of receiving reimbursement by the health insurances in the future.

JEL Classification: G24

Key Words: Venture Capital; Private Equity; Financing; Innovation; Health Economics; Medical Technology

Introduction

Innovation is the key to success in medical technology: doctors and patients are asking for better treatments and earlier diagnosis of progressive, so far incurable diseases like e.g. glaucoma or multiple sclerosis, and health insurances are looking for new technologies improving health outcomes and leading to cost reduction in healthcare. The OECD defines innovation as “(...) the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organisation or external relations.” (OECD; 2005, p. 46). In medical technology, product innovation clearly dominates the innovation landscape.

However, innovation requires financing and involves risk, in particular product development risk and regulatory risk, the latter predominantly in the United States (CHI & BCG; 2011, p. 8). On the other hand, innovation can promise high returns: a new technology that significantly improves health outcome of severe diseases with high prevalence like e.g. diabetes or cardio-vascular diseases, encounters huge and growing markets due to the demographic development in industrialized countries¹ and lifestyle changes in emerging markets. Venture capital investors (VCs) are prepared to take this risk and therefore focus amongst others on investments in medical technology (“medtech”) ventures.

Target of this exploratory research was to find out, how VCs select medtech ventures for funding. Therefore 39 VCs and industry experts from Germany, Switzerland, Austria and Israel were interviewed and asked about their investment behavior and their investment criteria for medtech ventures. Focus in this paper is laid upon product-related criteria applied to medtech ventures located in Germany, Switzerland or Austria.

Research on product-related VC investment criteria

Venture capitalists’ (VCs) investment criteria have been evaluated by numerous researchers worldwide during the past 40 years, mainly focusing on identifying global criteria referring to all sorts of ventures, independent of industry, geography or stage of the venture (Keppler, 2010, p.132). The most important criteria discussed in literature so far comprise quality of the management team, market and

¹ E.g. the share of healthcare spending in the German Domestic Product has risen from 10.1% in 1995 to 11.6% in 2009 (Statistisches Bundesamt; 2011, p.33).

market growth, unique selling proposition (USP) of the product, risk, returns, exit, strategy and competition (Khanin et al.; 2008, p. 13-15).

The investment criterion “product” respectively “technology” is one of the most relevant criteria in almost all studies on VCs’ investment criteria, but is rarely ranked the number one criterion. Highest-ranked criteria are mainly related to the management team followed by product or market-related criteria (Khanin et al.; 2008, p.11-12). Product-related sub-criteria were only evaluated in some studies and are summarized in *table 1*. However, ratings are not available in most cases.

Table 1: Product-related investment criteria (sub-criteria)

Authors / Criteria	Uniqueness (USP)	Protection Ability	Platform Technology	Competitive Advantage	Functioning Prototype	Customer Need	Market Acceptance	Degree of Innovation
Tyebjee & Bruno, 1984	X	X						
MacMillan et al., 1985		X			X		X	
Roure & Maidique, 1986				X		X		
Rea, 1989	X	X		X				
Riquelme & Rickards, 1992	X	X			X			
Fried & Hisrich, 1994				X				
Zacharakis, 1995	X	X						
Muzyka et al. 1996	X			X				
Zacharakis & Meyer, 1998	X	X						
Vinig & de Haan, 2001	X				(X*)		X	X
Kaplan & Strömberg, 2001	X			X	X			
Brettel, 2002		X			X		X	
Eisele et al., 2002	X	X	X		X	X	X	X
Baum & Silverman, 2004		X						
Silva, 2004	X			X				
Clarysse et al., 2005	X	X	X				X	
Jell et al., 2009	X	X			X	X		X
Total	12	11	2	6	7	3	5	3

Source: Author’s research/calculations

The product’s USP and its protection ability, i.e. by patents, are criteria that are cited most frequently in the studies analyzed, followed by a functioning prototype and a competitive advantage of the product. The criteria competitive advantage, protection ability, degree of innovation and the USP seem to overlap as stated by

* Vinig & De Haan (2001) use the product development stage as a criterion.

Fried & Hisrich (1994, p. 35):”For example MacMillan² speaks of ‘proprietary products’, while we more broadly discuss a business concept offering a ‘competitive advantage’.” Some kind of product differentiation or superiority to competitor products appears in all studies using sub-criteria for the product criterion. The patentability of the product is to be seen in the same context as a patent may offer some protection of this competitive advantage and may create a monopoly situation for the winner of a patent race (Baum & Silverman; 2004, p. 416). Patents or patent applications seem to very relevant for VCs’ decisions in the biotech industry, reducing the time to investment by 76% (Haeussler et al.; 2009, p.2) and increasing significantly the amount of financing obtained (Baum & Silverman; 2004, p.426). For VCs focusing on electronics, software, telecommunications and semiconductors the patentability of the new technology is also a must (Jell et al.; 2009, p.20). A high disruptive potential of the technology is regarded as attractive, but it is not mandatory. “Second movers” entering the market with a similar, but improved technology, are even preferred by some VCs as the investment involves lower risk (Jell et al.; 2009, p.11).

The sub-criteria “functioning prototype” and “market acceptance” relate to the venture’s development stage, as a product can only show market acceptance when it is already sold. However, many ventures are still in the product-development phase and seek funds to develop a ready-to-market product and to finance the regulatory approval process. Thus, in this case, the criterion “market acceptance” cannot be fulfilled, but the criterion “functioning prototype” could be. Only Eisele et al. (2002) realized that a combination of the two criteria “functioning prototype” and “market acceptance” is contradictory for later financing stages and excluded the criterion “functioning prototype” in the expansion phase. In their study, which is one of the few studies using ratings³, “customer need” is the most important product-related criterion, whereas “platform technology”, i.e. the potential to create different applications of the same basic technology, shows the lowest importance (Eisele et al.; 2002, p. 19).

Overall, researchers used different sets of product-related criteria, different research methodologies, and different types of investors for their investigations, which lead to a lack of comparability of the results for the importance of the single criteria (if evaluated). A clear product differentiation with a competitive advantage, which

² Refers to Macmillan, Siegel and Subbanarasimha (1985), see References

³ Only Muzyka et al. (1996), Vinig & de Haan (2001), Eisele et al. (2002) and Jell et al. (2009) provide an analysis of the importance of sub-criteria.

is also patentable, seems to be the main product-related criterion identified and used by previous researchers. Apart from Baum & Silverman (2004) and Haeussler et al. (2009), both focusing on the role of patents in the biotech industry, there is no industry-specific research on VCs' investment criteria available so far.

Research Methodology

70 VC firms from Germany, Switzerland, Austria, The Netherlands and Israel focusing on medtech ventures, which are in the start-up or expansion phase and are located in Germany, Switzerland or Austria, were identified from industry directories and the member lists of the national venture capital and private equity associations⁴. Only VC firms were selected that had their main activities in the start-up or expansion phase, but many start-up investors already start investing in the seed stage. All VC firms active in medtech had either a general technology focus or a life sciences focus. They were contacted between end of March and end of July 2011. 37 VCs participated in the survey, which was conducted in the form of semi-structured interviews, either personally or by telephone. In addition, two VC experts were interviewed: one consultant for medical technology ventures, who used to work for a leading Swiss venture capital firm, and one expert from the Swiss start-up financing platform CTI invest⁵, both active in venture capital (therefore also referred to as "VCs"). For the interviews, a structured questionnaire with open and closed questions was used. In order to obtain more accurate data, the participants were asked to describe the investment process followed and the criteria used in their most recent medtech investment in Germany, Switzerland or Austria. As the success of this investment was still unknown, this proceeding also minimized any potential self-reporting bias. The questionnaire was based on criteria identified by previous research, expert interviews and the author's own experience in venture capital and medtech investments. The research focus was laid upon one industry and one region in Europe in order to obtain more accurate and industry-specific investment criteria.

The interviews were recorded and transcribed afterwards. For the analysis of the texts the qualitative data analysis software MAXQDA[®] was used. Categories for the text analysis were derived from the interview guide respectively created inductively from the text. Investment criteria like e.g. "product" or "USP" were defined as categories and their relevance for VC decisions or additional characteristics were

⁴ Germany: www.bvkap.de; Switzerland: www.seca.ch; Austria: www.avco.at

⁵ www.cti-invest.ch

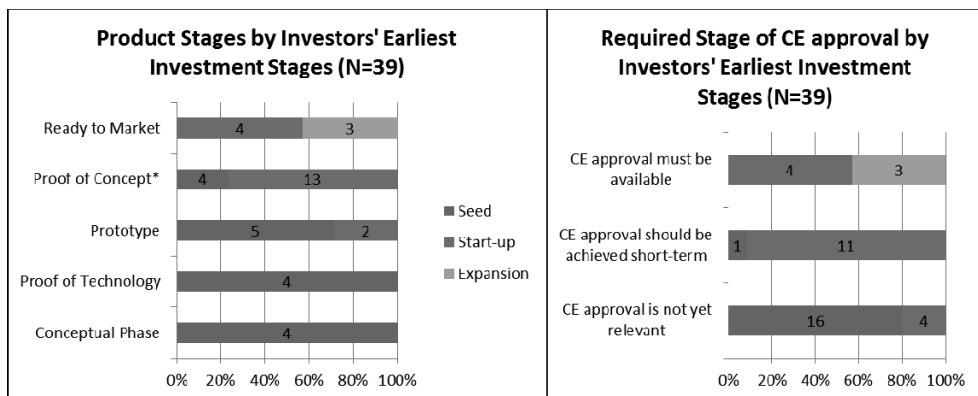
defined as sub-categories (dimensions). Subsequently, the qualitative data were also analyzed quantitatively to the extent possible (most data were nominally scaled).

Discussion and Analysis

The sample received shows a high share of early stage investors (seed and start-up): 43.6%⁶ of the VCs interviewed are already active in the seed stage, for 48.7% the earliest point in time for an investment is the start-up stage and 7.7% only invest in the expansion stage or in later financing stages. All VCs investing in the seed stage are also active in the subsequent start-up stage and two third of the VCs interviewed (also) offer expansion financing. As the decision of a VC is influenced by general fund criteria like the investment stage, stage-related criteria like the development stage of the product and the stage of the CE approval process need to be analyzed taking into account the earliest possible investment stage of each VC (*table 2*).

Very early investment stages like the conceptual phase (“one person and one idea”) and proof of technology are only accepted by VCs already active in the seed stage. A working prototype is a minimum requirement for VCs getting active in the start-up stage, but most of them would like to see proof of concept including clinical data or even a product which is ready to market. A ready-to-market product is a must for all VCs active in the expansion stage as the product is already sold at that stage.

Table 2: Product Stages and Required Stage of CE approval by Investors’ Earliest Investment Stages



*including clinical data

Source: Author’s calculations

⁶ All percentage rates indicated refer to a sample of n=39 participants.

Before placing a medical device on the market, it must have received CE-marking. This means that the product has undergone safety and performance tests and meets EU safety and health requirements (European Economic Community; 1993, p. 25). Performance tests must be based on clinical data (European Economic Community; 1993, p. 57). Therefore, CE-marking is an important milestone in the development of a medtech product. A great majority of the VCs does not yet require CE-marked products, but 12 VCs (30.8%) would like to see that the company is already working on the CE approval process and has generated sufficient clinical data to realize the approval short-term. In line with the VCs' stage focus, CE mark is a must for those VCs who also require ready-to-market products. Clinical data (either animal models or first in patient data) are required or considered important by nearly two thirds of the VCs, not only because of CE-marking, but also as a proof of concept of the technology. Jell et al. (2009, p. 10) also find that VCs shy away from high technological risks and prefer the availability of a working prototype. In medtech, a working prototype alone does not seem to be sufficient proof of concept as clinical data are required in addition by a great majority (*table 3*).

Innovative products with a clear USP that fulfill a medical need are a must for all VCs. This USP can either appear in the form of a disruptive technology satisfying a high unmet medical need, or in the form of a significant improvement of an existing technology leading to a better fulfillment of the medical need, or as an innovative business concept or technology leading to significant cost reductions for the healthcare stakeholders (patients, doctors, clinics and health insurances). However, significant cost reduction alone without improvement of the medical outcome is only attractive to few VCs (12.8%). Cost reduction in healthcare ("health economics") as an additional characteristic of an innovative medical product is regarded as a plus as it increases the chances of getting reimbursed by the health insurances. The findings regarding the product's USP are in contrast to previous studies, which confirmed the importance of innovation and a competitive advantage, but did not classify them as a "must" criterion or "deal killer" (Muzyka et al.; 1996, p. 281, Vinig & de Haan; 2001, p. 11; Eisele et al.; 2002, p. 19; Jell et al.; 2009, p. 11). Patents also play an important role for VCs active in medtech. However, 10.3% state to prefer trade secrets in some cases as patents disclose too much information to competitors. "Freedom to operate" is required by nearly two-thirds of the VCs and also verified during the due diligence.

In addition to the fulfillment of a medical need – which is stated as a must criterion by all VCs - the fulfillment of the customer needs is explicitly mentioned by

59.5% of the VCs, i.e. main stakeholders like patients and doctors, in some cases also clinics, must all benefit from the product. This is consistent with the findings of previous studies, which also rate “customer need” (although more generally used) as important criterion (Eisele et al.; 2002, p. 19; Jell et al.; 2009, p. 14).

Furthermore, the new product should be affordable by the customer paying for it respectively in a similar price range as the currently used “gold standard”. The probability of receiving reimbursement from health insurances for a new product is higher if its pricing is not significantly above the pricing of the currently used and reimbursed gold standard. In case of disruptive technologies addressing an unmet medical need, where no gold standard exists, the health outcome has to justify the cost, which involves a higher risk of failure for the new venture if reimbursement cannot be achieved and patients would have to pay themselves. If the costs of the new product or treatment are not affordable by the average patient, the business model is doomed to failure. A high probability of receiving reimbursement by health insurances is therefore must for 35.9% of all participants and 51.3% consider it as important, depending on the kind of product, i.e. they would also invest in classical self-pay products like e.g. dental implants. The remaining 12.8% of the VCs classify a high reimbursement probability as a “plus” as they are also open to invest in so-called over-the-counter (“OTC”) products offered directly to consumers like e.g. diagnostic dipsticks for blood glucose monitoring. Although involving a higher risk, disruptive technologies (“game-changers”) are a must for 43.6% of the VCs. The remaining 56.4% also invest in innovative improvements of existing technologies or innovative business concepts. Similar to the findings of Eisele et al. (2002, p. 19) and Clarysse et al. (2005, p. 15) platform technologies do not play an important role in medtech, but can be a plus depending on the VC’s individual preferences.

Table 3: Descriptive Statistics on Product-related Investment Criteria

Descriptive Statistics (n=39)	Relevance of Criteria				Open Question VC's statements
	Must	Important	Plus	not relevant	
Criteria					
Product has a clear USP	100,0%	-	-	-	-
Disruptive technology	43,6%	56,4%			
Product fulfills a medical need	100,0%	-	-	-	-
Availability of clinical data	48,7%	15,4%	30,8%	5,1%	-
Health Economics are relevant					33,3%
Cost reduction = sufficient USP					12,8%
Platform technology is preferred	-	-	-	-	17,9%
Product must fulfill stakeholder needs	-	-	-	-	59,5%
Product must be affordable	-	-	-	-	37,8%
Product has high reimbursement probability	35,9%	51,3%	12,8%	-	-
Patents (adding up to 100%):					
Product must be patentable	7,7%	-	-	-	-
Patent application filed	46,2%	20,5%	-	-	-
Patent granted	15,4%	-	-	-	-
Protection is a must (also by trade secrets)	10,3%	-	-	-	-
Freedom to Operate (FTO) is a must					64,1%

Source: Author's calculations

Conclusion and Implications for Future Research

The present exploratory analysis helps to identify several new criteria specific for medtech ventures like clinical data or a high probability of reimbursement by health insurances. In addition, this qualitative research also allows for evaluating the reasons why certain criteria are used or weighted differently by the VCs. It can also be demonstrated that stage-related criteria like a working prototype and CE-marking are related to the VCs' minimum requirements for the stage of the new venture. Criteria used in previous research are found to be relevant for medtech ventures as well, but the results obtained in this study are comparable only to a limited extent as they show a much higher level of detail than previous studies. Apart from two

studies referring to the biotech industry, there is little industry-related research in venture capital. For VCs, research that is specific to their target industries would be more helpful for selecting new ventures. Fund-seeking entrepreneurs would also welcome information on how VCs interested in their industry look at their business cases. Therefore future research should focus on selected industries, be more precise in defining investment criteria and also try to identify new criteria.

References

- Baum, J.A.C. and Silverman, B. S. (2004): Picking winners of building them? Alliance, intellectual and human capital as selection criteria in venture financing and performance of biotechnology startups, *Journal of Business Venturing*, Vol. 19, pp. 411-436
- Brettel, M. (2002): Entscheidungskriterien von Venture Capitalists, *Die Betriebswirtschaft*, 62. Jg. (2002), Issue 3, pp. 305-325
- California Health Institute (CHI) & Boston Consulting Group (BCG) (2011): Competitiveness and Regulation: The FDA and the Future of America's Biomedical Industry, February 2011, Internet Source: http://www.bcg.com/expertise_impact/Industries/Biopharmaceuticals/PublicationDet, downloaded on 29th of February 2012
- Clarysse, B., Knockaert, M. and Lockett, A. (2005): How do early stage high technology investors select their investments? *Vlerick Leuven Gent Working Paper Series* 2005/21
- Eisele, F., Habermann, M., and Oesterle, R. (2002): Die Beteiligungskriterien für eine Venture Capital Finanzierung - Eine empirische Analyse der phasenbezogenen Bedeutung, *Tübinger Diskussionsbeitrag Nr. 238*, March 2002
- European Economic Community (1993): Council Directive 93/42/EEC of 14 June 1993 concerning medical devices, *Official Journal*, L 169, 12.07.1993; <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1993L0042:20071011:en:PDF>, downloaded on 3rd of March 2012
- Fried, V. H. and Hisrich, R. D. (1994): Toward a Model of Venture Capital Investment Decision Making, *Financial Management*, Vol. 23, No. 3, Autumn 1994, pp. 29-37

- Haeussler, C., Harhoff, D. and Muller, E. (2009): To Be Financed or Not - The Role of Patents for Venture Capital Financing, ZEW - Centre for European Economic Research Discussion Paper No. 09-003. Available at SSRN: <http://ssrn.com/abstract=1393725>
- Hall, J. and Hofer, C. W. (1993): Venture Capitalists' Decision Criteria in New Venture Evaluation, *Journal of Business Venturing*, Vol. 8, No. 1, pp. 25-42
- Jell, F., Block, J. H., and Henkel, J. (2009): Innovativität als Kriterium bei Venture Capital-Investitionsentscheidungen – eine qualitativ empirische Untersuchung, April 2009, Available at SSRN: <http://ssrn.com/abstract=1394149>
- Kaplan, S. N. and Strömberg, P. (2001): How Do Venture Capitalists Choose Investments? University of Chicago Graduate School of Business Working Paper
- Keppler, S. (2010): Investment Criteria applied by Venture Capitalists in the Venture Screening Process: A Critical Review of Research in the United States and Europe, in: *Blickpunkt der Forschung 2*, Weilburg 2010, pp. 112-142
- Khanin, D., Baum, R. J., Mahto, R. V., and Heller, C. (2008): Venture Capitalists' Investment Criteria: A Literature Review and Assessment, *Silicon Valley Review of Global Entrepreneurship Research*, Volume 4, Issue 1, October 2008, pp. 5-30
- MacMillan I. C., Siegel, R., and Subbanarasimha, P.N. (1985): Criteria Used by Venture Capitalists to Evaluate New Venture Proposals, *Journal of Business Venturing*, Vol. 1, pp. 119-128
- Muzyka, D., Birley, S. and Leleux, B. (1996): Trade-offs in the investment decisions of European venture capitalists, *Journal of Business Venturing*, Vol. 11, pp. 273–287
- Organisation for Economic Co-Operation and Development (OECD) (Hg.) (2005): *Oslo Manual. Guidelines for Collecting and Interpreting Innovation Data*, 3rd Edition
- Rea, R.H. (1989): Factors affecting success and failure of seed capital / start-up negotiations, *Journal of Business Venturing*, Vol. 4, pp. 149–158
- Riquelme, H. and Rickards, T. (1992): Hybrid conjoint analysis: An estimation probe in new venture decisions, *Journal of Business Venturing*, Vol. 7, pp. 505-518

- Roure, J. B. and Maidique, M. A. (1986): Linking prefunding factors and high-technology venture success: An exploratory study, *Journal of Business Venturing*, Vol. 1, pp. 295-306
- Silva, J. (2004): Venture capitalists' decision-making in small equity markets: a case study using participant observation, *Venture Capital*, April-September 2004, Vol. 6, No. 2/3, pp. 125-145
- Statistisches Bundesamt (2011): *Gesundheit Ausgaben 2009*, Fachreihe 12, Reihe 7.1.1, Wiesbaden
- Tyebjee T. T. and Bruno, A. V. (1984): A Model of Venture Capitalist Activity, *Management Science*, Vol.30, No. 9, pp. 1051-1066
- Vinig, T. and de Haan, M. (2001): How do Venture Capitalists Screen Business Plans: An Art or a Science? Evidence from the Netherlands and the USA, University of Amsterdam, Netherlands. *Sprouts: Working Papers on Information Systems*, 1(7). <http://sprouts.aisnet.org/1-7>
- Zacharakis, A.L. (1995). *The Venture Capital Investment Decision*. An unpublished Doctoral Dissertation. University of Colorado at Boulder
- Zacharakis, A. and Meyer, G. D. (1998): A lack of insight: Do venture capitalists really understand their own decision process? *Journal of Business Venturing*, Vol. 13, pp. 57-76

THE PARADOXES OF MODERN STOCK EXCHANGE MARKETS. CHARACTERISTICS OF INVESTMENT BEHAVIOR OF BROKERS FROM ROMANIA

Gheorghe CIOBANU, PhD¹, Ioana - Cristina SECHEL²

¹Professor, Babeş-Bolyai University, Faculty of Economics and Business Administration, Cluj-Napoca, Romania, gheorghe.ciobanu@econ.ubbcluj.ro

²PhD student, Professor, Babeş-Bolyai University, Faculty of Economics and Business Administration, Cluj-Napoca, Romania, ioana.sechel@econ.ubbcluj.ro, isechel@yahoo.com

ABSTRACT

The efficient market theory is based on the assumption that financial market actors' decisions are rational, because they use all information available in the market at the same time. Adherents of this theory therefore exclude the formation of speculative bubbles, which are considered inefficient situations. Events occurring worldwide especially in the last five years show however, that the broker's psychology plays an extremely important role in the evolution and fluctuation of the financial market. The brokers are always looking for certain profiles for their strategies that can help them understand the future of their investment or part of it.

The attraction for investments in financial instruments is generated by their potential to produce superior returns to those that can be obtained from the interest bonuses (Stoica, 2006), but also by the unlimited issue in terms of derivative products.

JEL Clasification: G02, G11

Keywords: investment decision, brokers profile, stock investments, investment behavior

With this paper we continue the series of some analysis on the investment decision on the contemporary stock market which is characterized by opportunities and risks consciously assumed. In this sense, we present the results of our study based on the questionnaire method, regarding the broker's vision on the capital

market in Romania and their behavior, trying to achieve some of their behavioral profile lines. The questionnaire is based on 34 questions about investment decisions, investment characteristics, investment preferences and questions about their personality.

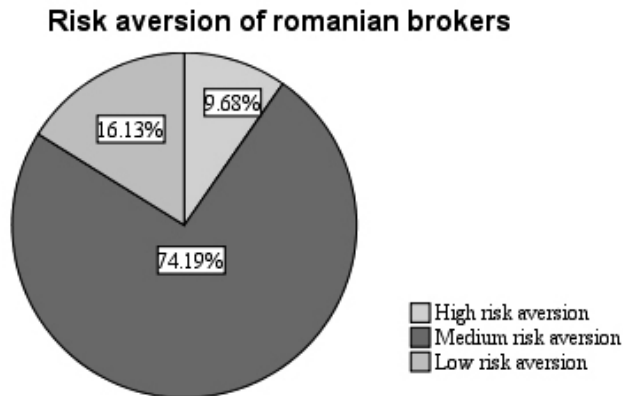
The role of investment behavior of brokers is very important, especially in an economy where capital market is just at the beginning. The modernity of a stock market and consequently the modernity of capital market is given by the attitude to investment brokers, by their qualification level, experience, personality or by the way of their risk perception.

RISK PERCEPTION IN BROKER'S VISION

Risk is an extremely important element, around which it can be build the investment decision. Depending on the probability and possibility of risk appearance (Mionel, 2010, p. 203), an investment decision becomes difficult to take. But is there a fair and credible level of risk associated with investment in financial instruments? Each broker has its own risk assessment scale, which means that if a broker considers an investment very risky, for another the same investment can be associated with an acceptable risk. Therefore, brokers need to know and to be aware of effects that can result if an event occurs, so that he can evaluate if an investment is risky or not. As a concept, the uncertainty is very close to the significance of risk, with the exception that in the case of uncertainty, the effects that may occur cannot be quantified.

The principle that a broker assume additional risk, as long as he get higher amount of gain, is the one that makes the notion of risk be associated with the potential earning (Jacquillat & Solnik, 1997, p. 82). Brokers must determine their precise level of acceptable risk for them but also for their clients. This risk level depends on many factors, but is determined primarily by their personality and attitudes towards risk. We have to deal with brokers who show a greater aversion to risk or brokers who like risk.

Regarding brokers in Romania, most of them show a moderate aversion to risk (74.19%), a rate of 16.13% show a low risk aversion, while only 9.68% say that they have a high risk aversion. All brokers have testified that they give importance to risk, each of them in their own extent.



Source : Author's calculations.

Nearly the 10% of brokers in Romania who show a high risk aversion, they always want to use methods of protection against risk and to limit losses if the market development is not in the sense expected. Precisely because of how they choose to invest, they are also called defensive brokers (Graham, 2010, p. 364) but also because they prefer increasing shares (shares for growing), the price of which increased over time more than average of overall market and for the future, the expectations are for increasing. At the opposite side are situated brokers who show a pleasure to risk, a low aversion to risk, and who will speculate any movement in market price and who will look for profits marking even in the conditions of assuming an unwarranted risk. For this ones, price changes are nothing but the opportunity for new earnings. Regarding to the principle high risk - high potential earnings, brokers who show a pleasure for risk, often use risky financial instruments for trading, with higher leverage, so that they can achieve high yields using relatively small amounts invested.

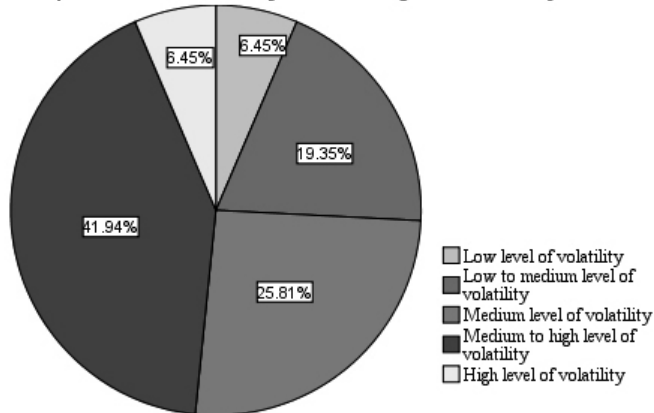
The third category of brokers, represented with a rate of 74.19% of brokers in Romania is that of brokers with a moderate risk aversion. They do not necessarily consider to open a position in the market to have a protective role, and their expectations are reasonable and in line with market evolution.

ACCEPTABLE LEVEL OF VOLATILITY

In direct correlation with the acceptable level of risk is also the attitude towards volatility. In this sense, 41.94% of respondent brokers consider acceptable a medium to high level of volatility in the market to achieve their objectives. A percent-

age of 25.81% prefer a medium volatility in the market, 19.35% prefer low to medium volatility in the market, while 6.45% believe that their investments would increase if the market volatility would be lower. Only a percentage of 6.45% of the brokers believe that the high volatility of the market would help them to achieve their investment objectives.

The acceptable level of volatility for achieving investment objectives

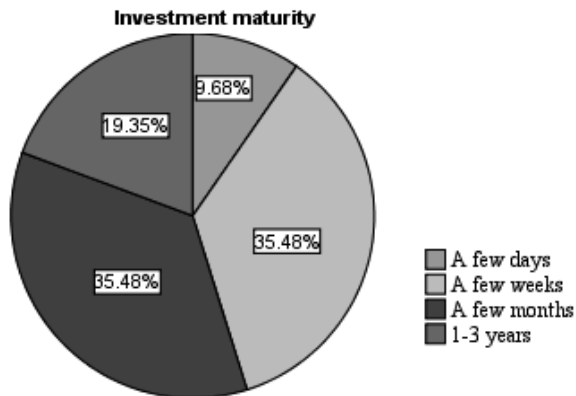


Source : Author's calculations.

Based on our study results, we can say that most brokers show a propensity to speculative investments, at least because of the acceptable volatility level.

INVESTMENT MATURITY

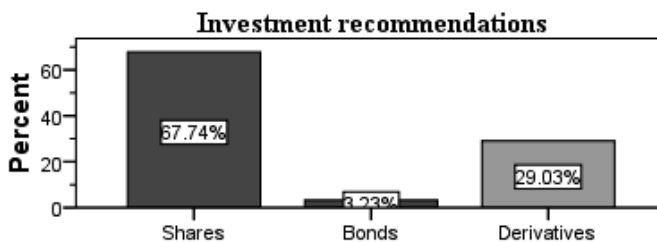
Regarding the time horizon that brokers take into consideration when they are trading on the capital market, most of them trade only for a several weeks or for several months (35.48% for each of the two variants), which reinforces our conclusion about the propensity to speculation. Brokers who are highly speculative, and who have the maturity of their investments only for a few days, have a percentage of 9.68%, while 19.35% of them make investments that have maturities between 1 and 3 years. Noted in this case is that none of the respondents do not realize transactions that have maturities longer than three years, this is because the stock market suffered large corrections in the last five years. In this sense, brokers have adapted to market needs and to the needs of their clients, restricting the time horizon for their investments.



Source : Author's calculations.

BROKER'S RECOMMENDATIONS

Most of the broker's recommendations are for investments in equity market (shares). Approximately 68% of them recommend equity investments, while 29.03% recommend investments in financial derivatives, and only 3.23% of them recommend investments in bonds. Derivatives segment is still underdeveloped in Romania, and this is why the proportion of brokers recommending these financial instruments is relatively low (29.03%).



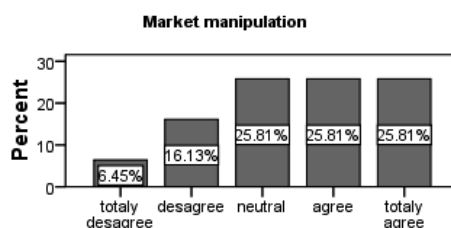
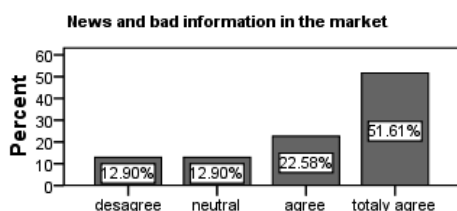
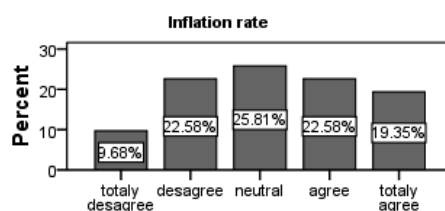
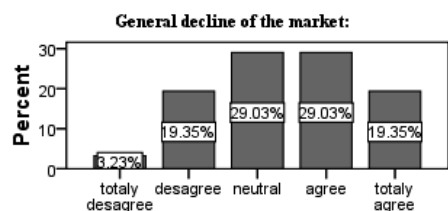
Source : Author's calculations.

In this case we would be tempted to rebut the conclusion before, but we must not lose the fact that in Romania the spot market is more developed than the futures market, brokers may be more familiar with share trading, and this is why they recommend investments in shares. In this case is also remarkable that any of the respondents do not recommend investments in mutual funds, real estate and bank deposits. Many brokers see as an alternative in bonds to bank deposits investments, because bonds bring a fixed income and offer a greater stability for investors. The relatively small percentage of brokers who recommend investments in bonds

can be explained again by a limited market bond transactions in Romania. Again, we believe that the 29.03% percentage of brokers recommending investments in financial derivatives reconfirm the hypothesis of inclinations to speculations of the brokers in Romania, and this percentage is significant.

BROKERS FEARS ABOUT INVESTMENT STRATEGIES USED

Regarding fears impact on brokers in Romania and on their investment strategies, we took into consideration a general market decline, inflation rate, news and bad information in the market and the possibility of market manipulation.



Source : Author's calculations.

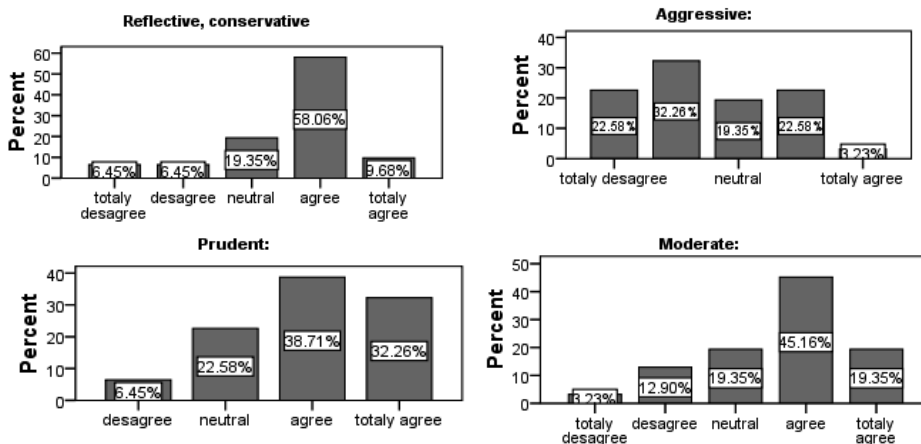
It can be seen from the previous frequencies that the brokers manifest a real fear for a general decline of the market. The percentage of 29.03% of brokers who say that they are agree with the fact that a market decline would be a disturbing factor for their investment and also the 19.35% who are in full agreement with this, shows that Romanian capital market is very exposed to trend changes. The fact that most transactions are made on shares, a general market decline may be a real fear of the brokers. In addition to this, we consider the fact that the market surveillance authority (CNVM) admitted short selling since 2011 on spot market. Brokers cannot use short selling on the spot market, but only on futures market, until 2011. Michel Barnier, Commissioner for Internal Market and Services warned in 2010 that "Under normal conditions, short selling promotes market liquidity and contribute to setting efficient prices." Some Member States have decided to suspend or

ban short selling after the financial crisis. Naked short selling occurs when the seller has not borrowed the securities, and he has no insurance before initiating a short sale, fact that can create a specific risk in case of non-trading period.

Inflation rate is also confirmed by the broker`s responses as a real concern for them. A percentage of 22.58% of brokers agree that inflation rate is a concern, while 19.35% believe that inflation rate is a really concern for their investments.

In an overwhelming percentage, brokers fear refers to the bad news or information in the market, 51.61% are absolutely certain that this kind of information can negatively influence the evolution of their investments, while 22.58% said the same thing but with slightly lower strength. However, 12.90% believe that their investments will be influenced by any bad news or rumor appeared in the market. Directly linked to this, market manipulation seems to be the most serious aspect to take into consideration. Over 51% of brokers consider their investments a real challenge in case of a possible market manipulation. Only a percentage of 6.45% of them consider that there can be no manipulation of the market in Romania.

ELEMENTS OF PERSONALITY



Source : Author`s calculations

After analyzing the results of our study related to the brokers personality, we concluded that a successful broker who is active on Romanian capital market can be described as reflective, conservative in a very large percent (over 67%), very moderate (64%), very prudent (70%), but dynamic (64%) and aggressive in a lesser percent (25%).

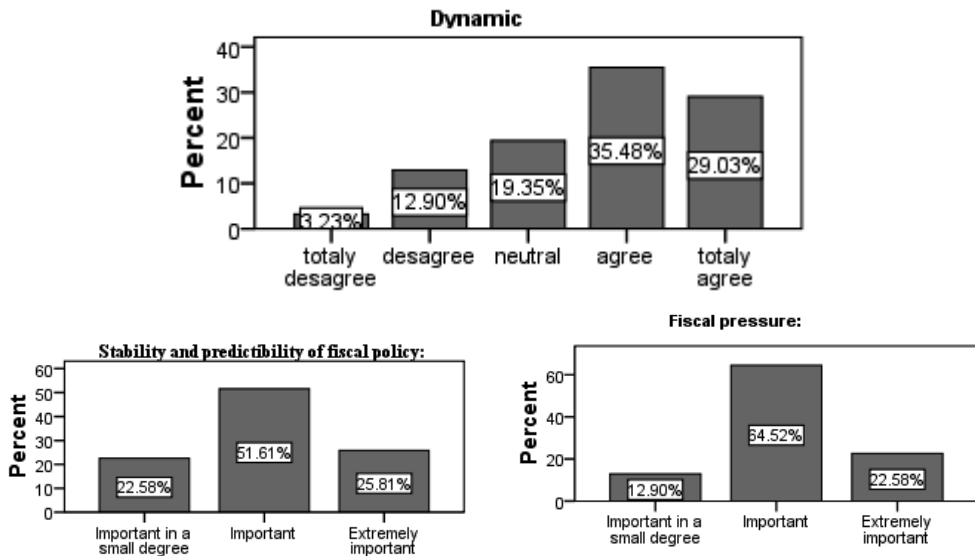
Perhaps surprisingly, the proportion of brokers that are not considered aggressive in the investment process is quite high (almost 55%) which means that a small number of brokers often conclude transactions with speculative character. From the resulted data we can conclude that the Romanian capital market needs balanced brokers, moderate ones, who will not soar in excessive speculative transactions, to balance the market somehow.

STABILITY, PREDICTABILITY AND FISCAL PRESSURE

Correlated with the stability of national economy in which is functioning capital market, brokers believe that stability and predictability of fiscal policy on investment is important for 51.61% of the brokers, and very important for 25.81% of them. A percentage of 22.58% of brokers believes that this is important but only in a small extent, in terms of setting their investment strategy. It is therefore confirmed in this case that stability in any field is essential for its further development. It is again noted that no respondent considered “not important” this issue, which states that any importance is attributed to the stability and predictability of fiscal policy, brokers will take this into consideration in setting their investment strategy.

Moreover, 64.52% of brokers consider important the aspects of fiscal pressure when setting their investment strategies, and 22.58% of them consider this aspect extremely important. Only 12.90% of them consider this aspect important but only in a little extent. Therefore we can see a clear difference in the importance given to both aspects. Fiscal pressure, at a time is the element of interest to brokers rather than stability and predictability of fiscal policy, maybe because of the predominantly speculative transactions made Romania.

A too high fiscal pressure in the capital market can lead to various financial innovations from brokers so that they can avoid paying taxes (Louis & Devos, 1991, p. 65) , something which is not desirable, especially in a market like Romania, which is still at the beginning.



Source : Author's calculations

CONCLUSIONS ON BROKERS PROFILE FROM ROMANIA

From the great variety of the responses in our study, we can give some of the profile lines of the brokers in Romania. Therefore, the main characteristics of the Romanian brokers are:

- His efficiency of his activity is good (70% of brokers), confessing that he marked for his clients, profits of 10% per year on average.
- He is reflective, conservative (58%), prudent (38%), moderate (45%), dynamic (35%) and aggressive (22%).
- His primary purpose is to increase portfolio value for his clients (48.8%).
- He considers that a medium to high market volatility is consistent with his investment objectives.
- Has high knowledge in investing domain.
- His investment decisions are based on technical analysis and on fundamental analysis reports made by specialized companies.
- He considers that the acceptable net returns are between 3 and 15% / year.
- He is considered a broker with average (medium) aversion to risk.

- The most commonly used instruments are equities, futures, speculative transactions and very little used are bonds, options and CFD trades, CDS, ETF or others. Sometimes he uses hedging and arbitrage transactions.
- He don't trade on the international markets, but only in Romania.

Brokers place their amounts using a most common logic, so that it can be raise suspicion of market capacity to evolve in a certain sense. What happens in practice in investment decision stays on the broker`s mind and his thinking.

BIBLIOGRAPHY

- Graham, B. (2010). *Investitorul inteligent*. București: Editura C.H.Beck.
- Jacquillat, B., & Solnik, B. (1997). *Marches financiers. Gestion de portefeuille et des risques*. Paris: Dunod.
- Louis, J.-V., & Devos, D. (1991). *L'ethique des marches financiers*. Bruxelles: Editions de l'Universite de Bruxelles.
- Mionel, O. (2010). *Psihologia investitorului*. București: Editura Universitară.
- Stoica, O. (2006). *Inovația financiară și dezvoltarea piețelor de capital*. Iași: Analele Științifice ale Universității Alexandru Ioan Cuza din Iași, LII,LIII.

THE SOVEREIGN DEBT CRISIS – A DISRUPTIVE ELEMENT IN THE GLOBAL ECONOMY

CIOBANU Gheorghe¹, DECEANU Liviu-Daniel²

¹ Professor, Faculty of Economics and Business Administration, Department of Political Economy, “Babeş-Bolyai” University, Cluj-Napoca, Romania, gheorghe.ciobanu@econ.ubbcluj.ro

² Ph.D. student, Faculty of Economics and Business Administration, Department of Political Economy, “Babeş-Bolyai” University, Cluj-Napoca, Romania, liviu.deceanu@econ.ubbcluj.ro

ABSTRACT

At the EU level, and not only, the last two years were marked by the sovereign debt crisis, a subject that has become virtually a serious reality, which requires multiple and extensive actions of the European leaders, and, at the same time, generates various effects worldwide.

We are witnessing a resetting of the the global economy tectonics, which causes surprising mutations, especially in terms of protection capacity against what we call “country risk”.

Countries – not just European – for which until recently this risk was unthinkable, have become subject to credit ratings downgrades, by the rating agencies – Portugal and Ireland (end of summer 2011), US (august 2011), Italy (2011 autumn), France and Austria (2012).

In the euro area, the debt crisis, which started in 2010 with the Greek episode, has become a general one, the future of the common currency itself being questioned.

In this context, several questions are *emerging*. *Was the Euro area established in haste, without adequate preparation and without the existence of a optimum currency area? Is the Economic and Monetary Union the victim of wrong budget policies? Are some convergence criteria too old and ineffective? Are there really effective levers of intervention within system? To what extent is indebtedness a necessary situation, beneficial for growth? How can tax harmonization be achieved? Are speculators now stronger*

than central banks? What actions should take the European Central Bank in the current situation? How do react countries like China to this new economic and financial architecture?

Our study aims to do a radiography of the current situation, to identify some solutions to the problems raised by the current crisis, but also to provide some answers to the questions presented above, but also to others.

JEL Classification: G00, G01, G21.

Keywords: sovereign debt crisis, country risk, downgrading, global economy, eurozone, policies, central banks.

THE SOVEREIGN RISK – BASIC ASPECTS

The study of country risk and especially sovereign risk, has become increasingly important towards the end of the twentieth century, prompting interest from both academia and the professional world (banks, multinational companies, insurance companies), the financial markets themselves becoming more sensitive to information on international risks. The definitions presented in the literature on country risk are characterized by a relatively large variety, but many of them don't have a general nature and suffer from the narrow orientation of the analysis done by their authors; also, we can say that the proliferation of these definitions, expressing specific interests of analysts, was done in a context of theoretical vacuum, in the absence of a specific theory of country risk. At the same time, it is clear that many approaches are related to the national character of country risk, and therefore they are obsolete nowadays; as some studies highlight (Amewokunu, Zhan, Saidini; 2006, p. 5), the close association of sovereign risk with constraints arising out of national territories sphere is obsolete today, the current international environment being characterized by a pronounced interdependence between countries – from an economic, financial, political and even cultural point of view.

In this context, country risk appears as *a composite risk, representing all elements emanating from the environment of a country that are able to affect a bank, an industrial or financial investor, an exporter and in general any foreign agent conducting an operation in that country – political, commercial, financial and natural risks of a specific nature.*

Definitions of country risk have multiplied in the economic literature of the '80s, with the onset of the sovereign debt crisis. The decade witnessed major losses

suffered by banks due to country risk, in the context of a slight indifference from banking representatives to the new problem appeared on the horizon (Meunier; 2005, p. 61).

The *sovereign risk* is a special risk concerning bank loans contracted or guaranteed by a State (sovereign debt). It implies that, at some point, the government becomes unable to fulfill its obligations, or that it no longer wants it. An important aspect is related to the additional risk, in this context, that implies the impossibility to obtain a compensation in court, because of the debtor access to legal immunity.

In the mid 1980s, shortly after the sovereign debt crisis manifested in Latin America, Shelagh A. Heffernan aimed to provide a clear image of sovereign risk in her book, *Sovereign Risk Analysis*. For the author, sovereign risk analysis means, first of all, identifying those cases in which states can not fulfill their commitments on external debt (Heffernan; 1986, p. 4). Since the beginning, she distinguishes between sovereign and private external debt, noting that sovereign risk refers to the first one, and aims the estimation of the probability of default (*Sovereign risk analysis is Concerned with the estimation of the probability of default on external sovereign debts*. – Heffernan; 1986, p. 5).

Regarding sovereign risk, it was considered low for countries with strong currencies – euro, dollar, yen, pound, while the risk of developing states was considered as high. However, recent events in Greece, especially after 2009, and recent evolutions in the U.S., denied – at least in part – these assertions.

The continuous growth of indebtedness represents a fact of the last period, countries like Greece, Ireland, Japan, Spain, Portugal, Italy, France being directly affected. Austerity measures and reallocations of national income are more and more difficult to implement, and the economic crisis generated major tensions. An element to be added here is that developed countries are helped in refinancing public debt by the specific economic and financial environment, while, for the developing states, the ability to pay is a far more delicate problem, often related to what the international literature in the field calls *willingness to pay*. The solvency issue is essential for these countries, its degradation (due to such phenomena as the crisis effects on the government balance) resulting in significant difficulties in refinancing. Of course, sovereign risk is influenced at the present time also by the indebtedness of the private sector, a high level generating the risk of financial collapse and increasing the banking sector fragility.

SOVEREIGN DEBT CRISIS – CURRENT ISSUES

In the case of OECD countries, the public debt problem proves to be a very serious one; in the last three years, its related indicators had an extremely negative evolution. For some countries, this phenomenon will be extremely difficult to manage both politically and socially, because it requires decisions concerning the reallocation of national income, a subject already delicate due to the economic and financial crisis and its consequences.

Table 1. Governmental debt (percentage of GDP)

	2008	2010	2012	Δ 2012-2008
Spain	40	66	81	41
Greece	93	124	132	39
Portugal	66	86	95	29
Italy	106	118	122	16
Ireland	44	78	91	47
Great Britain	56	79	90	34
France	68	85	90	22
Germany	66	77	83	17
Belgium	89	102	104	15
Japan	159	181	198	39
USA	40	63	73	33
Canada	29	32	33	4
Switzerland	41	41	40	-1

Source: BNP Paribas, Global Outlook, april 2011.

In this landscape, the greek situation is a special one. Until about two years ago, the Greek State was part of a group of countries characterized by the degradation of the public sector solvency, in the absence of liquidity constraints. A year later, the rising of public debt to GDP was a dramatic one, and the negative perception of solvency caused significant difficulties in financing and refinancing, boosted by speculative attacks. From now on, Greek sovereign risk analysis gets the features of a developing state sovereign risk analysis.

Solvency degradation can be attributed to the economic crisis effects on the government budget balance, the lack of reliable measures in order to improve the

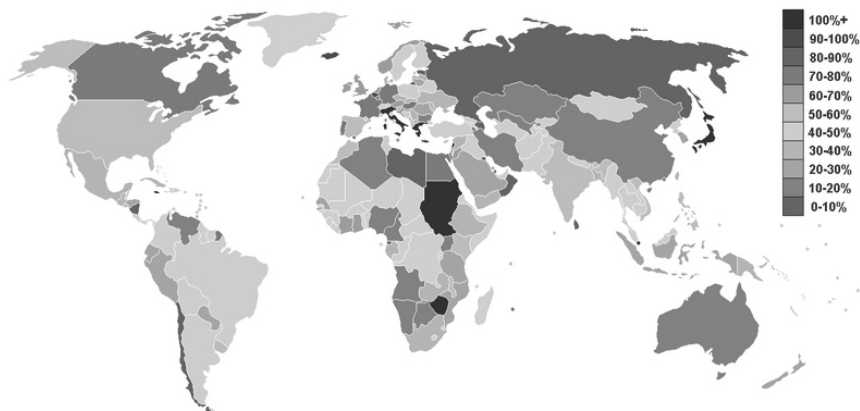
situation of public finances, the presence of irregularities, discovered too late, in the context of the public accounting opacity of the Greek State. In the same time, evaluations done by rating agencies have contributed to the increase of difficulties in refinancing, showing a strong pro-cyclical character; despite a bigger demand for securities, risk premiums have increased significantly since the autumn of 2009, as well as volatility, investors reducing sharply the place of Greek bonds in their portfolios. The measures taken by the Greek government, as well as the already famous “rescue package” come to meet this delicate situation. However, Greece’s public debt sustainability can be affected by an excess of budgetary rigor. For example, BNP Paribas specialists pointed out that in a context of fragile economic growth, a reduction in the annual budget deficit to GDP by 3-5 percentage points for two or three years could cause a bigger decrease in GDP and tax revenue than anticipated, and therefore a smaller deficit reduction than announced. We can speak, in this context, about a dangerous vicious circle – negative growth-debt – which may manifest itself for many years.

Figure 1. Total external debt to GDP



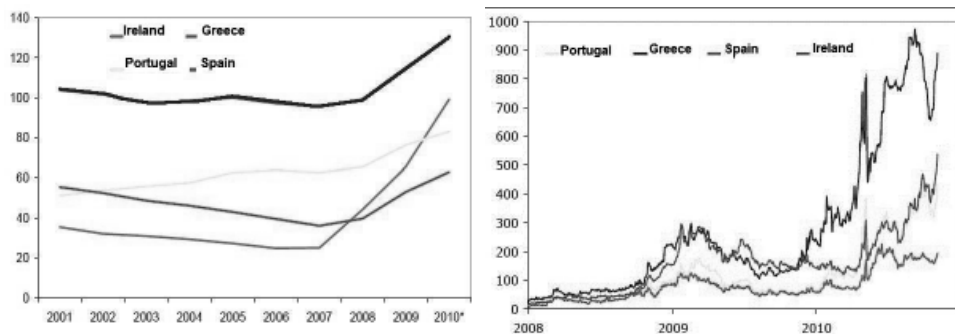
Source: Ben Smith, 2011 (IMF data), created with <http://gunn.co.nz/map>.

Figure 2. Public debt (percentage of GDP)



Source: Bloomberg, 2011.

Graph 1. Evolution of public debt (% of GDP) and Sovereign risk premiums (Portugal, Greece, Spain, Ireland)

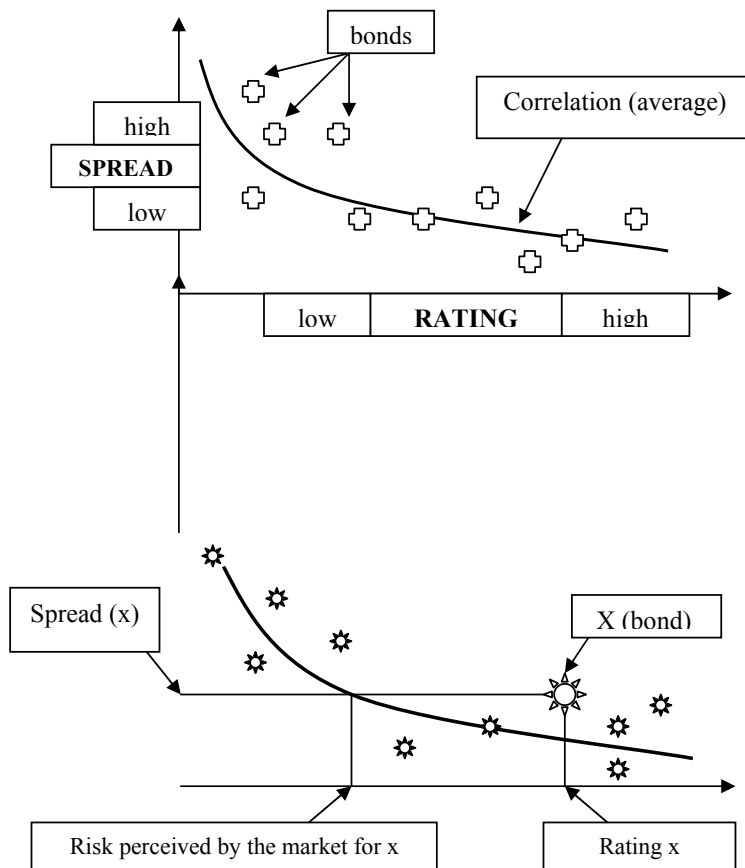


Source: Longueville, Guy, Faure, François, Country Risk: Normalisation in most emerging countries, uncertainty in some advanced countries, in Conjoncture, BNP Paribas, november 2010.

Many analysts believe that the ratings provided by agencies, concerning country risk, are complementary in terms of information content of the risk premium.

Some authors (Ricoeur-Nicolai; 1998, p. 56) have even tried to represent graphically the relationship spread-rating:

Figure 3 (a and b). Rating-spread relationship



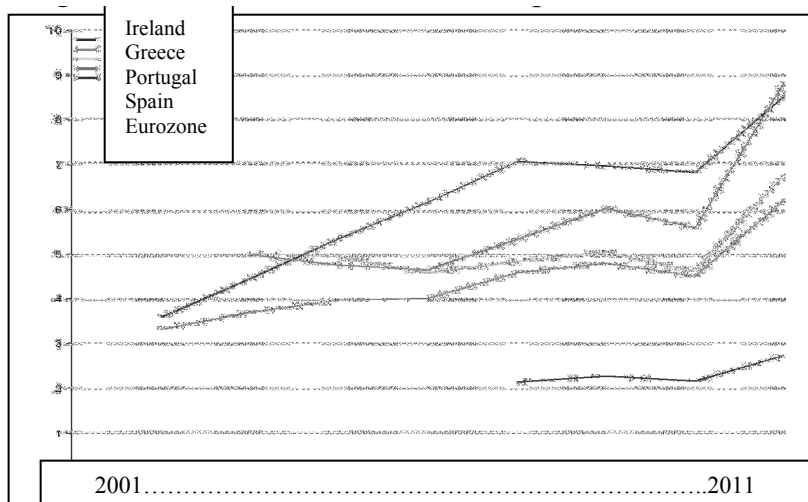
Source: Ricoeur-Nicolăi, N., Crises des économies émergentes: du bon usage des analyses du risque pays, Revue Zones émergentes, nr. 5, CDC, 1998 (adaptation).

Beyond the relationship spread-rating, obvious in the current context of sovereign debt crisis, beyond the higher and higher tensions and the mistrust that takes hold on markets, a series of remarks appear to us as essential to make:

- First, recent years have been marked, in addition to the global financial and economic crisis, by the sovereign debt crisis, manifested mainly at European level;
- As is highlighted by the graphic below, the size of external debt relative to exports increased significantly in recent years; this evolution is worrying, know-

ing that the exports of goods and services are the most reliable source of foreign currency, required for the debt payment;

Figure 4. Total external debt to exports



Source: Arepim AG / World DataBank, 2010.

- The European sovereign debt crisis, beyond the matter of Greece leaving the Eurozone, even put into question the future of the common currency; at the end of 2011, rumors that Germany would prepare a voluntary exit from the Eurozone were present.

Thus, the European Union found itself, in 2011, facing a major challenge. This involves first of all identifying insolvent European countries and offering a significant support to them, and even operating a debt restructuring where this is necessary. Also, macroeconomic policies should be revised, in order to allow achieving economic growth, despite the strict budgetary discipline; in the same time, we think that the banking system should be strengthened.

After lengthy negotiations and intermediate stages, the most recent event to date is the Treaty signed on March 2, 2012. The European budget pact represents a mechanism on which agreed 25 of the 27 European Union member states (except the UK and the Czech Republic); it has an intergovernmental nature, and concerns especially the Member States of the Euro area. The pact was strongly supported by Germany, which even conditioned further assistance for countries with difficulties with achieving progress on political union. Among the primary importance

elements of the Treaty, we can recall here the maximum structural deficit set at 0.5% of GDP. The determination of the structural deficit has certain features, and the calculation methodology is harmonized at the Community level; essentially, calculating the structural deficit is the same as calculating the budget deficit, with the elimination of some disruptive factors. If the specified threshold is exceeded, several correction mechanisms are triggered automatically. However, in exceptional circumstances or for countries with public debt below 60% of GDP, a structural deficit of more than one percentage of GDP is accepted.

Among other things, such an approach is made in order to positively influence the credibility of the states and stimulate economic growth. Although essentially such a commitment can only be positive in this context, we consider that its sphere remains limited, given that it only refers to budgetary issues. Also, this agreement, which complements the European stability mechanism, is inconsistent with the Keynesian theory, proposing a variant without deficit of public finances. In essence, such a performance is desirable, but it is not appropriate in any situation. Moreover, the new “golden rule” is not an absolute novelty, resuming older elements such as the Stability Pact or the Maastricht convergence criteria; many times, these rules were not respected, their requirements being gradually diluted. For many countries, recording a satisfactory growth is almost impossible without deficit.

PERSPECTIVES AND CONCLUSIONS

Certainly, in the next period of time, the future of the common European currency and the European integration process in general will take shape; solving the issue of sovereign debt will depend on the effects of the taken decisions, and, especially, on the commitments made. In this context, we underline some aspects that we consider of great importance today, issues that need to worry with priority, in our opinion, the European policymakers:

- The issue of adjustment should not be left only to the debtor states, facing serious problems;
- Undoubtedly, Europe requires significant liquidities – in this context we can discuss the potential role of countries such as China;
- The disappearance of the single currency could mean the common market end, leading to the destruction of the European construction core; such a development would have undoubtedly adverse effects for the rest of the world, marking the end of multilateralism;

- Since its debut, the European Monetary System has shown construction flaws, and the building of the Eurozone was achieved on unstable bases; we recall here the fact that the European Union does not meet the specific conditions of optimal currency areas, plus the lack of appropriate economic and monetary preparation. Many voices, including that of former European Commission President Jacques Delors, directly involved in the design of the common currency, argue that the euro was introduced in haste, that policymakers did not take into account the weaknesses and fundamental imbalances of the Member States;
- In the current situation, a reform concerning the treaties appears to us as appropriate, new transfers of sovereignty being necessary;
- The budgetary policies implemented in the euro area have not always been the most effective; from this perspective, the solution of a budgetary union in the region is at least interesting; the need for budget discipline is obvious, extreme measures such as putting into budgetary guardianship countries with major problems being viable. Budgetary rigor should result in limiting the growth of interest rates on government securities (for example, concerning Italian and French debt), in a context where investors tend to lose appetite for sovereign bonds issued by some euro area countries;
- Although its mandate clearly underlines as primary objective maintaining price stability, the European Central Bank must find its correct place and role in the current context; from this point of view, controversies are numerous: Germany, for example, disagrees with the issue of a collective bond or the purchase of government securities by the European Central Bank, for states that are in a difficult situation. We agree in part with such a view, though open market operations by the ECB could still prove themselves useful in emergencies. In the medium and long run, this activity could affect the institutions' balance sheet, and a depreciation of the purchased securities would automatically lead to a loss of credibility;
- The convergence of economic policies in general and fiscal policy in particular should be a priority at EU level;
- In close contact with the fiscal discipline issue, financial services (and especially the income from speculations) taxation requires an appropriate treatment; in many cases, hostile speculation actions disrupt financial markets, solid gains being obtained by hiring contrary positions to central banks interventions.

Finally, we will add the fact that the problem of sovereign debt is now a common one both to developed and the developing countries. Unfortunately, there is no specific mechanism that we can commonly use in order to solve these issues – the current procedures have rather a special character: the restructuring of debt through the Paris Club, debt conversions of „Brady type”, etc. Often lately, in the light of the new mutations, indebtedness is perceived exclusively as a state that countries should avoid. We believe that this view is wrong; the world’s countries – emerging or not – may be obliged, for various reasons such as a low level of national saving, to seek new sources of funding, in order to obtain economic growth. If some underdeveloped countries benefit in this context of aid or loans with low interest rates, most of the states turn to FDI or portfolio investments. Thus, economies are turning to loans in order to continue development. This classical development type is based on the following principles: resource inputs translate into investment / investments imply increased production and consequently favors the development of the export capacity of the economy / increased exports mean higher incomes and, finally, allow debt reduction.

In this context, we can say that states may even change their status and become creditors. Of course, in order that this very positive phenomenon indeed occur, it is essential that the funds raised by borrowing are used effectively, in areas where productivity is high and the competitive advantages, present (Andritzky; 2006, p. 34). Unfortunately, this does not happen every time, and often states prove themselves at least imprudent in their appeal to foreign capital. Generally, as long as states use attracted capital for productive investments, the emergence or amplification of growth should not be delayed; the necessary condition is that the benefits obtained from the investment exceed the cost of capital. In some cases, however, attracted capitals are never invested, and are directed towards financing the budget deficit or consumption.

We will end by saying that, despite the large number of levers and indicators, responsibility remains the key element in terms of crisis prevention.

BIBLIOGRAPHY

Books:

Andritzky, J. (2006). *Sovereign Default Risk Valuation – Implications of Debt Crises and Bond Restructurings*, Springer, ISBN 3-540-37448-5, Berlin, Heidelberg.

Bouchet, M. H., Clark, E., Gros Lambert, B. (2003). *Country Risk Assessment – A Guide to Global Investment Strategy*, Wiley, Sussex.

Heffernan, Shelagh A. (1986). *Sovereign Risk Analysis*, Allen and Unwin, ISBN 0-04-332119-4, London.

Meunier, N., Sollogoub, T. (2005). *Economie du risque pays*, La Découverte, ISBN 2-7071-4203-4, Paris.

Articles:

Amewokunu, Y., Su, Z., Saidini, C. (2006). Proposition d'un cadre d'analyse du risque-pays dans le contexte de la mondialisation, Conférence Internationale de Management Stratégique, Annecy/Geneva, june.

Longueville, G., Faure, F. (2010). Country Risk: Normalisation in most emerging countries, uncertainty in some advanced countries, in *Conjoncture*, BNP Paribas, november.

Ricoeur-Nicolai, N. (1998). Crises des économies émergentes: du bon usage des analyses du risque pays, *Revue Zones émergentes*, nr. 5, CDC.

Sites, others:

http://www.lemonde.fr/election-presidentielle-2012/article/2012/03/11/guigoule-pacte-budgetaire-europeen-n-etait-pas-vraiment-utile_1656062_1471069.html

<http://www.lefigaro.fr/conjoncture/2012/02/28/20002-20120228ART-FIG00587-le-pacte-budgetaire-europeen-est-deja-menace.php>

Bloomberg (www.bloomberg.com)

Areppim AG / World DataBank, 2010

BNP Paribas, Global Outlook, april 2011

FINANCIAL PERFORMANCE MEASUREMENT OF SWISS PAINTING PORTFOLIOS AND MARKET SEGMENTATION

Frank Forster

Institute of Social Sciences, Cyprus International University, Lefkoşa

E-mail: talis@bluewin.ch

ABSTRACT

Recent media coverage and research suggest that art has performed quite well in comparison to other asset classes over the last decade, especially during the global recession of 2008 and 2009. Apart from the reportedly poor performance of equity, why could art be such an attractive asset class? The main goal of this paper is to investigate for the first time, whether investors can use a tailored hedonic model to reliably calculate different Swiss painting segment indices according to their preferences, to track reliably the performance of their portfolios.

The approach chosen is to first calculate a Swiss painting index (SPTotal), using a specific hedonic regression model on a unique unbiased larger sample, and then to compare its performance to that of other asset classes. Next, the SPTotal of modern Swiss art is split into three different smaller price segments, with high to low price market portfolios.

The practitioner can use the final model presented to reliably calculate the performance of distinctive small art segments. The exemplary model of this paper is powerful and shows that Swiss paintings were a fairly good domestic financial investment during the period studied. Nevertheless, the composition and observation period of the segments under study can affect the usefulness of this method.

JEL Classification:

Keywords: Economics of the Arts, Time-Series Models, Wealth Management; Asset Allocation, Portfolio Choice; Investment Decisions

INTRODUCTION

The news media regularly report on very high prices achieved at auction sales. The most recent example is a sculpture sold at the world record price of \$ 104.3

million at Sotheby's in 2010¹. The hammer price was four times higher than the house had estimated. Even this simple example supports many notions about art markets. First, pricing is not rational, i.e., decisions are more emotionally driven and less financially driven (TEFAF, 2010). Second, art market prices are random and unpredictable (Baumol, 1986). Last, art investments are interesting for High Net Worth Individuals (HNWIs), who have little concern for money (Bachofen, 2008).

The focus of this paper is put on the question of whether the performance of different price segments of modern Swiss paintings can be reliably determined and, if so, whether such portfolios are a lucrative investment in comparison to other - mainly Swiss - asset classes. Thus, the research questions to be answered by this study are the following.

Research question 1: The SPTotal portfolio consists of three sub-portfolios with low to high price segments of Swiss paintings. Is it possible to reliably calculate the annual performance of SPTotal and its segment portfolios using a specific hedonic model?

Research question 2: The potential users of such indices are, for example, art advisors, insurance companies, tax authorities, or HNWIs. Can these target segments use the tailored model to estimate the performance of sub-samples like categories (painting segments), artists (individual artist performance), and single paintings (painting pricing)?

Most of the artists selected for the portfolios are assumed to have demonstrated a superior performance during the observation period of 1998 – 2009. Thus, the sample is statistically biased. The main goal of this paper is to provide practical guidance for an art fund manager or collector who intends to invest in Swiss paintings. It is obvious that larger sample indices are of limited use if one is confronted with a myriad of buying options for art objects from various geographic art markets around the world. As suggested by this paper, the situation can be improved if the specific model holds: first, by choosing the artists desired, and second, by subsequently calculating unbiased Swiss painting indices per price segment or any other small category of interest. This approach may give the investor the desired informa-

¹ Alberto Giacometti, 1901 – 1966, Swiss painter and sculptor, information taken from www.forbes.com, 2010.

tion because he is primarily interested in the performance of specific acquisition targets, such as the works of particular artists or whole collections.

RESEARCH METHODOLOGY AND MODELING

Methodology

The SPTotal index and the sub-indices refer to the base year 1998, value 100, and show the percentage increases and decreases over time (T) relative to the base year as the underlying data changes. There are four performance figures: the overall portfolio (SPTotal), the high price market portfolio (PP), the middle price market portfolio (MM), and the low price market portfolio (LM). The hammer prices are deflated to the base year and do not include auction fees (net return numbers). The price for a painting (Y) is a function of its constituent characteristics (X) and a residual (ϵ), as displayed in exhibit 1 and equations 1 and 2. The estimates (coefficients, α) indicate the impact of the respective characteristics on the price of the painting. The time dimension is captured using time dummies (Z). The coefficients of the time dummies reflect the price changes of the respective year. The residual is determined by external factors and consumption benefits; the better the fit of the model, the smaller the values of the residuals. The significant outcome of the hedonic study is found post hoc, i.e., after the course of many analyses and modifications performed on the initial model (Exhibit 1) and the data set.

The hedonic regression model can be written as follows (Agnello, 2002):

$$\text{Ln}Y_{it} = \alpha_0 + \sum_{k=1}^K \alpha_k \cdot X_{k,it} + \sum_{t=1}^T \beta_t \cdot Z_{it} + \epsilon_{it} , \quad (1)$$

where:

$\text{Ln}Y_{it}$ is the natural logarithm of the price of the painting i ($i = 1 \dots N$) sold at time t

($t = 0 \dots T$), the dependent variable.

α_0 is the constant term.

α_k is the coefficient of the characteristic, which is the price impact of characteristic k with respect to the reference painting.

$X_{k,it}$ is the characteristic k ($k = 1 \dots K$) of painting i at time t . This variable is referred to as the (independent) variable or predictor.

β_t is the price impact of the paintings sold in year t , always with respect to the reference year 1998. The antilog shows the price percentage change of a painting, controlled for heterogeneity, between the periods $t = 0$ and $t = 1$, i.e., the index of period t with respect to period 0 is the antilogarithm of the estimated coefficient of the respective time dummy, $\exp(\beta_t)$ (Berndt, Griliches, and Rappaport, 1995).

Z_{it} is a dichotomous time dummy variable, with the value 1 if the work is sold in the time period considered and 0 otherwise.

$$\text{Ln}Y_{it} = \alpha_0 + \sum_{k=1}^K \text{Ln}\alpha_k \cdot X_{k,it} + \sum_{t=1}^T \beta_t \cdot Z_{it} + \varepsilon_{it} \quad , \quad (2)$$

The interpretation of the semi-log form of equation 1 is the percentage impact on Y of increasing the coefficients by one unit. The double-log form, equation 2, can be regarded as the elasticity, i.e., the percentage impact on Y of increasing the coefficients by one percent (Fildes, 1992). The choice between the two equations is mostly determined by the explanatory power of the model, R^2 .

The hedonic indices are calculated as follows (Kräussl and van Elsland, 2008):

$$I_t = (\exp(\beta_t) / \exp(\beta_{t-1})) * I_{t-1} \quad , \quad (3)$$

where the annual return rates and, subsequently, the annual geometric returns are derived from the index. The investment returns are not considered to be independent of each other because of the assumed buy and hold and the reinvestment of the proceedings. As a result, the geometric average (Geo) is used to represent the mean.

The price variables in equation 1 and 2 are given in natural logs. Thus, the percentage difference between a characteristic with respect to the reference variable for that group is given by formula 4, which is $100 * (\exp(\alpha_k) - 1)$.

Modeling (Exhibit 1)

Physical properties: The size reflects the surface of the painting in centimeters squared. The size is expected to be an important price determinant. First tests have indicated that the coefficient of determination, R^2 , is more than 0.9 for some artists.

According to art experts², the format and color also have an impact on the price. Allegedly, landscape-sized, non-monochrome paintings are the easiest to sell. This relationship is reflected in a Y/N dummy (1/0) rather than in the measures used, to avoid potential multicollinearity with size, for which a positive sign is expected.

Color: According to the same practitioners, colorful paintings sell better and at a premium. The respective dummy is expected to have a positive sign.

Technique: Technique is classified into three sub-groups. The reference group chosen is mixed media and pen. With respect to the reference group, Oil is expected to have a positive sign because oil paintings usually come from older and more established artists and should therefore sell at higher prices.

Media: Media are classified into four sub-groups. The reference group chosen is Wood and Varia. Technique and media could be proxies for the current physical conditions of a painting and the resulting durability, transportability, and storability. Because canvas shows the most favorable conservative characteristics in this respect and is often used in connection with oil, canvas is expected to sell at a higher price and to have a positive sign, while paper is prone to fade if not protected properly.

Dated: The date of the creation of a work is an important characteristic. If no date is available, an expert's decision has to be taken.

Subject matter: There are figurative and non-figurative paintings. Figurative paintings display a reasonably recognizable person or animal. If neither is present in a painting, then the painting is classified as non-figurative. According to the interviews conducted, figurative paintings from the same artist usually sell at higher prices. This relationship is not true for painters best known for their landscapes. Depending on their representation in a portfolio, the sign may be positive or negative. If a portfolio contains fewer artists with typical landscape paintings, then the sign is expected to be positive.

Signature: According to the literature, together with size, the name of the artist has the greatest impact on the price. The respective psychic dividends are derived, to a great extent, from the latter characteristic (Agnello and Pierce, 1996). The artists included in portfolios are picked based on their expected past performance. It

² Interviews have been conducted with various art advisors and gallery owners in 2008 and 2009 in Switzerland.

can be argued whether, from an investor's point of view, data availability would be a better criterion. However, one of the research aims of this work is to investigate the possibility of making performance measurements of selected artists from an art advisor's point of view, irrespective of publicly available statistical data. The reference artist is Mario Comensoli³, an artist who had enough but not too many transactions and whose work had a reasonably stable price level during the observation period.

The signature serves as a protection against potential forgeries and as branding. A signature is expected to have a positive impact on the price because paintings belonging to the lower and middle price segment cannot necessarily be called "signed all over"⁴.

The ranking and presence in public collections are based on information from Artfacts⁵. Both should give an indication of the popularity, reputation, and historical importance of an artist and the resulting consumption benefits, i.e., psychic dividends. Thus, the ranking may give an indication of the impact of taste and current trends. A presence in public museums can provide more insight into ownership effects such as pleasure, satisfaction and upper class appeal. However, there may be strong multicollinearity between the name and the latter two variables.

Date of sale: Market characteristics that are relevant to the date of sale include external factors such as the per capita income and the inflation rate in Switzerland. These factors are proxies for the impact of the overall macroeconomic situation on domestic painting prices. It is assumed that the macroeconomic environment affects prices and that the art market follows economic ups and downs. The per capita income should have a positive sign. Inflation in Switzerland is traditionally very low; if there is an impact on prices, then the sign should be negative, i.e., assuming that art is truly a hedge against inflation.

Almost all of the artists represented in the portfolios were already deceased at the time of the observation period. Nevertheless, the model controls for any death effects and can be used to observe possible death effects. However, they are not assumed to have a significant impact on the prices, if any. An important indicator of

³ Mario Comensoli, 1922 – 1993, realistic Swiss painter.

⁴ The term "signed all over" means that a typical painting can easily be attributed to an artist merely based on the style, technique, or subject matter, without being signed physically.

⁵ Artfacts, an artist database, was founded 2001 in London, www.artfacts.net, 2010.

market demand and liquidity is the percentage of pieces that are bought-in. The coefficient indicates the ratio between buy-ins and total lots sold⁶. Its significance also depends on whether the negotiated reserve prices are set realistically.

Place of sale: Location is classified into four sub-groups. Swiss sales include domestic auction houses, whereas large international sales refer to the big two (Sotheby's and Christie's). International sales are sales from foreign auction houses. The reference value is Swiss sales. Paintings sold at Sotheby's and Christie's are said to obtain higher prices and should therefore have a positive sign. Seemingly insignificant works are rejected by them. Thus, there is a tendency to sell more valuable paintings through these houses.

The last two characteristics are related to the respective auction houses and their policies. These characteristics indicate the lot number of an art object and whether it is illustrated in the auction catalogue. An auction house can choose between three orders in which their items are sold: according to increasing value, according to decreasing value, or randomly distributed throughout the auction. Similar to the afternoon or weekend effect in financial markets, research suggests that works sold later in an auction, when ordered by decreasing value, will generally achieve lower prices with reference to the estimated prices (Beggs and Graddy, 1997). For the model, this trend indicates that revenue-maximizing houses may sell the most expensive works at an earlier stage in their auctions. Therefore, theoretically, the sign should be negative because the higher the lot number is, the lower the price.

The question of whether a picture of the item appears in the auction catalogue is mostly related to its price. As professionally made illustrations are clearly a cost factor, it can be assumed that they were only made if a higher price was expected. Thus, the impact on price should be positive if there is a picture.

MODEL ADJUSTMENTS AND EMPIRICAL RESULTS

Specification Tests

The unbiased sample includes 5,323 global transactions from public and private sales of around 80 galleries and auction houses. The number of transactions peaked significantly in 2007 and 2008; those years exhibited the best performance.

⁶ According to a previous study, the buy-in rate reflects the investors' behavior. In times of crisis, the rate increases and vice versa. In nominal terms, the study found an average rate of 45 % in 2008, more than double the rate for the same period in the previous year (TEFAF, 2010)

Multicollinearity (strong correlations among independent variables) was analyzed by examining tolerances of less than 0.2 and respective VIFs that were higher than 5. Almost all of the variables displaying more extreme values as compared to the threshold were eliminated. The excluded variables are as follows: Dead, Ranking, Inflation, and Income. The variables Public Collections and Unsold were rejected due to insignificance. All models are significant at the 1 % level. The explanatory powers are (adjusted R^2) as follows: SPTotal: 78 %, PP: 75 %, MM: 75 %, and LM: 71 %. The Durbin-Watson ranges were from 1.606 to 1.742. As a rule of thumb, the Durbin-Watson value should be approximately equal to 2, with a value of less than 1.5 or more than 2.5 being a possible cause for alarm (Matignon, 2005). Thus, the Durbin-Watson statistics of the samples imply that there is no serious problem of positive autocorrelation in the time series data. The standard errors and p-values of the important estimators are significantly small.

The signs of the final coefficients of the specific model are as expected. The lot number, the TMs (Technique and Media), and the weaker performing artists show negative signs. The lot number has a limited influence but indicates that the higher the lot number (i.e., the later a piece is sold in a public sale), the lower the price. The technique of oil on canvas is the most expensive.

Performance Results (Figures 1 and 2)

The performance of SPTotal (1.3 %), PP (2.6 %), and LM (3.0 %) during the observation were superior to that of Swiss equity (1.1 % SPI, Swiss Performance Index). This relationship is not surprising, as equity is thought to have performed poorly during the last decade. Furthermore, LM also outperformed Swiss bonds (2.6 % DBTR, Domestic Bond Total Return Index). Nevertheless, gold achieved the best return rate of all asset classes (8.5 %) observed. The risk of investing in the three portfolios was lower than investing in equity, but higher than investing in bonds.

From all alternative investments observed, the Mei Moses post-war and contemporary category index (Mei) performed best (7.5 %). However, because it is calculated based on repeated sales, there may be a selection bias as only more successful and clearly identifiable paintings are included in the sample. Thus, the index does not accurately reflect the two art categories as a whole. Furthermore, investments in classic cars (4.1 % DOX) were on a higher level than PP and LM during the observation period. From a domestic asset management perspective, real estate investments (IAZI) yielded the best financial performance over the past decade.

SUMMARY AND CONCLUDING REMARKS

First, a portfolio of 29 modern and contemporary Swiss painters – including private and public sales transactions – was selected according to the experts' view. The main criterion was an assumed good financial performance in the past observation period. Three segments were then formed from the total sample. The segments were built using three price ranges. This choice was made because the target segments may apply the same logic using art price indices⁷. The starting point considered was the budget that could be or had already been invested in art. The low price market portfolio (LM) ranges from CHF 2,000 to CHF 15,000, the middle price market portfolio (MM) reaches up to CHF 60,000, and finally, the prime market portfolio (PP) goes up to CHF 350,000 and above. Many other segmentation criteria are possible. For example, art collectors who want to build or expand a collection may be more interested in segmentations based on art schools or on the evaluation of a collection as a whole portfolio, e.g., for insurance and/or tax purposes.

Second, four indices were computed using hedonic regressions based on ordinary least squares calculations. These indices were derived directly from time dummy variables from a single equation (the pooled approach). The initial model and estimator were adjusted to find finally, after many iterations, the best fit and resolve the problems of multicollinearity, heteroskedasticity, and non-normality of the sample data.

Research Question 1

The indices of the SPTotal portfolio and of two sub-portfolios could be calculated reliably. Some insignificant time dummy coefficients were involved. This result is not a shortcoming of the specific model developed in this paper, but due to the fact that there were weak price changes and/or a low number of transactions for certain artists in (a) distinctive year(s) with respect to the reference year during the observation period. Thus, it is important that there are a sufficient number of independent transactions, not only in the reference year, but also in all subsequent years. Furthermore, the performance of the artists in the portfolio must significantly change over time, otherwise efficiency problems of the time dummy coefficients may arise. As a result, the estimated index is not reliable enough for a practitioner.

⁷ See also the remarks of Klein (1993).

Research Question 2

The target segments can use the described methodology to assess the performance of painting segments if some statistical constraints are considered. The usefulness of the specific model as presented in this paper, strongly depends on the samples selected, and the observation period. The individual artist performance can be calculated using either the adjacent period or the pooled approach (both with equation 2)⁸. Furthermore, single painting prices can be assessed by applying the regression equation to a single artist, if sufficient transaction data and the relevant characteristics of the painting to be valued are available, i.e., if his work is liquid and rather homogenous. The latter two approaches, individual artist performance and painting pricing, could be the subject of more detailed future research.

There are general statistical and art-specific considerations on performance measurements based on hedonic regressions. From a technical point of view, the database used for the calculations is crucial. The available data is often restricted to transactions from highly liquid artists, traded in the tertiary market. These artists may not be the focus of interest for potential users of art market indices. For art market segments, artist performance, and painting pricing, the number of transactions is even more crucial. If the database is too small, then an expert's estimation of the assumed performance of an artist or the valuation of a painting must be used. Hedonic regression assumes a stable relationship between the predictors and the resulting price over time. This assumption is not a strong one, for a short observation period as used in this study. However, for a longer observation period, the adjacent period approach is the better choice.

The specification of the model is also challenging. Firstly, some characteristics that may have an important impact on the price are not publicly available; such characteristics include the condition of a painting, the importance of a work within the oeuvre of an artist, or external factors. Thus, the model may be incomplete, and as a result, the estimators may be biased and inconsistent. The effects of variables that are not individually specified in the model, will be captured in the error term. Secondly, the problem of multicollinearity cannot always be solved entirely. The practitioner is usually interested in the performance of specific artists, whose works

⁸ Other authors who calculated returns by artists using the same equation stated that the sample size was too small for many artists. Thus, e.g., Agnello used only artists with more than 300 transactions (Agnello, 2002). This strategy underlines again the importance of the samples selected and the resulting transactions for reliable performance measurements using hedonic regression.

are in his collection or portfolio. Natural correlations may be inevitable. One artist may be publicly traded more frequently by the big two, resulting in a positive correlation between the respective artist and the location. This paper shows, that the characteristics can be respecified to a successful extent. However, it is also clear that if the sample is not tailored to specific statistical needs, but to the requirements of a fund manager or insurance agent, then, complete independence of all variables is very unlikely.

BIBLIOGRAPHY

Agnello, R.J., 2002. Investment returns and risk for art: evidence from auctions of American paintings. *Eastern Economic Journal* 28(4), 443-464.

Agnello, R.J., Pierce, R., 1996. Financial returns, price determinants, and genre effects in American art investments. *Journal of Cultural Economics* 20(4), 359-383.

Artfacts, 2010. Value Artist Ranking Information, www.artfacts.com, Available at: http://www.artfacts.net/marketing_new/?Services,Artist_Ranking

Baumol, W.J., 1986. Unnatural value: or art investment as floating crap game. *American Economic Review* 76(2), 10-14.

Bachofen, K., 2008, May 13. More than Just another Toy for the Super-Rich. *Handelszeitung*, Available at: http://www.handelszeitung.ch/artikel/Unternehmen-Mehr-als-ein-Spielzeug-fuer-Superreiche_328828.html

Beggs, A., Graddy, K., 1997. Declining values and the afternoon effect: evidence from art auctions. *The RAND Journal of Economics* 28(3), 544-565.

Berndt, E.R., Griliches, Z., Rappaport, N.J., 1995. Econometric estimates of price indexes for personal computers in the 1990's. *Journal of Econometrics*. 68(1), 243-268.

Fildes, R., 1992. The practice of econometrics: classical and contemporary: Ernst R. Berndt. *International Journal of Forecasting* 8(2), 269-270.

Klein, U., 1993. *Der Kunstmarkt, zur Interaktion von Aesthetik und Oekonomie*, European University Studies, series V, Economics and Management, vol. 1407, Frankfurt, p. 185.

Kräussl, R., van Elsland, N., 2008. Constructing the true art market index – a novel 2-step hedonic approach and its application to the German art market, VU University Amsterdam, Working paper series, pp. 1–38.

Matignon, R., 2005. Comparing prediction estimates. In: *Neural Network Modelling Using SAS Enterprise Miner*, AuthorHouse, Milton Keynes, p. 507.

Sosnoff, M.T., 2010. Is Giacometti's Walking Man A Triple-A Bond?, www.forbes.com, February 11th. Available at: http://www.forbes.com/2010/02/11/giacometti-walking-man-personal-finance-financial-adviser-network-cisco-systems_3.html

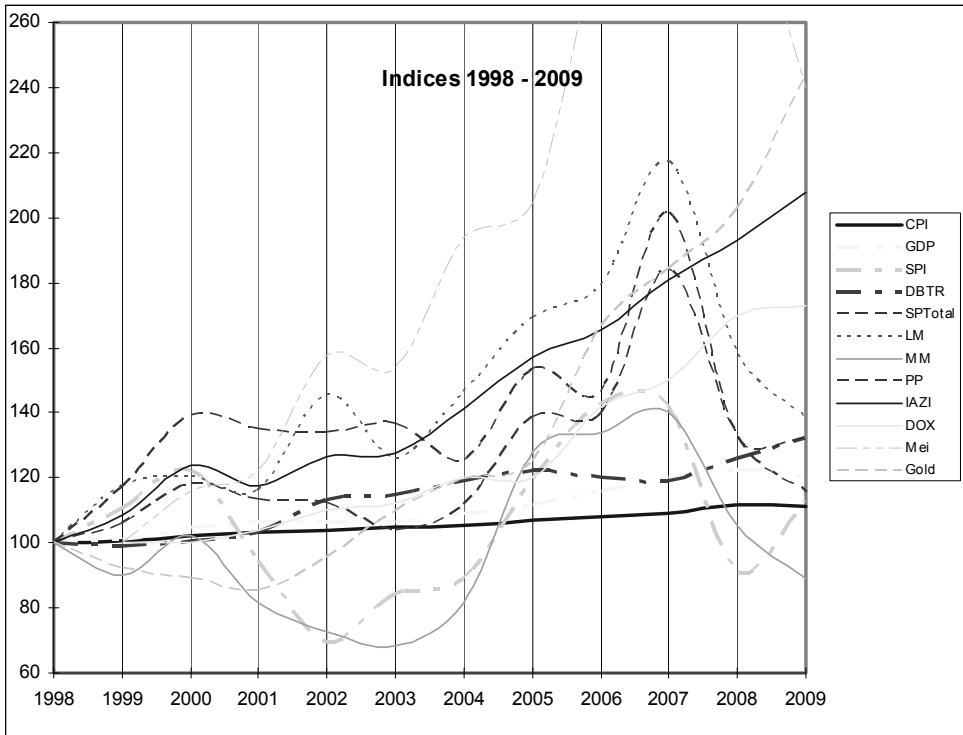
TEFAF, The European Fine Art Foundation, 2010. Trends in the art trade during global recession, prepared by C. McAndrew, The Netherlands, The European Fine Art Foundation, p. 22.

Exhibit 1: Expected Price Determinants of Swiss Paintings

Attribute	Sub-Group	Characteristic	Category	Code	
Physical Properties	Support	Size		cm ²	
		Format, upright or landscape	Y/N	1/0	
		Color, non-monochrome or monochrome	Y/N	1/0	
		Technique	Dummies		
		Acrylic/Gouache/Tempera/Watercolor			
		Oil			
		Mixed/Pen		reference	
		Media	Dummies		
		Canvas			
		Paper/Cardboard/Greaseproof/Photo			
		Wood/Board/Panel/Pavatex/Masonite		reference	
		Varia/Plastic/Metal/Silkscreen/Vellum			
		Dated, year of creation		Year	
	Subject matter	Figurative	Y/N	1/0	
	Signature	Name of artist	Dummy		
		Signed	Y/N	1/0	
		Ranking of artist		Rank	
		Public Collections		number	
Date of Sale		Sold date, year of sale	Dummies		
		Income, per capita income		income	
		Inflation		in	
		Unsold		percent	
		Dead	Y/N	coef- ficient 1/0	
Place of Sale	Location	Swiss sales	Dummies	reference	
		International big sales			
		International sales			
		Private sales			
			Lot number		number
			Illustration	Y/N	1/0

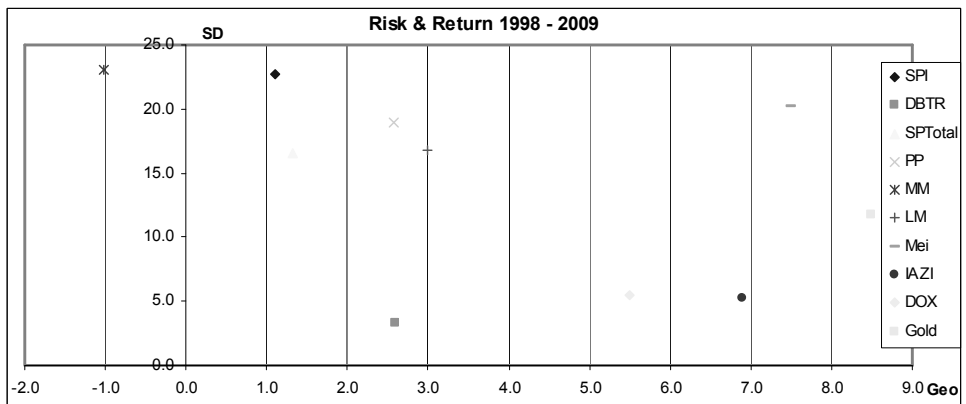
Source: Author

Figure 1: Swiss Painting Performance Indices and Benchmarks



Author's calculations

Figure 2: Risk & Return Trade Off



Author's calculations

THE IMPACT OF STOCK MARKET LIBERALIZATION ON VOLATILITY

Gherman Mircea-Cristian¹, Ciupac-Ulici Maria-Lenuta²

¹Ph.D. Student, Technical University of Cluj-Napoca, Romania

²Associate professor Ph.D., Commercial Academy Foundation, Romania

ABSTRACT

Stock market liberalization could have a favorable impact on the economy in many aspects. For instance, several empirical studies have shown that liberalization has had a positive effect on developing economies via the decreased cost of equity, increased returns, and increased private physical investment. This study analyzes the impact of stock market liberalization on volatility in six emerging stock markets. The purpose of this study is two-fold. First, GJR-GARCH methodology is utilized to examine the time-varying nature of conditional volatility following liberalization. Second, we analyze the effect of liberalization on stock market volatility. Theory on the effects of financial liberalization on volatility has been ambiguous, and empirical work has yielded conflicting results. Our findings imply that the impact of stock market liberalization is to raise the volatility in three stock markets and to decrease in two equity markets.

JEL Classification: O16

Keywords: liberalization, volatility, GJR-GARCH, stock market.

1. INTRODUCTION

Stock market liberalization¹ could have a favorable impact on the economy. For instance, several empirical studies have shown that liberalization process has had a positive effect on developing economies regarding the decreased cost of equity, increased returns, and increased private physical investment. However, stock market

¹ The definition of stock market liberalization in previous studies conforms to the broad idea of “removing restrictions on international capital flows” (Jayasuriya, 2002).

liberalization may make a country susceptible to political and economic turmoil abroad making the domestic markets to be more volatile. Some agree that the East Asian crisis from 1997 is an example of turmoil in national stock markets due partly to stock market liberalization policies.

The effect of stock market liberalization on volatility is an important issue. Volatility is harmful as it makes investors averse to holding stocks, it increases the risk premiums and the cost of capital, and decreases investment (Jayasuriya, 2002). But, if volatility rises following liberalization process, it may reduce social welfare.

We have an important question: why should stock market liberalization affect market volatility? One explanation is that liberalization process attracts a new group of investors, who are mostly institutional investors from developed markets, whose decisions are based more on rational investment analyses and whose strategies focus on fundamental valuation factors. That is way there is the possibility of reduced volatility after liberalization. On the other hand, an open market may expose the liberalizing country to uncertainties abroad which could be reflected in increased domestic stock price volatility. Thus, the possibility of increased volatility after liberalization process. The competing effects may offset each other and stock market liberalization may not have a significant impact on market volatility.

Macroeconomic and microeconomic (portfolio) theory predict reduced volatility following stock market liberalization in a world with perfect information. However, if information is incomplete or asymmetric, contagion models will describe higher volatility levels. Market microstructure theory also provides conflicting arguments regarding the effects of liberalization process on volatility. Overall, there exists no theoretical model that clearly describes the volatility following liberalization process [Dhir (2007)].

The paper is organized as follows. Section 2 describes the previous empirical literature of emerging market volatility. Section 3 explains our methodology for testing the effect of liberalization on market volatility. Section 4 explains the actual data and measurements used in this study. Section 5 reports our empirical findings and discusses the theoretical implications of our results. Finally, in Section 6, we conclude the study and provide recommendations for further research.

2. LITERATURE REVIEW

Several studies have examined the impact of stock market liberalization on the volatility of stock returns and shown empirically that market opening may decrease

or increase volatility. The previous studies regarding the effect of stock market liberalization on volatility are ambiguous. Some models imply that allowing capital flows or quantities to absorb shocks leaves prices to be more stable. On the other hand, models of herding and other market imperfections lead to fear of increased volatility once domestic stock exchanges are open to foreign participation.

Bekaert and Harvey (1997) point out that poorly developed stock market in a relatively closed economy is likely to be characterized by high stock market volatility to begin with and liberalizing such a market to foreign investors can only decrease volatility. This is because a fully integrated market is influenced by world factors rather than local factors, such as unstable macroeconomic policies and political risk that are prevalent in countries with poorly developed stock markets. They realize a time-series and cross-sectional study of 17 markets during 1976–1992 using monthly data and they find that liberalization process reduces volatility. In their paper from 2000, they made a pooled cross-section and time series study on 20 emerging markets during 1976–1995 and they found that there is a small but mostly insignificant increase in volatility following liberalizations process; it becomes negative when control variables are taken into account. Kwan and Reyes (1997) find that stock market liberalization in Taiwan significantly reduces volatility. This result coincides with that obtained by Cuñado et al. (2006) and Dhir (2007). De Santis and Imrohorglu (1997) identified that there is no obvious relationship between stock market liberalization and volatility. Their study was made on 5 emerging markets during 1988–1996. The same result obtains Nguyen and Bellalah (2008), but the analysis was made on 7 markets during 1985–2003. Kim and Singal (1993) realize a study on emerging markets and obtain that volatility is not significantly different after 12 months but is significantly lower after 24 months of opening relative to before. In 2000, Kim and Singal realize another study on 14 emerging markets for a period of 10 years and identify that volatility in the first 2 years after liberalization process is not significantly different from that before, and in the fourth and fifth years after liberalization is significantly less than before. Koot and Padmanabhan (1993) have made an individual study on Jamaica during 1969–1990 and found that volatility is significantly higher in the period after liberalization. Levine and Zervos (1998), Miles (2002) and Jayasuriya (2005) obtained the same result, an increase in volatility after stock market liberalization.

The liberalization process is extremely complex and there is no established economic model that guides us.

3. METHODOLOGY

In this section we present the methodology used for parameter estimation of the used econometric model for all the six analyzed countries. Before going into details concerning the estimation procedure we analyzed the data from statistical points of view. This prerequisite analysis is required by GJR-GARCH estimation since some of the time series have a strongly asymmetric characteristic.

If P_t is the index value at time t , then r_t is the continuously compounded daily return of the underlying stock index at time t and it is expressed as:

$$r_t = \ln(P_t) - \ln(P_{t-1}) \quad (1)$$

The volatility of the returns series is not constant over time. Therefore, it can be expressed with the help of an econometrical model. The property of volatility of being variable over time is known as heteroscedasticity, which is modeled by the GARCH models, which capture the phenomenon of volatility clustering. Empirically, most of financial and economic phenomena exhibit the clustering of volatilities. A standard GARCH(p, q) model is expressed by two equations, the mean and the variance equations as it follow:

$$y_t = \mu_t + \varepsilon_t, \varepsilon_t = \sigma_t z_t, \quad (2)$$

$$\sigma_t^2 = \omega + \sum_{k=1}^q \beta_k \sigma_{t-k}^2 + \sum_{j=1}^p \alpha_j \varepsilon_{t-j}^2, \quad (3)$$

where $\omega > 0$, $\alpha_j \geq 0$, $\beta_k \geq 0$ and z is a sequence of independent identically distributed (i.i.d.) random variables with mean 0 and variance 1. This process is weakly stationary if $\sum_{j=1}^p \alpha_j + \sum_{k=1}^q \beta_k < 1$. The estimation procedure, used also in this study, involves the last constraint and it uses the OLS method. The procedure, depending on the data set, will converge after a number of steps. In some cases it is not converging, meaning that the chosen GARCH model is not fitted the data.

One important aspect is related to order of GARCH models. In many applications it is sufficient to use only the first order GARCH model ($p = q = 1$) as stated in Bollerslev et al. (1994). Therefore, GARCH models describe the time evolution of the average size of squared errors, or in other words, the evolution of the magnitude of uncertainty as shown in Engle(1994).

There are several GARCH models used in time series applications, some of them dealing with the symmetry of the effects for both positive and negative shocks which affect almost every financial time series. An interesting model from this category is GJR-GARCH model as defined by Glosten et al. (1994). This is described by both GARCH equation, but the variance equation is modified as it follows:

$$\sigma_t^2 = \omega + \sum_{k=1}^q \beta_k \sigma_{t-k}^2 + \sum_{j=1}^p \alpha_j \varepsilon_{t-j}^2 + \sum_{j=1}^p \gamma_j D_{t-j} \varepsilon_{t-j}^2 \text{ where } \omega > 0, \alpha_j \geq 0, \beta_k \geq 0$$

and

$$D_{t-j} = \begin{cases} 1, & \varepsilon_{t-j} < 0 \\ 0, & \text{otherwise} \end{cases}$$

Stationary assumption for the model requires that

$$\sum_{j=1}^p \alpha_j + \sum_{k=1}^q \beta_k + \frac{1}{2} \sum_{j=1}^p \gamma_j < 1 \text{ and } \sum_{j=1}^p \alpha_j + \sum_{j=1}^p \gamma_j > 0.$$

Estimating GJR-GARCH parameters is a similar process with the procedure describe in case of the simple GARCH model, with the mention that the third group of parameter (i.e. the values for γ_j) from the variance equation could lead to a slower model convergence. As we will see in next empirical section, this approach is giving interesting results and the convergence is achieved pretty fast for most of the analyzed time series.

Before presenting the results of described parameter estimation procedure a preliminary analysis of the data was performed. We have studied three main characteristics of the analyzed series: the stationarity, the evolution of autocorrelation function of the squared series values and the fat tail distribution fitting concept for the return series. Based on the last characteristic a GJR-GARCH model is suited for one type of distribution law or another. Since the returns are not following a normal distribution, we applied some tests in order to verify which distribution is fitting better for the analyzed data. We choose to study the Student and the Skewed-Student distributions. If these prerequisites are fulfilled, then a distribution will be suited to characterize the data. Then it is performed the model parameter estimation for each time series.

This analysis is a starting point for a decision making concerning the order of used GARCH model. For some of the series it is possible to propose, at least, an order for the model which could be relevant.

Finally, after a GJR-GARCH model was founded for each time series the volatility could be characterized and the financial liberalization impact on each country stock market can be observed from the parameters values and structures.

4. DATA

Following the implementation of stock markets liberalization, we try to analyze different aspects regarding the behavior of capital market indices. We used daily closing prices of six indices from European emerging stock markets: Hungary (BUX), Poland (WIG), Czech Republic (PX), Slovenia (SIB), Slovakia (SAX) and Romania (BET).

The analyzed period begins on the first listing day of each index (January 2, 1991 (Hungary); April 16, 1991 (Poland); September 7, 1993 (Czech Republic); January 3, 1994 (Slovenia); July 3, 1995 (Slovakia); September 19, 1997 (Romania) and ends on June 30, 2011 (Slovenian stock exchange index is an exception – the data ends on October 14, 2010). All of values are collected from Datastream database. These indices are denominated in local currency.

We studied the impact of stock market liberalization on two subperiods: before, respectively after liberalization process. The official date of stock markets liberalization was considered the breaking point: January 2001 (Poland, Czech Republic and Slovakia), July 2001 (Hungary), January 2002 (Slovenia), respectively January 2006 (Romania).

The main descriptive statistics of daily logarithmic returns series corresponding to the six analyzed indices for the period from the first listing day until June 30, 2011 are presented in Table 1.

Table 1: Descriptive statistics

Before stock market liberalization						
Indices	BET	BUX	PX	SAX	SBI	WIG
Observations	2052	2632	1667	1327	1978	1969
Mean	0.09186	0.07243	0.02151	-0.04805	0.03078	0.14614
Median	0.07713	0.04782	-0.03205	0.00000	0.01951	0.09552
Maximum	14.57646	13.61574	15.39053	9.57377	7.46532	14.78305
Minimum	-11.90178	-18.03310	-7.56636	-11.48386	-9.85252	-11.34433
Std. Dev.	1.81309	1.76861	1.52716	1.46001	1.33833	2.65604
Skewness	0.10129	-0.91112	1.75809	-0.57071	-0.39365	-0.06234
Kurtosis	10.28401	17.70470	19.35607	9.72888	10.49455	6.33031
Jarque-Bera	4539.87	24077.18	19300.36	2573.58	4680.28	912.59
Probability	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
After stock market liberalization						
Indices	BET	BUX	PX	SAX	SBI	WIG
Observations	1380	2506	2641	2572	2214	2639
Mean	-0.01295	0.04852	0.03580	0.03472	0.01493	0.03795
Median	0.01966	0.05340	0.08447	0.00000	0.02162	0.05463
Maximum	10.56451	13.17775	12.36405	11.88026	11.01770	6.08375
Minimum	-13.11676	-12.64895	-16.18547	-14.81009	-11.34402	-8.28882
Std. Dev.	2.00687	1.66507	1.54558	1.24805	1.10019	1.32672
Skewness	-0.49404	-0.09577	-0.51607	-1.04786	-0.44474	-0.24114
Kurtosis	8.58363	9.57402	16.31911	21.25760	22.35766	5.70608
Jarque-Bera	1848.81	4516.49	19638.48	36193.61	34640.83	830.79
Probability	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Source: Author's calculations in Eviews

The values of return series are positive in all examined markets, both before liberalization process (except Slovakia) and after liberalization (except Romania). First argument that returns do not follow the normal distribution law is given by Kurtosis coefficient (it presents values above 3), which means that the distribution is leptokurtic (it is much sharper than the normal distribution). Second argument is given by the asymmetry coefficient (Skewness) which is different from zero for both subperiods. Before stock market liberalization only BET and PX distribution returns series have positive values for Skewness coefficient indicating an asymmetry to right; for the other return series, the asymmetry coefficient has negative

values, ie the left tail is longer. After liberalization process all the distributions of return series have negative values for Skeweness coefficient. Third argument that the distribution of daily returns does not follow normal distribution law is given by Jarque-Bera test value. The presence of elongated tails are primarily due to the fact that information arriving on the market requires some time to be incorporated in the price, this thing generating a cluster behavior in yields, which is translated into a leptocurtic distribution.

5. EMPIRICAL RESULTS

The discussions on this subject is based mainly on the study of conditional volatility series that are obtained by using a dynamic model of volatility, that is specific for partially integrated markets, as well as linear regression analysis that includes conditional volatility and key variables of liberalization. Overall, our empirical results are combined with previous studies as they confirm the variety and persistence of conditional volatility on emerging markets. Regarding the impact of liberalization, the results show that, in general, market opening is not accompanied by a significant increase in market volatility. In particular, volatility tends to decrease due to large capital inflows and domestic growth.

In previous works, return volatility is modeled by using the method of Schwert (1989) or the Generalized Autoregressive Conditional Heteroskedasticity (GARCH) the model of Bollerslev (1986, 1992).

Construction of ARMA-GARCH-type models requires that the return series to be stationary, that the stock prices are integrated of first order. In order to test stationarity / non stationarity of indices returns series we used Augmented Dickey-Fuller test (ADF) test and Kwiatkowski-Phillips-Schmidt-Shin (KPSS). The results from table 2 show that return series are stationary and integrated of first order.

Table 2: ADF și KPSS² results test

Indices	ADF	KPSS
BET	-49.09392***	0.274175
BUX	-65.87203***	0.133894
PX	-53.7763***	0.064817
SAX	-63.18492***	0.344752
SBI	-44.80944***	0.245058
WIG	-35.5807***	0.344057

Source: Author's calculations in Eviews

Note: *** represents the rejection of null hypothesis for 1% significance level.

Then the distribution fitting procedure was applied and each time series has a well fitted distribution from the mentioned ones. Then for each index and for both periods we estimated the GJR-GARCH parameters. In all the cases we didn't find a model with a higher order than two. Hence, we selected the best model from all the estimated. The selection criteria were based on the minim standard error and a relevant p-value. Thus, in the following table are presented the values for each estimated parameters in the case when the indexes are analyzed before liberalization.

In the first part of table 3 it can be seen that before the financial liberalization the persistence of volatility is near to one value for all stock indices. Next, in the second part of the table we present the results obtained in the period after the moment of financial liberalization for each stock index. The table structure is very similar and we estimated the values for the parameter up to maximum order of two. Following liberalization, we obtain that the persistence of volatility increase for three return series (0.37% for Romania, 0.42% for Slovakia and 1.82% for Poland), respectively it decrease for other two return series (-2.12% for Hungary and -1.53% for Czech Republic).

² For both tests we used thee model with constant. The critical values of ADF test are: -3.432 (for 1% significance level), -2.862 (for 5%) and -2.567 (for 10%); respectively the critical values for KPSS test are: 0.739 (for 1% sognificance level), 0.463 (for 5%) and 0.347 (for 10%).

Table 3: The estimated GJR-GARCH model parameters

Indices	Model	α_1	β_k	$\Sigma\alpha_j + \beta_k$
Before stock market liberalization				
BET	GJR-GARCH(1,1,0)	0.2043*	0.7855*	0.9898
BUX	GJR-GARCH(1,1,0)	0.2724*	0.7206*	0.993
PX	GJR-GARCH(1,1,0)	0.2166*	0.7793*	0.9959
SAX	GJR-GARCH(2,2,0)	0.0511	0.9418*	0.9929
SBI	GJR-GARCH(1,2,0)	0.1805*	0.8195*	1.0000
WIG	GJR-GARCH(1,2,0)	0.2203*	0.7561*	0.9764
After stock market liberalization				
BET	GJR-GARCH(1,1,0)	0.2448*	0.7487*	0.9935
BUX	GJR-GARCH(2,1,0)	0.1031*	0.8688*	0.9719
PX	GJR-GARCH(1,2,0)	0.1317*	0.8490*	0.9807
SAX	GJR-GARCH(2,2,0)	0.0253*	0.9718*	0.9971
SBI	GJR-GARCH(1,2,0)	0.1735*	0.8265*	1.0000
WIG	GJR-GARCH(2,2,0)	0.0571*	0.9371*	0.9942

Source: Author's calculations in SAS

Note: *** represents the rejection of null hypothesis for 1% significance level.

6. CONCLUSION

Despite the empirical power of GARCH models, there is no general consensus on the economic reasons why the uncertainty tends to cluster. Thus, these models achieve better performance in some periods and worse in other periods and the parameter estimation will converge accordingly. Our results of GJR-GARCH test can be aligned in the financial literature to that obtained by Bekaert and Harvey (2000). The results of our study may be influenced by the current financial crisis, because the second analyzed subperiod includes the crisis period. In our further research we shall try to neutralize the financial crisis and use other econometric models for studying the impact of stock market liberalization on volatility.

REFERENCES

- Bekaert, G., Harvey, C.R. (1997), Emerging equity market volatility, *Journal of Financial Economics*, vol. 43, pp. 29– 77
- Bekaert, G., Harvey, C.R. (2000), Foreign speculators and emerging equity markets, *Journal of Finance*, vol. 55, pp. 566– 613

- Bollerslev, T. (1986), Generalized Autoregressive Conditional Heteroscedasticity, *Journal of Econometrics*, vol. 31, pp. 307-327
- Bollerslev, T., Engle, R. F. & Nelson, D. (1994), ARCH Models, in Engle, R. F., and McFadden, D. L.(eds.), *Handbook of Econometrics*, vol. 4, Ch. 49, Amsterdam: North-Holland
- Cuñado, J. et al. (2006) Changes in the Dynamic Behavior of Emerging Market Volatility: Revisiting the Effects of Financial Liberalization, *Facultad de Ciencias Económicas y Empresariales Universidad de Navarra*, Working Paper no.01
- DeSantis, G. & Imrohorglu, S. (1997), Stock Returns and Volatility in Emerging Financial Markets, *Journal of International Money and Finance*, vol. 16, pp. 561-579
- Dhir, P (2007), The Impact of Stock Market Liberalization on Emerging Equity Market Volatility, Honors Projects, Paper 5, Macalester College
- Glosten, L. R., Jagannathan, L. & Runkle, D. E (1993) “On the Relationship between the expected value and the volatility of the Nominal Excess Returns on Stocks”, *Journal of Finance*, No. 48, pp. 1779-1801
- Jayasuriya, S. (2005), Stock market liberalization and volatility in the presence of favorable market characteristics and institutions, *Emerging Markets Review*, vol. 6, issue 2, pp. 170–191
- Kim, E. H. & Singal, V. (1993), Mergers and Market Power: Evidence from the Airline Industry, *The American Economic Review*, vol. 83, issue 3, pp. 549 – 569
- Kim, E. H. & Singal, V. (2000), Stock Market Openings: Experience of Emerging Economies, *Journal of Business*, vol. 73, pp. 25-66
- Koot, R.S. & Padmanabhan, P. (1993), Stock market liberalization and the distribution of returns on the Jamaican stock market, *Global Finance Journal*, vol. 4, issue 2, pp. 171-188
- Kwan, F.B. & Reyes, M.G. (1997), Price Effects of Stock Market Liberalization in Taiwan, *The Quarterly Review of Economics and Finance*, vol. 37, pp. 511-522
- Levine, R. & Zervos, S. (1998), Capital Control Liberalization and Stock Market Development, *World Development*, vol. 26, issue 7, p. 1169-1183
- Miles, W. (2002), Financial Deregulation and Volatility in Emerging Equity Markets, *Journal of Economic Development*, vol. 27, issue 2, pp. 113-126

Nguyen, D.K. & Bellalah, M., (2008) Stock market liberalization, structural breaks and dynamic, changes in emerging market volatility, *Review of Accounting and Finance*, vol. 7, issue 4, pp. 396-411

Schwert, G.M. (1990), Stock Volatility and the Crash of '87, *Review of Financial Studies*, vol. 3, issue 1, pp. 77-102

THE ROLE AND REGULATION OF CREDIT RATING AGENCIES IN THE MODERN FINANCIAL MARKETS

Branimir Marković, Ph.D.¹, Slobodan Stojanović²

¹Full Professor, Faculty of Economics in Osijek, Croatia, markovic@efos.hr

²University of Applied Sciences "Lavoslav Ružička" in Vukovar, Croatia, stojanovic@vevu.hr

ABSTRACT

Credit rating agencies (CRAs) are of great importance in today's modern financial markets. Primary goal of their business is to secure objective and reliable ratings of debt issuers as well as of different credit instruments that are used by financial services users. In order to deliver appropriate ratings CRAs perform analysis using specific methodology and issue credit opinions on creditworthiness of companies and governments. Beside traditional ratings of corporate and government (sovereign) debt instruments, CRAs issue credit opinions on a wide range of more complex financial debt instruments, including structured finance products. The ratings issued by CRAs have a major impact on actions of every player on the financial markets. Credit opinions are closely followed by investors, borrowers, issuers and governments and observed as the key information in determining investment decisions. The rating of any credit instrument represents an indicator of risk associated with ability of the issuer of the debt instrument to fulfill his contractual obligations, i. e. to repay his debts. Additionally, the cost of raising capital in the market is directly influenced by the rating given to an issuer or credit instrument. The unfavorable ratings are increasing the interest costs, thus making the financing more expensive.

CRAs play a vital role in financial markets by reducing the informative asymmetry about the creditworthiness between lenders and investors, on one side, and issuers on the other side, thus increasing market efficiency and lowering transaction costs for both sides. CRAs have started to develop their business model in the early 20th century in the USA. The modern credit rating industry is highly concentrated and oligopolistic with "big three" credit agencies dominated the market and having

a combined market share of 95%. A number of regional and local agencies provide specific rating services with very limited impact on the global financial markets. The role of CRAs has expanded with the financial globalization and different regulatory frameworks that assigned CRAs an authoritative position and considerable clout over market participants. Nevertheless, the failed ratings and contribution of CRAs to recent financial and global crisis require revisiting their business model, the role and market position as well as a new and flexible approach to their regulation. Therefore, the aim of the paper is to provide an overview of the development and characteristics of the credit rating industry as well as of recent trends and policy changes in the field of CRAs regulation.

JEL Classification: G24

Keywords: credit rating agencies, credit ratings, regulatory framework

1. INTRODUCTION

Credit rating agencies (CRAs) have been one of the key players in financial markets since John Moody issued first publication with bond ratings of railroads companies in 1909. Over time the credit rating industry has developed into a multimillion dollar business greatly influencing every aspect of financial markets. Well-known American journalist Thomas Friedman appropriately described the strengths of CRAs in a 1996 interview saying that there are only two superpowers in the world today, the USA, which can destroy you by dropping bombs, and Moody's, which can destroy you by downgrading your bonds, but sometimes it's not clear who is more powerful. Due to market complexity and diversity of borrowers, CRAs act as intermediaries that decrease informational asymmetry providing evaluation of creditworthiness of any entity that issues debt. They are producing credit ratings that issuers, investors and regulators use in their decision-making. Gradually, their credit risk assessments have come to be viewed as authoritative with ratings being an integral part of the financial regulatory framework in numerous ways. However, the role of CRAs in recent financial crisis requires revisiting their business model and flexible approach to their regulation and oversight.

2. THE HISTORICAL ROOTS AND DEVELOPMENT OF THE CREDIT RATING AGENCIES

CRAs development was closely linked with expanding business operations of many US companies in the 19th century. Companies had started to establish busi-

ness relations with new partners having insufficient information on their dealings. A transition from local into geographically larger markets required specialized institutions that would become source of reliable and objective information on creditworthiness of numerous suppliers and customers. These early credit reporting agencies of 19th century, such as Mercantile Agency established in 1841 by Lewis Tappan from New York, and Bradstreet Company established in 1849 by John Bradstreet from Cincinnati, provided and sold to its subscribers information on business standing and financial conditions of companies all over the US (Sylla; 2002, 23). In the same time, a number of railroad corporations needed additional capital to facilitate their expanding railroad networks and operations. Investors followed data on their property, assets, liabilities, earnings, and managerial structures in specialized publications, such as *The American Railroad Journal* of which Henry Varnum Poor became the editor in 1849. Poor started his own firm in 1868 to publish *Poor's Manual of the Railroads of United States* with annual data on financial and operating statistics of major American railroad companies (Wolfson & Crawford; 2010, 86). Increasing need for capital and willingness of investors to invest their money in railroad and corporate bonds influenced the transition from credit reporting to credit rating and consequently led to the establishment of CRAs (Olegario; 2001, 6). The agencies collected and provided standardized ratings of large borrowers who issued bonds and other marketed debt instruments. First such agency, Moody's Investor Service, was established by John Moody in 1909. It published *Moody's Analyses of Railroad Investments*, which analyzed each firm's relative investment quality, thus providing the first publicly available bond ratings of railroad companies and becoming the first to rate public market securities. Poor's Publishing Company entered bond rating business in 1916, Standard Statistics Company in 1922, and the Fitch Publishing Company in 1924. These CRAs evolved over time, merging with others and changing the ownership structure, but retaining their core business and dominance in the rating market to the present day.

3. AN OVERVIEW OF THE GLOBAL CREDIT RATING INDUSTRY

Until 1970s CRAs operations were mostly limited to the US market due to existence of large bond markets seen by companies as a preferable way to access additional capital. Furthermore, numerous willing investors needed a service of bond quality certification provided by CRAs (Sylla; 2002, 22). Globalization of capital markets from the 1970s onwards and gradual abolishment of capital flow restric-

tions with regulations that made ratings central in investment decision-making process ensured expansion of CRAs on a global scale. Especially rapid growth has been observable since 1990s with CRAs assigning ratings to numerous new debt instruments. Structured finance ratings have become mayor contributor to CRAs revenues and profits since 2000, noticeable in financial filings of raters that are public companies, such as Moody's. Although Switzerland's BIS estimated in 2000 that there are 130 to 150 CRAs worldwide (Estrella; 2000, 14), the market of credit rating is highly concentrated and oligopolistic. There are only three global players, while others are confined to local markets or specialized in ratings of specific securities and issuers. Structure of the credit rating industry in the US market is presented in table 1.

Table 1 Registered US credit rating agencies for 2010

Nationally Recognized Statistical Rating Organization (NRSRO)	Credit analysts and supervisors	Rating Class*	Total ratings outstanding
Standard & Poor's Rating Services (S&P)	1,242	1 to 5	1,190,500
Moody's Investors Service, Inc.	1,239	1 to 5	1,039,187
Fitch Inc.	1,380	1 to 5	505,024
DBRS Inc.	87	1 to 5	42,584
Kroll Bond Rating Agency	11	1 to 5	17,624
Morningstar Credit Ratings, LLC	22	4	8,322
A.M. Best Company, Inc	176	2, 3 and 4	7,159
Rating and Investment Information, Inc. (R&I)	87	1, 2, 3 and 5	4,418
Egan-Jones Rating Company	8	1 to 5	1,054
Japan Credit Rating Agency Ltd. (JCR)	88	1, 2, 3 and 5	736
Total:	4,340	---	2,816,599

* Classes of credit ratings: (1) financial institutions, (2) insurance companies, (3) corporate issuers, (4) asset-backed securities, (5) government securities

Source: adapted from 2011 Summary Report of SEC Staff's Examinations of each NRSRO

Only ten raters are registered as NRSROs with the US Security and Exchange Commission (SEC) in 2010. The three largest raters issued 97% of total ratings, and employ 88% of all credit analysts and supervisors. According to US regulation, CRAs can issue ratings on five different classes of assets. Some raters specialize in a particular rating class or a region, for example A.M. Best primarily assigns ratings on insurance companies, while JCR specializes in ratings on Japanese corporation. Moody's and S&P have been the key players in the credit rating market since their establishment, while the Fitch has started to build its market share since 1997 when

it was acquired by the French business services group Fimalac. Big three CRAs control 95% of the total credit rating market internationally, Moody's and S&P have market share of around 40% each, while Fitch controls around 15% (White; 2010, 216). The SEC data indicates that the Herfindahl-Hirschman Index (HHI), which measures industry competition, amounts to 3,495 for all NRSROs ratings outstanding in 2010, thus reflecting highly concentrated industry. The inverse of the HHI indicates that there are 2.86 equally sized firms in the market. The concentration is even higher in some rating classes, e.g. the three largest CRAs issued over 99% of all ratings for government securities in 2010. The total aggregate revenue was approximately \$3.8 billion in 2009 and \$3.7 billion in 2010. The earnings of three largest raters made up over 98% of the total earnings. In accordance to US regulations, the CRAs must submit their financial reports without obligation to make them publicly available if they are privately held companies. According to available reports of Moody's and some estimates due to insufficient data on privately held Fitch and S&P, the agencies realized operating margins in the range of 30% to 50%. The revenues and margins were down in 2009 due to the effects of global financial crisis, but continued to rise in 2010. Data also reveals the financial strength and size of Moody's and S&P that are approximately twice as big in terms of revenues as Fitch (see table 2).

Table 2 Revenues and margins of the three largest CRAs in period 2008 to 2010

The "big three" CRAs	Total Revenues (in mil. \$) / Operating margin (%)					
	2008		2009		2010	
Standard & Poor's Rating Services	1,583.0	47.3	1,537.3	46.3	1,695.4	45.0
Moody's Investors Service, Inc.	1,204.7	44.6	1,217.7	43.4	1,405.0	46.2
Fitch Ratings, Inc.	731.2	38.0	609.8	36.0	657.2	29.8

Source: author's calculation according to US SEC Filings and Annual Reports of CRAs

The credit rating market structure in the EU is very similar. There are 16 CRAs registered or certified by the European Securities and Markets Authority (ESMA) in accordance with the EU CRA Regulation. CRAs can issue ratings on classes such as corporate, financial institutions, insurance, sovereign and public finance, and structured finance. Big three CRAs are again dominant having 317,926 or 95.8% ratings outstanding (table 3). Eight CRAs have less than 200 ratings outstanding and two CRAs did not have any rating issued at the time. The fifth placed ICAP Group issued almost 3,000 ratings although it assigns only ratings on corporate issuances.

Table 3 CRAs registered or certified with ESMA on January 6th 2012

Credit Rating Agency	Country of residence	Rating class ^a	No. of ratings on June 30 th 2011
Standard and Poor's Credit Market Service	*	1 to 5	141,067
Moody's Investors Service	**	1 to 5	102,982
Fitch Ratings	***	1 to 5	73,877
DBRS Ratings Limited	UK	1 to 5	9,433
ICAP Group SA	Greece	1	2,964
Japan Credit Rating Agency Ltd	Japan	1 to 5	1,005
GBB-Rating Gesellschaft für Bonitätsbeurteilung GmbH	Germany	2	188
AM Best Europe-Rating Services Ltd.	UK	1 and 3	139
Creditreform Rating AG	Germany	1 and 5	65
Feri EuroRating Services AG	Germany	4	59
ASSEKURATA GmbH.	Germany	3	47
Euler Hermes Rating GmbH	Germany	1 and 2	24
Bulgarian Credit Rating Agency AD	Bulgaria	2, 3 and 4	23
Companhia Portuguesa de Rating, S.A.	Portugal	1	8
PSR Rating GmbH	Germany	1	0
CRIF S.p.A.	Italy	1	0
Total:	---	---	331,881

a Rating class: (1) corporate, (2) financial institutions, (3) insurance, (4) sovereign and public, (5) structured finance

* France, Italy, UK; ** Cyprus, France, Germany, Italy, Spain, UK; *** France, Germany, Italy, Poland, Spain, UK

Source: www.esma.europa.eu, Accessed: (13-02-2012)

4. THE ROLE AND FUNCTIONS OF CREDIT RATING AGENCIES

A credit rating can be defined as an opinion regarding the credit quality of individual obligations or of an issuer's general creditworthiness, issued using an established and defined ranking system of rating categories. CRAs assess credit risk of borrowers and provide evaluations of the likelihood that obligations will be repaid (de Haan & Amtenbrink; 2011, 5). In this way, CRAs are playing a vital role in enabling financial markets to operate efficiently by acting as intermediaries who are rectifying informational asymmetries that exists between borrowers and lenders in the market (Rousseau; 2005, 5). CRAs maintain that ratings are not recommendations to invest, nor are they a guarantee that default will not occur. In their view,

the rating is only an opinion on the credit risk in relation to specific issuance. It measures two components of credit risk, i.e. probability of default and expected loss in the event of default, which depends on CRAs rating methodology (Hunt; 2009, 36). Additionally, if ratings are designated as opinions, the CRAs are protected from civil liability in cases of poor quality ratings (Hill; 2004, 56). CRAs issue ratings on different asset classes, ranging from traditional fixed-income instruments to complex structured finance products. Credit ratings are expressed on a scale of letters and figures. For example, S&P and Fitch have AAA as a highest rating, followed by AA, A, BBB, BB, B, CCC, CC, C, and D as a default, while Moody's has Aaa as a highest rating, followed by Aa, A, Baa, Ba, B, Caa, Ca, and C. The generic rating classifications are usually supplemented with numerical or notational modifiers for a finer gradation. Basically, there are instruments with investment grade, with ratings of BBB/Baa or above, and instruments with speculative grade, with ratings of BB/Ba or below, also known as high-yield or junk grade. CRAs assign credit rating using specific methodology through the rating process encompassing a gathering of information to evaluate credit risk of a given issuance, issuing a rating and monitoring on an ongoing basis if rating should be changed in the near future. Therefore, CRAs are using rating outlooks and reviews (watch lists) procedures to monitor development of ratings over medium and short term. The agencies base their ratings on quantitative and qualitative assessments of the issuance using all publicly available data as well as information provided by the issuer. The rating process is generally structured to hear the best case the issuers have to present before the rating is assigned (Cantor & Packer; 1994, 5). Some CRAs issue unsolicited ratings based only on publicly available information and without involvement of the issuer, which makes them less reliable and less accurate than solicited ratings (Kormos; 2008, 23). Due to complexity of today's financial markets and perceived informational value of ratings, investors use ratings as an external tool to assess credit risk and determine their investment portfolio compositions. Ratings greatly influence the interest rates the borrowers have to pay, thus defining their cost of capital. An issuance downgrading may result in higher interest rates on outstanding and new loans. In general, access to capital markets became increasingly difficult, if not impossible, without the quality assurance from the credit rating agencies.

5. CREDIT RATINGS AND REGULATORY FRAMEWORK

The importance of CRAs as gatekeepers to capital markets is further enhanced by the position they acquired within the regulatory and supervisory framework.

Financial regulators transformed credit rating into the “seal of approval” and created regulatory benefits for CRAs, i.e. “regulatory licenses” that issuers must obtain to access financial markets (Portnoy; 2006, 82). For the first time the ratings were used for regulatory purposes in 1930s in the USA when banks were prohibited to invest in speculative investment securities as determined by recognized rating manuals, thus making the creditworthiness judgments of these third-party raters the force of law (White; 2010, 213). In 1970s, the US SEC designated some CRAs as NRSROs and made their ratings central for numerous regulatory purposes in the following years, with the net capital rule relating to the determination of the broker-dealers’ capital requirements being one of the first. Outsourcing of regulatory functions resulted in ratings being used for five key purposes, such as determining capital adequacy requirements for financial institutions, identifying or classifying assets for eligible investments or permissible concentrations, evaluating the credit risk of assets in securitization or covered bond offerings, determining disclosure requirements, and determining prospectus eligibility (Katz et al.; 2009, 2-3). Nevertheless, the role of CRAs before and during recent financial crises has led to regulatory changes. International Organization of Securities Commissions (IOSCO) revised its Code of Conduct Fundamentals for CRAs in 2008 by strengthening its voluntary principles relating to quality and integrity of rating process, avoidance of conflicts of interests, responsibilities to interested parties and public disclosures. In 2006, the CRA Reform Act (US Public Law 109-291) was passed providing the US SEC with explicit legal authority to regulate and supervise CRAs operations focusing on activity reporting, public disclosures, on-site inspections, and disciplinary actions. Amendments were adopted in 2009, requiring enhanced disclosure of information and further restricting activities that could generate conflicts of interests. In the EU, minimal oversight of CRAs based on voluntary adherence to the IOSCO Code was substituted with regulation on CRAs (No 1060/2009) defining formal registration and supervisory process by the ESMA and relevant home member state. Registered CRAs are subject to legally binding rules that prohibit advisory services, require enhanced disclosure and transparency, differentiation of the ratings of the complex structured products, and stronger internal governance mechanisms. In order to enhance transparency, the ESMA created a central repository where rating activities and other historical data on CRAs operations can be found. Generally, there is a tendency to strengthen and legally regulate the oversight of CRAs as well as to remove references to ratings and find alternative standards of creditworthiness for regulatory purposes.

6. COMPENSATION MODELS OF CRAS

Generally, CRAs use issuer-pay and subscriber-pay compensation models. Until 1970s, CRAs traditionally sold their ratings to subscribers. In exchange for a fee, subscribers were provided with research and analysis on credit risk. Development of low cost photocopying machines, which made it almost impossible to restrict further dissemination of ratings by subscribers (Hill; 2004, 50), as well as active seeking of ratings due to default of the US Penn Central Corp. in order to reassure investors in issuance quality, influenced CRAs to start charging issuers in the 1970s (Cantor & Packer; 1994, 2). Under the issuer-pay model, the raters receive compensation from obligors for rating the obligor or securities issued by the obligor. There are 7 CRAs in the USA that operate under the issuer-pay model, while 3 agencies use subscriber-pay model. According to the US SEC, 99% of the total outstanding ratings in 2010 were issued by CRAs that are charging issuers for their services. Critics point to the conflict of interest and argue that ratings paid by investors are biased, thus having tendency to be inaccurate and of insufficient quality. On the other hand, CRAs have always claimed that their concern for reputational capital as an important asset is sufficient to prevent any influence on ratings, thus maintaining the objectivity of the rating process. In order to remedy this conflict of interest regulators are trying to find alternative compensation models that would better align interests of CRAs and users of rating, as well as improve incentives of credit raters to produce reliable and high-quality ratings. According to the US Government Accountability Office Report on CRAs (2012, 8-14) there are 7 models proposed at various stages of development.

Table 4 Proposed alternative compensation models for NRSRAs in the USA

Model	Description
Random selection	Issuers pay for ratings but payment is made to a ratings board that randomly assigns NRSROs to rate issuances.
Investor-owned CRA	Institutional investors create and operate an NRSRO; issuers are required to get two ratings, 1 from the investor-owned CRA and 1 from a CRA of their choice.
Stand-alone	NRSROs choose which issues to rate; a transaction fee for original issuance and fees from secondary market transactions pay for the ratings.
Designation	NRSROs choose which issues to rate and securities holders designate which NRSRO(s) would receive the fees they pay for rating(s); a third party collects and distributes fees.
User-pays	Third-party auditors determine who is "using" ratings and require that all "users" pay the NRSROs.
Alternative user-pays	Creditors' resources are pooled and a government agency or independent board uses these resources to solicit ratings; NRSROs bid on the right to rate products.
Issuer and investor-pays	Issuers and investors pay a fee on the issuance of new debt and secondary market trades; NRSROs are placed in a continuous queue and assigned to rate issues as their number comes up; assignment eventually is based on an NRSRO's performance.

Source: www.gao.gov/products/GAO-12-240, Accessed: (10.02.2012.)

7. CONCLUSION

CRA's have a prominent role in financial markets serving as gatekeepers who should eliminate informational asymmetry between borrowers and investors by providing credit ratings on issuing entities and/or financial debt instruments. Due to market complexity many investors rely solely on ratings produced by external credit raters rather than conducting their own due diligence, thus increasing market efficiency and lowering their transaction costs. Credit opinions are closely followed by financial community and viewed as the key information in investment decision making. CRA's acquired their strength and market position in great part due to incorporations of ratings in numerous financial regulations. Rating embedment in the regulatory framework made them unavoidable for anyone who needs access to capital markets. Despite their importance, highly concentrated industry and evident conflict of interests, the CRA's remained unregulated private institutions until financial crises of 2007. The failed ratings and agencies' contribution in fueling the crisis resulted in introduction and overhaul of regulatory policies on

CRAs. Regarding the current sovereign debt crisis and the controversial role of the CRAs sovereign ratings, further regulatory changes leading to stronger regulation and supervision are to be expected.

REFERENCES

- Cantor, R. & Packer, F. (1994). The Credit rating Industry, Federal Reserve of New York Quarterly Review, 19(2), 1-26, ISSN 0147-6580
- de Haan, J. & Amtenbrink, F. (2011). CR agencies, Available at: www.dnb.nl/binaries/Working%20Paper%20278_tcm46-246556.pdf, Accessed: (31-01-2012)
- Estrella, A. et al. (2000). Credit Ratings and Complementary Sources of Credit Quality Information, Available at: <http://www.bis.org>, Accessed: (25-01-2012)
- Hill, C. (2004). Regulating the Rating Agencies, Washington University Law Quarterly, 82, 43-95, ISSN 0043-0862
- Hunt, J. (2009). Credit rating agencies and the “worldwide credit crisis”: the limits of reputation, the insufficiency of reform, and a proposal for improvement, Columbia Business Law Review, 2009(1), 1-62, ISSN 0898-0721
- Katz, J., Salinas, E. & Stephanou, C. (2009). CRAs: No Easy Regulatory Solutions, Available at: <http://ssrn.com/abstract=1485140>, Accessed: (01-02-2012)
- Kormos, B. (2008). Quis Custodiet Ipsos Custodes? Revisiting Rating Agency Regulation, Available at: <http://ssrn.com/abstract=1085132>, Accessed: (15-01-2012)
- Olegario, R. (2001). CRAs: Their Historical Roots, Current Status and Role in Market Development, Available at: http://siteresources.worldbank.org/INTWDRS/Resources/477365-1257315064764/2429_olegario.pdf, Accessed: (10-02-2012)
- Partnoy, F. (2006). How and Why Credit Rating Agencies are Not Like Other Gatekeepers, in *Financial Gatekeepers: Can They Protect Investors?*, Fuchita, Y. & Litan, R. (eds.), 59-102, ISBN 0-8157-2981-2, BIP and the Nomura ICMR
- Rousseau, S. (2005). Enhancing the Accountability of Credit Rating Agencies, Available at: <http://ssrn.com/abstract=797325>, Accessed: (08-01-2012)
- Sylla, R. (2002). An Historical Primer on the Business of Credit Ratings, in *Ratings, Rating Agencies, and the Global Financial System*, Levich, R. et al. (eds.), 19-40, ISBN 78-1-4020-7016-7, Kluwer Academic Publishers, Boston

White, L. (2010). The Credit Rating Agencies, *Journal of Economic Perspectives*, 24(2), 211–226, ISSN 0895-3309

Wolfson, J. & Crawford, C. (2010). Lessons from the Current Financial Crisis: Should Credit Rating Agencies Be Re-Structured?, *Journal of Business & Economics Research* 8(7), 85-91, ISSN 1542-4448

SOME FEATURES OF THE RELATIONSHIP TO PERSONAL FINANCES WITHIN POPULATION OF EASTERN CROATIA¹

Branko Matic¹, Ph.D., Hrvoje Serdarušić², B.Sc., Maja Vretenar³, B.Sc.

¹Full Professor, Faculty of Economics in Osijek, Croatia, matic@efos.hr

²Teaching Assistant, Faculty of Economics in Osijek, Croatia, hserdar@efos.hr

³Lecturer, University of Applied Sciences of Slavonski Brod, Croatia, mvretenar@vusb.hr

ABSTRACT

The authors discuss some specifics of the relationship to personal finances within population of Eastern Croatia. A survey was carried out in order to test personal attitudes of inhabitants regarding the accessibility and disposal of money required for satisfying their personal needs. By expressing these views the respondents have positioned the region's financial potential in comparison to Croatia as a whole.

JEL Classification: D14

Keywords: money, personal finance, Eastern Croatia

INTRODUCTION

The economic lagging of Eastern Croatia changed the attitude of population in this area towards to their personal finance. Awareness of respondents regarding the necessity of managing in their income and expenses. It also changes the ratio of respondents regarding ways to solve their financial situation primarily by increasing their financial discipline.

¹ The presented results are the outcome of the following projects: 1. Bank System in the Financing of Polycentric Development (No. 010-0102290-1284), 2. Financing of Local and Regional Self-Government (No. 010-0102290-2446) and 3. Restructuring of Companies in Business Distress (No. 010-0102290-2292), conducted with the support of the Ministry of Science, Education and Sports of the Republic of Croatia

DETERMINANTS OF GEOGRAPHIC, ECONOMIC AND DEVELOPMENT POTENTIAL OF EASTERN CROATIA

Eastern Croatia covers the geographical area of Osijek-Baranja County (OBC) and Vukovar-Srijem County (VSC). This area includes the surface area of 6.599 km² and is part of the historic region of Slavonia, Baranja and Western Sirmium.

Number of residents who live in Eastern Croatia according to last census is population of 535.274 residents. Of that number 330.506 residents live in Osijek-Baranja County, and 204.768 residents live in Vukovar-Srijem County in 13 cities and 55 municipalities.

The economic structure of these two counties was mostly the result of historical circumstances, and consequences of the transition that has left the Homeland War. Manufacturing, wholesale and retail trade and construction make up 80% of the total economic potential of this area.

Development of the economy can be traced to the basic financial indicators of legal entities and they are shown in Table 1.

Table 1: The most important financial indicators of corporate Osijek-Baranja County and Vukovar-Sirmium County in 000 HRK

		2007	2008	2009	2010	6/2011
OBC	Revenues	8.515.955	9.744.576	9.431.900	9.297.457	3903676
	Expenditures	8.166.768	9.482.169	9.937.662	9.252.029	3788660
	The consolidated financial results	349.187	262.407	-505.762	45.428	115.014
	Number of employees			18.015	17.387	16.601
VSC	Revenues	23.749.000	28.213.000	23.356.000	21.933.000	18.492.000*
	Expenditures	23.328.000	27.574.000	23.626.000	22.909.000	18.880.000*
	The consolidated financial results	269.000	457.000	-386.000	-1.073.000	-388.000*
	Number of unemployed	45.542	46.196	44.125	39.778	45.831*

Source: FINA, HGK

* Data for the first 9 months

The unemployment rate in the county has observed trend of growth in the observed age and is higher than the rate of unemployment at the state level (Table 2).

Table 2: Unemployment rate in the Osijek-Baranja County and Vukovar-Srijem County

	2007	2008	2009	2010
OBC	28,4	26,2	27	29,6
VSC	22,9	20,9	22,3	26,4

Source: HZZ (2010) Analytical Bulletin No. 4

THE ATTITUDES OF RESPONDENTS ABOUT THEIR PERSONAL FINANCIAL POSITION

Economic development of a country significantly influences the development of its regions and the financial potential of every individual within that region. Accordingly, the authors have conducted primary research through a questionnaire to collect relevant information about the financial potential of the population in the Eastern Croatia, knowing their status in the financial system and its relation to personal finance. The study was conducted in December 2011, on a representative sample of 1198 respondents. The target group comprised the employed and unemployed, pensioner population, students and other persons, while the questionnaire was structured in four parts. The first part of the questionnaire related to the basic information about the sample (sex, age, completed qualifications, work experience, etc.), the second and third part of the state of current monthly income, and current and anticipated financial obligations of the respondents, while the fourth part were issues related to the attitudes of respondents about their personal finances.

The age of respondents was divided into five class limits (Table 3).

Table 3: Age and sex structure of respondents

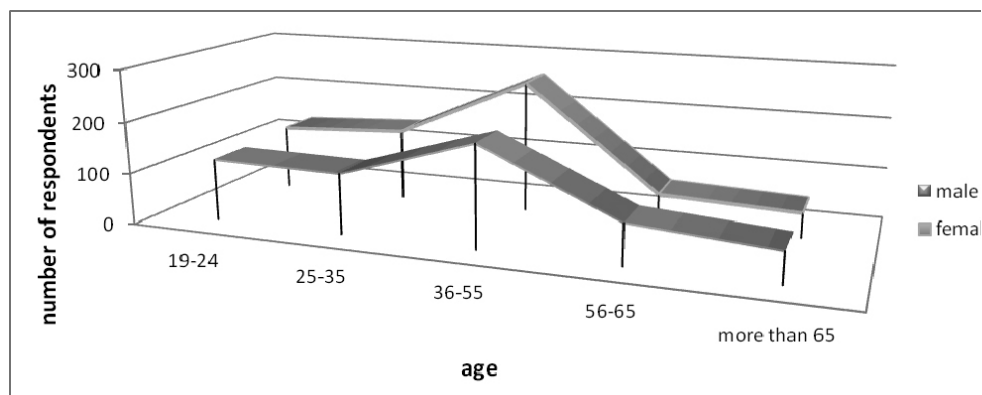
Age		19-24	25-35	36-55	56-65	More than 65	Total
Male	Number of respondents	120	116	195	78	59	568
	% sex	21,13%	20,42%	34,33%	13,73%	10,39%	100%
	% age	48,39%	45,14%	43,14%	57,78%	55,66%	47,41%
Female	Number of respondents	128	141	257	57	47	630
	% sex	20,32%	22,38%	40,79%	9,05%	7,46%	100%
	% age	51,61%	54,86%	56,86%	42,22%	44,34%	52,59%
Total	Number of respondents	248	257	452	135	106	1198
	% sex	20,70%	21,45%	37,73%	11,27%	8,85%	100%
	% age	100%	100%	100%	100%	100%	100%

Source: The authors

Analyzing the data it is possible to conclude that the largest group of respondents consists persons at the age of 36-55 years with a share of 37.73% of total respondents. The next largest group consists of respondents at the age of 25-35 years with a share of 21.45% of the total surveyed population, followed by respondents at the age of 19-24 years (20.70% share of the total surveyed), and respondents at the age of 56-65 years (the share of 11.27% of total respondents). In the total sample of respondents the least represented respondents with more than 65 years of age. This population makes 8.85% of total respondents (Table 3).

In the total sample surveyed is 568 men and 630 women (Chart 1).

Chart 1: Relationship to gender distribution of respondents

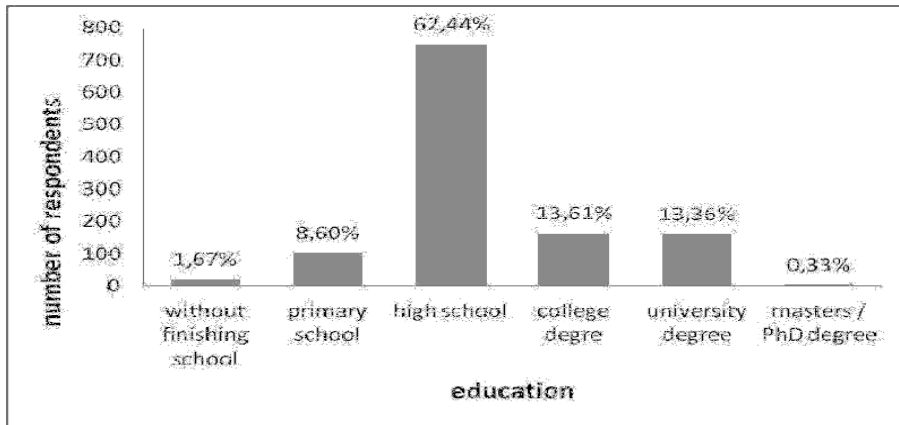


Source: The authors

The first three age surveyed more female persons for 1% to 6% depending on age limits, while the last two age surveyed more males for 2% to 5% over the entire sample. The largest percentage difference between respondents in relation to age, gender differs 1,3 times in favor of women for the age group 36-55 years and 1.4 times in favor of males in the age group of 56-65 years of age (Chart 1).

Education were divided into six categories and shown in Chart 2.

Chart 2.: Education of respondents



Source: The authors

In the total sample, most respondents have completed high school (748 of them or 62.44%). Followed by respondents who completed a college degree (163 respondents or 13.61% of total respondents) and respondents with university degrees (160 of them or 13.36%). Without finishing school is 20 respondents or 1.67%, and finished with primary school is 103 respondents or 8.60%. Completed master's / PhD degree have 4 respondents, and they make 0.33% of the respondents (Chart 2).

Like the qualification, status of employees is also divided into several categories (Table 4).

Table 4: Employment status of the population surveyed

Employment status		Employed	Unemployed	Pensioner	Student	Other	Total
Male	Number of respondents	323	85	104	53	3	568
	%	56,87%	14,96%	18,31%	9,33%	0,53%	100%
	Rank	1	3	2	4	5	-
Female	Number of respondents	366	107	76	74	7	630
	%	58,10%	16,98%	12,06%	11,75%	1,11%	100%
	Rank	1	2	3	4	5	-
Total	Number of respondents	689	192	180	127	10	1198
	%	57,51%	16,03%	15,03%	10,60%	0,83%	100%
	Rank	1	2	3	4	5	-

Source: The authors

In the total sample 689 persons are employed, or 57.51% of respondents, while the unemployed 16.03% or 192 respondents. In accordance with the assigned rank below pensioners (15.03% of the total population surveyed), students (10.60% of total respondents) and other people (housewives, dependents, etc.). Looking at employment status in relation to sex, more women are in the categories of employed, unemployed and students, while in the category of pensioners surveyed more men (Table 4).

Further analyzed by examining the sources of income of respondents and ranked as follows: the lowest rank = smallest representation of each source of income, the highest ranking = highest representation of each source of income (Table 5).

Table 5: Sources of income of respondents

Sources of income	Number of respondents	%	Rank
Salary	708	59,10%	1
Salary, pension	16	1,34%	6
Salary, scholarship	7	0,58%	8
Salary, social support	4	0,33%	9
Salary, pension, scholarship	2	0,17%	11
Salary, other sources	8	0,67%	7
Salary, scholarship, other sources	1	0,08%	12
Pension	191	15,94%	2
Pension, scholarship	2	0,17%	11
Pension, social support	4	0,33%	9
Pension, scholarship, social support	1	0,08%	12
Pension, other sources	3	0,25%	10
Scholarship	63	5,26%	4
Social support	37	3,09%	5
Other sources	143	11,94%	3
Did not answer	8	0,67%	-
TOTAL	1198	100%	-

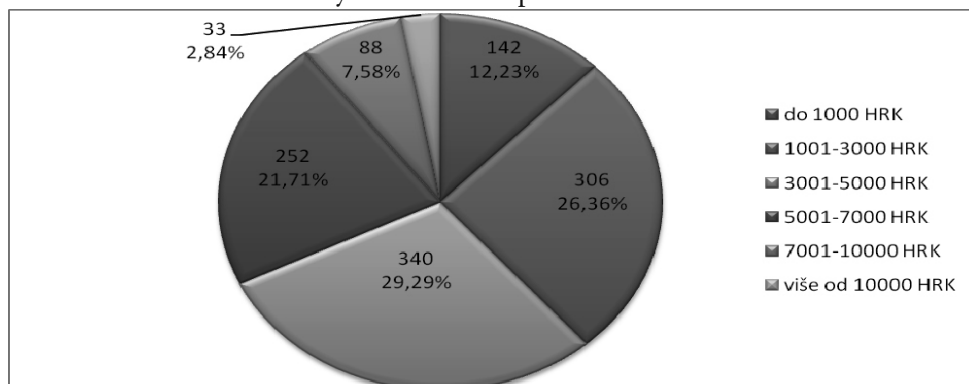
Source: The authors

The sources of income that realized for the life answered 1190 respondents, while 8 of them did not answer. In the total sample, the most significant share in total revenue sources occupies 59.10% of salary. After the salary, next most important source of income is pensions (ratio of 15.94%) and other income sources such as the allowance of various fees, royalties, etc. (the share of 11.94%). The scholarship is fourth, while social support ranked fifth rank income respondents. Most of

the patients receiving only one source of income, while several of them receiving multiple sources of income (two or three sources of income) (Table 5).

Chart 3 shows the monthly income of the population surveyed.

Chart 3: The actual monthly income of respondents



Source: The authors

About the amount of monthly income answered 1161 respondent, while 37 of them did not answer on the question. The highest monthly revenues generated are in the range of 3001.00 HRK to 5000.00 HRK and this population makes 29.29% of respondents. Monthly income ranging from 1001.00 HRK to 3000.00 HRK achieves 26.36% of respondents, while revenue in the amount of 5001.00 HRK to 7000.00 HRK achieves 21.71% of the total population surveyed. Incomes above 7001.00 HRK achieved only 7.58% of the respondents which indicates a weak financial strength of the Eastern Croatia population (Chart 3).

Table 6 presents data about the failure to meet obligations of respondents.

Table 6: Failure to meet the obligations of respondents

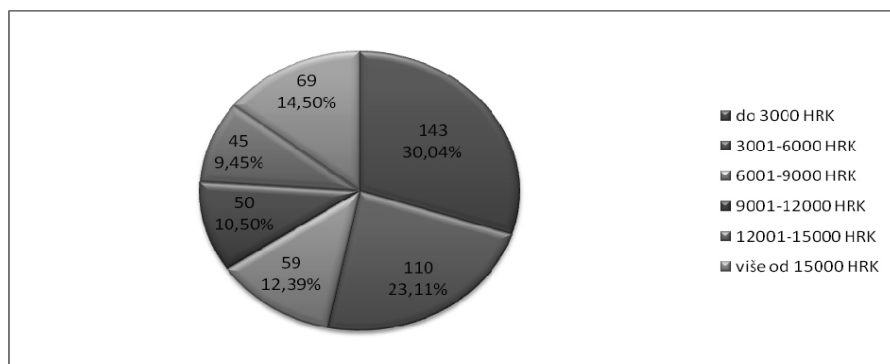
Age		19-24	25-35	36-55	56-65	More than 65	Total
Every day	Number of respondents	37	51	113	21	13	235
	%	15,74%	21,70%	48,09%	8,94%	5,53%	100%
Sometimes	Number of respondents	91	127	193	67	45	523
	%	17,40%	24,28%	36,90%	12,81%	8,60%	100%
Never	Number of respondents	114	75	140	45	45	419
	%	27,21%	17,90%	33,41%	10,74%	10,74%	100%

Source: The authors

The answer to the question regarding the possibility, or failure to meet daily obligations gave 1177 respondents, while 21 people did not answer. In the total sample, most respondents (44.44% of them) sometimes meet with the inability to settle their financial obligations. Every day this problem have 19.97% of respondents, while still much higher percentage of respondents (35.59%) never encountered this problem. According to this results it is possible to conclude that over two thirds of population in Eastern Croatia has or is experiencing financial difficulties related to the fulfillment of the obligations of everyday life.

Based on this next chart shows the amount of money required to refinance the debts of respondents (Chart 4).

Chart 4: The amount needed to refinance debts



Source: The authors

From a total of 476 people who responded that they need new debt in order to satisfy their old debts, the largest percentage of people (30.04% of them) needs to 3000,00 HRK to solve this problem. Up to 12000,00 HRK is necessary to 10.50% of respondents, and over 15000,00 HRK 14.50% of respondents (Chart 4).

Table 7: Care of respondents about personal finances

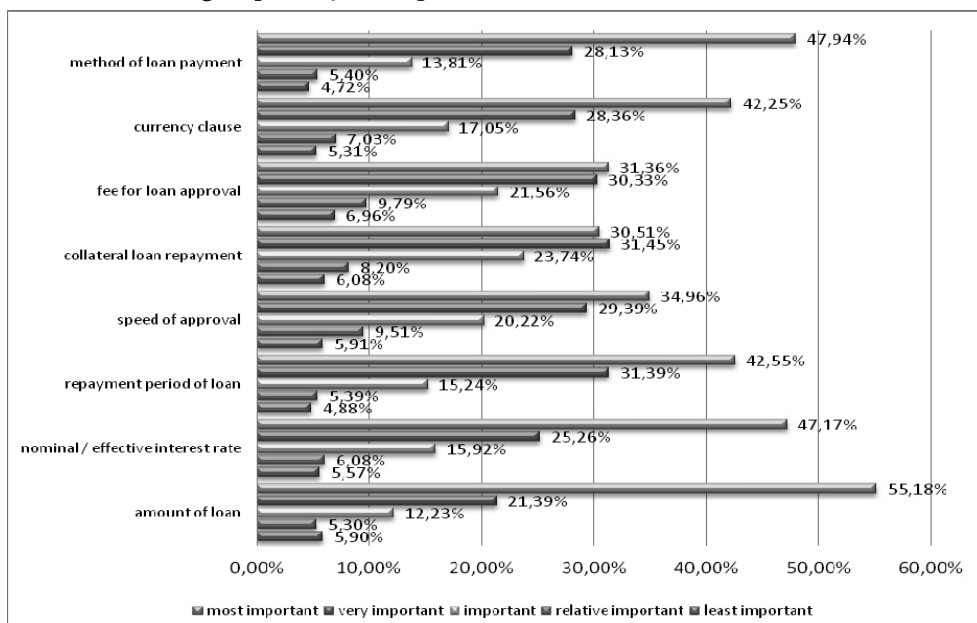
Care about personal finance		Care	Sometimes care	Do not care	Total
Male	Number of respondents	384	153	26	563
	%	68,21%	27,18%	4,62%	100%
Female	Number of respondents	478	123	25	626
	%	76,36%	19,65%	3,99%	100%
Total	Number of respondents	862	276	51	1189
	%	72,50%	23,21%	4,29%	100%

Source: The authors

Based on the data and analyzed it is possible to conclude that the respondents are very concerned about their personal finances. Of the total respondents (1189 of respondents, 9 of respondents did not answer the question) as many as 72.50% are very concerned about their personal finances, while 4.29% did not care about their financial position (Table 7).

The importance of certain elements during the debt of respondents are shown in Chart 5.

Chart 5: Ranking of priority of respondents in debt



Source: The authors

The analyzed attitudes of respondents to the importance of certain key elements in debt shows that the least important is method of payment, while relative important is speed and fees for loan approval. As an important element for the respondents is collateral loan repayment, and very important and the most important elements is amount of loans, the nominal and effective interest rate and repayment period of loans. Based on the data it is possible to conclude that exist considerable awareness of Eastern Croatia population about the importance of essential elements in any indebtedness (Chart 5).

CONCLUSION

Conducted research about the attitude of population in Eastern Croatia towards to their personal finance it is possible to conclude that the vast majority of the population meets the daily problems of subsistence needs. The causes of this are the economic stagnation of the area, which is manifested through reduced economic activity, high unemployment and low income of population. This situation results in an increased awareness of the importance of concerns about the conduct and management of personal finances as well as its relevance for the future of the respondents.

REFERENCE

Hrvatski zavod za zapošljavanje (2010) Analitički bilten br. 4

Matić, B., Serdarušić, H. (2008) Načini i modeli financiranja regionalnog razvoja – financiranje putem zaklada i fundacija, Ekonomski fakultet u Osijeku, Osijek

Hrvatska gospodarska komora www.hgk.hr

RISKS CONCERNED WITH CREDIT DEFAULT SWAPS APPLICATION

Izabela Pruchnicka-Grabias, PhD
Warsaw School of Economics, Poland

ABSTRACT

The author analyses different types of risks concerned with credit default swaps, concentrating especially on those which have not been often stressed in the standard literature of finance. They were noticed after the world financial crisis of 2008 – 2009. The paper shows that although credit default swaps have been thought to be instruments of risk reduction for a long time, in fact they create new types of risks which must be managed properly on a large international scale.

The empirical part of the paper aims at showing that swap curves are highly correlated with stock indexes of the biggest companies, which after taking into consideration that the situation on stock exchanges influences the real economy, proves that speculation on Credit Default Swaps markets may also influence the real economy. If one takes all risks of using them into consideration, the question arises what is the perfect model of functioning of credit default swaps, the model which will both not limit this innovation too much and will reduce negative effects of these instruments on the real economy.

JEL Classification:

Key words: Credit default swaps, risk, swap curves

A CREDIT DEFAULT SWAP AS THE MOST TYPICAL TYPE OF CREDIT DERIVATIVES

Credit derivatives are a specific class of financial instruments of which the value depends on an underlying market value which in turn results from the credit risk of private or government entities.¹ Derivatives can be treated as new products and

¹ S. Das, *Credit Derivatives and Credit Linked Notes*, John Wiley & Sons, Singapore 2000, p. 7.

their virtue is that they give the possibility of the credit risk transfer (credit derivatives) or other types of risks (for example currency risk), which helps a company to concentrate on its main activity no matter what the market situation is. All in all, credit derivatives can either replicate credit risk, transfer it or hedge.

Amongst the main applications of credit derivatives there are:²

- **The credit risk reduction** – the consequence of using a credit derivative by a subject that wants to hedge is the reduction or elimination of credit risk. However, credit risk is eliminated only if one uses instruments like bonds with credit options that is such instruments that assume that amounts that are to hedge a subject against the credit risk are paid in advance. The rest of credit derivatives create the credit risk of a counterparty. It means that a subject hedges itself against the credit risk of a reference entity and at the same time takes on the risk of a counterparty.
- **Taking the long position in the credit risk** – this way of generating profits has some virtues compared with the classical purchase of assets. First, it doesn't require incurring costs of possessing a balance sheet asset. Second, taking positions in credit risk instead of buying assets lets take on the credit risk only, instead of taking on additionally other kinds of risks like interest rate or currency risk.
- **Credit portfolio management** – many theoretical papers stress that the most important application of credit risk is this field. Banks still have many geographically and industrially concentrated portfolios of credit liabilities.
- **Alternative for liquidity reserves** – J.T. Moser³ presents credit derivatives as an alternative for holding liquid stock or risk-free securities in order to manage liquidity shortages resulting from potential losses on credit risk.
- **The management of costs of financing the activity** – often the aim of using credit derivatives is to arbitrage costs of capital⁴.

The main kinds of credit derivatives are:

² See further: K. Jackowicz, *Pochodne instrumenty kredytowe (II). Zastosowania pochodnych instrumentów kredytowych i związane z tym problemy*, *Bank i Kredyt*, April 2001, p. 33 – 45.

³ J.T. Moser, *Credit Derivatives: Just-in-time Provisioning for Loan Losses*, *Economic Perspectives*, Federal Reserve Bank of Chicago, Fourth Quarter 1998, p. 2 – 11.

⁴ See also: J.M. Tavakoli, *Credit Derivatives: a Guide to Instruments and Applications*, John Wiley & Sons, Inc., 1998, p. 121 – 124.

- **Credit swaps** in which one party pays a premium at regular time intervals, whereas another party makes payment that depend on the occurrence of a credit event.
- **Total return swaps** in which one party makes cyclical payments based on an underlying asset market, whereas another party makes payments based on costs of financing.
- **Credit spread options** that are options whose underlying asset is the credit spread that is the difference between the interest rate of a lender (on the credit or bond market) and the interest rate of treasury bills with the same time to maturity. One can name two types of credit spread options:
 - **Call option on credit spread** that entitles its holder to buy the credit spread at the agreed price, which means that it lets generate profits when the credit spread is reduced (credit risk is lower)
 - **Put option on credit spread** that entitles its holder to sell the credit spread at the agreed price, which means that it lets generate profits when the credit spread widens (credit risk is higher).

The most often applied and as a result, the most liquid of the instruments named above are credit swaps. S. Das emphasizes the nine following key terms of the credit default swap:⁵

- **Reference entity:** This is in effect the reference obligor the occurrence of a credit event in respect of which triggers the payout under the swap. The concept of reference entity is unique to credit default swaps. In the case of both total return swaps and credit spread transactions, a reference asset is needed. In contrast, in the case of a credit default swap, a reference entity concept is required. A reference asset is only required where there is cash settlement (based on the post-default price of the bond and loan) or physical settlement. It may also be needed to determine materiality.
- **Reference asset:** The relevant traded bond or loan asset issued or guaranteed by the reference credit must be nominated. The initial price of the asset must be agreed between the parties as at the commencement of the transaction. This is particularly important where the default payment is based on the post-default price of the

⁵ S. Das, *Credit derivatives and credit linked notes*, John Wiley & Sons, Singapore 2000, p. 32 – 34.

security. The initial spread to US\$ LIBOR on an asset swap basis is also agreed to enable determination of materiality where this is a condition of the transaction.

- Transaction dates: The key transaction dates include:
 - The trade date on which the effective terms of the transaction are agreed between the buyer and seller of protection
 - The effective date (usually 3 – 5 business days after the trade date) when the transaction becomes effective
 - Termination date when transaction ends.

The effective date is important in that credit protection is only valid commencing from the date and any credit event that occurs prior to that date is not covered. Termination is usually after the agreed period of credit protection or where there is a credit event prior to the scheduled maturity, the date of the credit event.

- Credit event: The occurrence of the credit event triggers the obligation of the seller of default protection to make the default payment to the purchaser of default protection.
- Materiality: The default event is usually linked to some concept of materiality to avoid an unintended triggering of a credit event.
- Publicly available information: The existence of a credit event is usually determined on the basis of publicly available information. This is required because it is assumed that either seller or buyer of protection has a contractual relationship with the reference entity, and, therefore, will only become aware of the occurrence of a credit event from public sources of information.
- Default payment: Following a credit event, the buyer of protection is compensated by the receipt of a payment from the seller of protection designed to match the erosion of value in the underlying bond or loan arising from the credit event.
- Payment timing: The settlement timing varies between the different default payment structures.
- Payment for credit/default protection: The buyer of default protection pays a premium. This premium is usually structured as an annual fee paid quarterly or semi-annually.

Besides, from the global point of view, swap curves let forecast the condition of both the economy and companies. It means that they can be treated as a barometer

of the economy. If the risk associated with a subject is higher, risk premiums are higher, so swap curves go up. It is interpreted as higher probability of defaulting in the future. To be exact, swap curves reflect the term structure of spreads on credit swaps markets. Their shape is determined by the supply and demand of hedges against credit risk and shows the credit quality of reference subjects. The majority of swap curves is rising, because investors expect a higher compensation for giving a hedging for longer periods of time, because usually the probability of default is rising together with time. However, other shapes are also possible.

The payment on Credit Default Swaps depends on the occurrence of the credit event. Unfortunately, there is no standard definition of the credit event, so it is important to define it precisely in the swap transaction documentation. Generally these can be:⁶

- Bankruptcy
- Insolvency leading to administration
- A technical default, as when an issuer does not meet a coupon payment on a bond as it falls due
- A downgrade in credit rating
- A change in the credit spread relative to an external benchmark, and above an agreed level.

KINDS OF RISK MET IN THE CDS MARKET

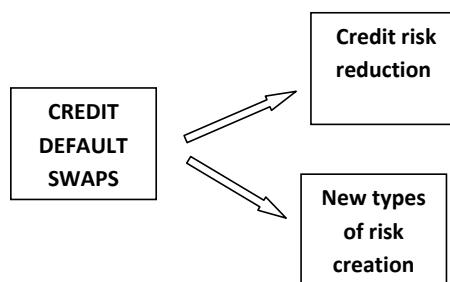
Amongst the most common types of risk concerned with credit derivatives application one can name:

- Counterparty risk
- Model risk
- The risk of manipulation to make the debtor go bankrupt
- The risk of not accepting the event as the credit event by ISDA
- The risk of using them as speculation tools
- Liquidity risk

⁶ M. Choudhry, *The Bond and Money Markets*, Butterworth-Heinemann, Oxford 2003, s. 1052.

All discussed ways of using credit derivatives let treat them as an efficient hedging tool, however they can also be used for arbitrage and speculation. It is mainly the speculation that is supposed to be harmful to the economy.

Figure 1. Credit default swaps and risk creation.



Source: Author.

It is not only after the global financial crisis of 2007 – 2009 when credit derivatives started to be treated as a threat to financial stability. In 2004 rating agencies warned against credit derivatives. For example, the report prepared by Fitch Ratings Agency emphasized that investors who to a large extent rely on data concerning credit spreads as the main indicator of the default risk, play a dangerous game. In the meantime Standard&Poor's stressed that credit derivatives did not help banks avoid large losses in the current credit cycle.⁷ These also market regulators to raise concerns about the credit risk transfer which may result in the risk concentration at the final users of credit derivatives.⁸

Besides, The European Central Bank pays attention to the information asymmetry concerning credit swaps prices and it stresses that the information on prices is limited, because prices for dealers are set bilaterally and they are not possible to be achieved for non-dealers. Some data are released by commercial providers continuously or at the end of the day, however they do not include information on parties of transactions or turnovers.⁹

N. Instefjord shows that financial innovation in credit derivatives can increase bank risk, especially in these banks, which operate in extremely flexible segments of

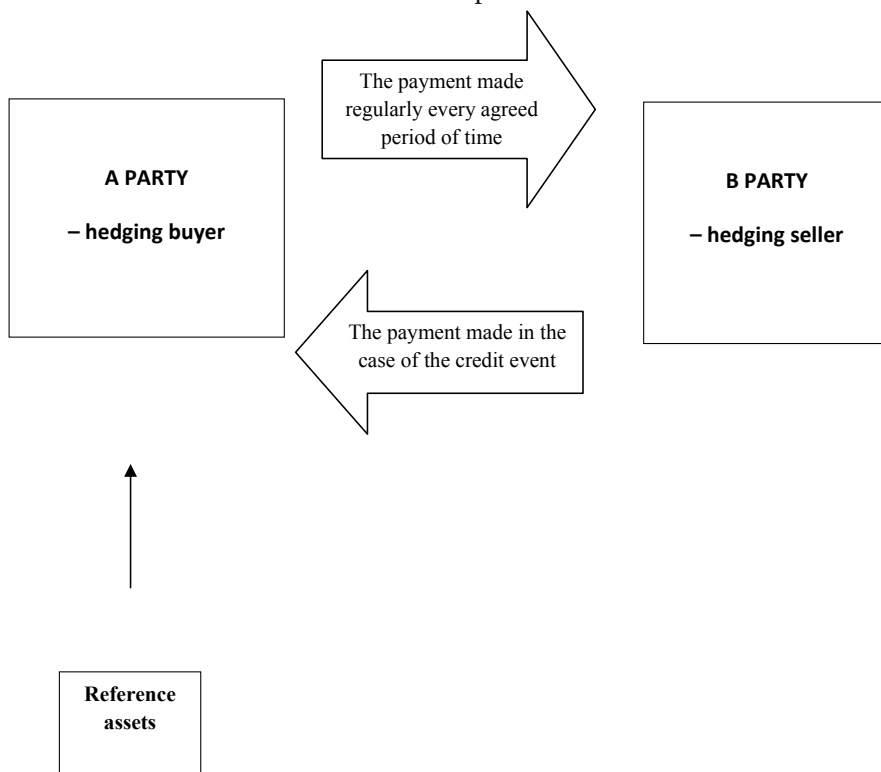
⁷ N. Patel, F. Haddow-Allen, Rating agencies debunk credit derivatives misconceptions, *Risk*, January 2004, p. 9.

⁸ M. Crabbe, Central banks seek more data on credit derivatives, *Risk*, June 2004, p. 16.

⁹ Credit Default Swaps and Counterparty Risk, European Central Bank, August 2009, p. 62.

the credit market. Thus, credit derivatives trading is a potential threat for a bank stability, even if banks apply these instruments only for hedging purposes or securitization of credit exposures.¹⁰

Figure 1. The idea of the credit default swap



Source: prepared by the author.

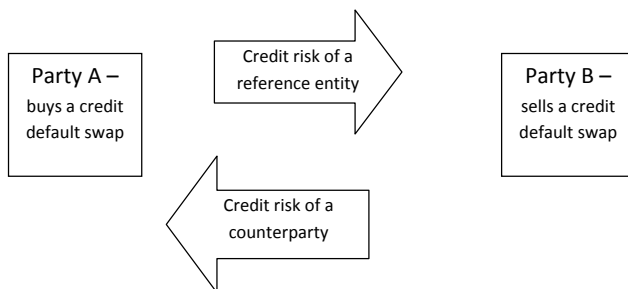
COUNTERPARTY RISK

Generally credit default swaps are treated as instruments which can be used in risk mitigation. Although it is true, in fact they generate at the same time a new type of risk – the credit counterparty risk. It means that even if a credit default swap should be exercised, the party which is to receive the payment as a compensation for a reference entity go bankrupt, it may not receive it because another party of

¹⁰ N. Instefjord, Risk and hedging: do credit derivatives increase bank risk?, Journal of Banking and Finance, vol. 29, iss.2, February 2005, p. 333 – 245.

the contract has for example liquidity problems. This type of risk can be reduced by settling a clearing house and such works are being conducted at the moment.

Figure 2. The risk transfer in a Credit Default Swap transaction.

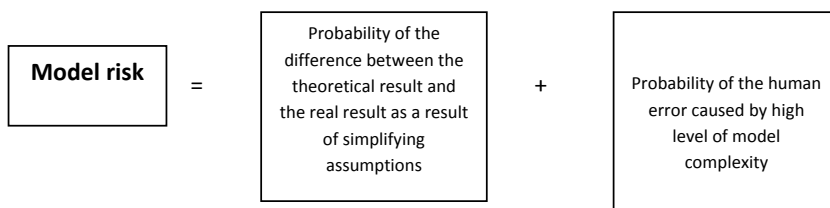


Source: prepared by the author.

MODEL RISK

Model risk is defined as the special risk that arises when an institution uses mathematical models to value and hedge securities.¹¹ The author defines it as the probability of generating a loss that derives from the extent of model simplification in comparison to the real economy and from insufficient knowledge of the person who applies it (see figure 3). It is relatively lower for such instruments as stocks or bonds than for derivatives. The more complex the derivative is the higher the model risk is. One of the reasons is that the more advanced the instrument is, the more difficult it is to suit the model to it, as well as to understand this product and rules of its valuation together with its oversimplifications. This is why nowadays, it is more difficult to manage the model risk than it was 20 years ago, when non-standard products were not as numerous as today.

Figure 3. Components of the model risk



Source: prepared by the author.

¹¹ M. Crouchy, D. Galai, R. Mark, Risk Management, McGraw-Hill, New York 2001, p. 579.

The modern portfolio theory¹² is based on the assumption that investors are in the setup of market equilibrium¹³, markets are perfect and efficient.¹⁴ Thus, treating investors as price takers who can't influence them has some far reaching consequences like not taking into consideration the speculation and the desire to influence the prices of cash markets in order to generate profits from derivatives markets. It could have been acceptable in the fifties or sixties when derivative markets were not so well-developed, however after Black and Scholes having done their model¹⁵, the financial world has changed. Paradoxically, it let the derivatives market grow and at the same time, it created the need for risk management on the market where more and more complex structures have appeared gradually. Derivatives changed the nature of the cash market. Although it is generally approved that these are derivatives whose prices depend on underlying market fluctuations, in fact there is also the impact of derivatives markets on cash markets that is often neglected. I mean here affecting prices of the cash market in order to generate profits from derivatives markets.

THE RISK OF MANIPULATION TO MAKE THE DEBTOR GO BANKRUPT

If the credit default swap is used as a hedging tool against the risk of not receiving payments from a debtor (no matter what the definition of the credit event is), if the debtor is not able to make payments on time and delays them, it may be tempting for the party hedged with the credit default swap to make the counterparty go bankrupt (for instance by disagreement for making payments by installments) in order to receive the credit default swap payment instead of waiting for delayed payments.

THE RISK OF NOT ACCEPTING THE EVENT AS THE CREDIT EVENT BY ISDA

On the 1st of March 2012 there was a compulsory conversion of Greek bonds into securities of lower values by their owners. ISDA¹⁶ decided that this was not the

¹² H. Markowitz, Portfolio selection, *The Journal of Finance*, Vol. 7, No. 1, March 1952, p. 77 – 91.

¹³ W.F. Sharpe, Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk, *Journal of Finance*, Vol. 19, No. 3, September 1964, p. 425 – 442.

¹⁴ E.F. Fama, Risk, return and equilibrium: some clarifying comments, *Journal of Finance*, Vol. 23, No. 1, March 1968, p. 29 – 40.

¹⁵ F. Black, M. Scholes, The pricing of options and corporate liabilities, *Journal of Political Economy* nr 81, May/June, 1973, s. 637-659.

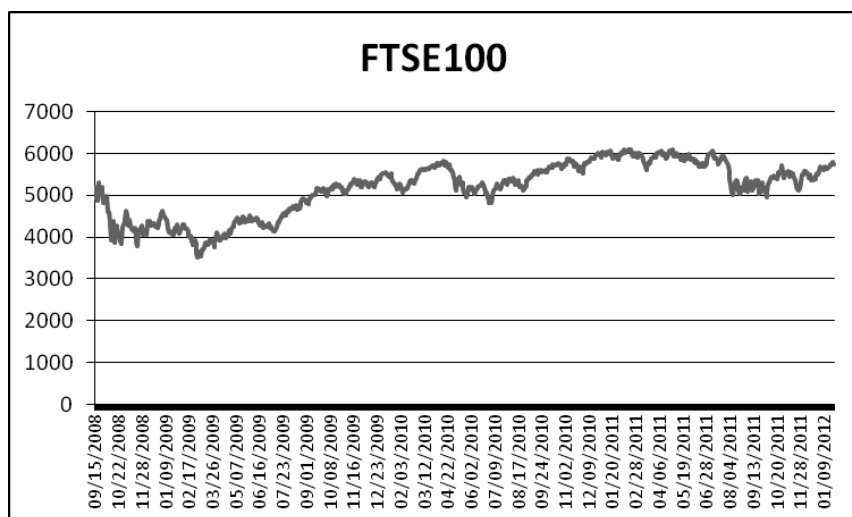
¹⁶ International Swaps and Derivatives Association

credit event for Credit Default Swaps, so the payments for hedge funds that had CDSs were not made. Later, it turned out that ISDA accepted the credit event but to the certain extent. However, it shows that hedging with derivatives can reduce some kinds of risk, however at the same time it generates new types of it. In this special case, if some fund bought Greek bonds and hedged with Credit Default Swaps, generated losses, although the hedging was made. It shows disadvantages of credit derivatives as hedging tools.

THE RISK OF USING CDSS AS SPECULATION TOOLS

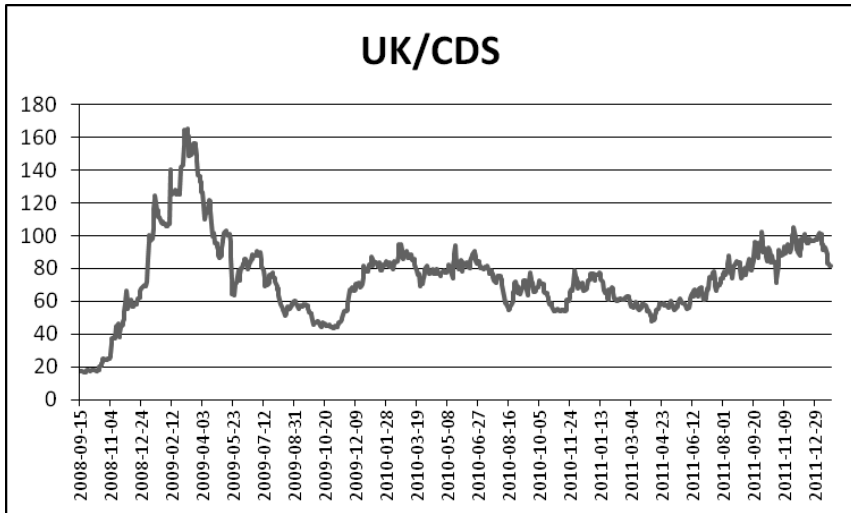
Charts 1 – 10 show that there exist high correlation coefficients between the stock quotations for the most representative companies in the examined countries and credit default swap curves. It means that market participants treat CDSs prices as an assessment tool of financial situation of CDS reference entities.

Chart 1. Fluctuations of the FTSE 100 index between 15.09.2008 and 30.01.2012.



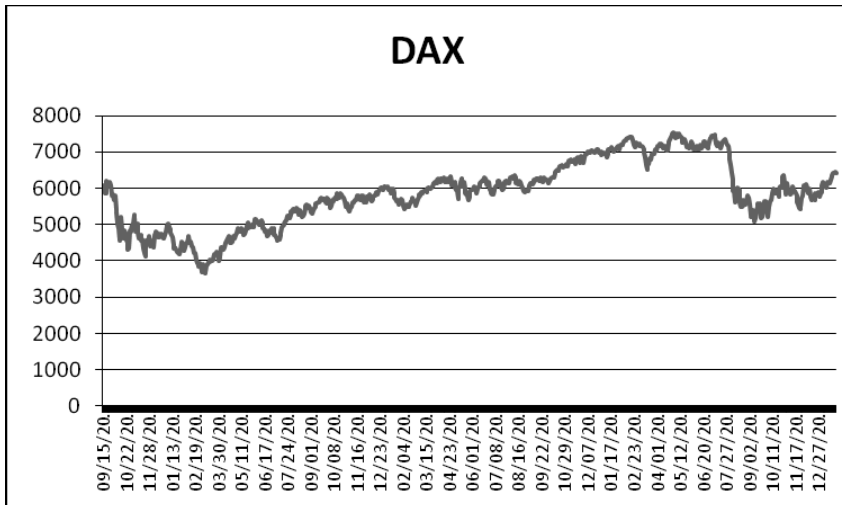
Source: Data from www.stooq.com.

Chart 2. United Kingdom CDS prices between 15.09.2008 and 30.01.2012.



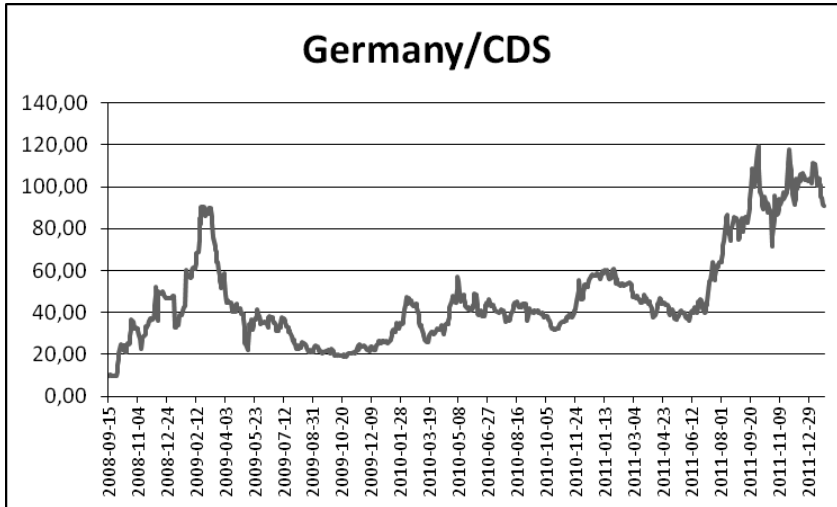
Source: Data from www.stooq.com.

Chart 3. Fluctuations of the DAX index between 15.09.2008 and 30.01.2012.



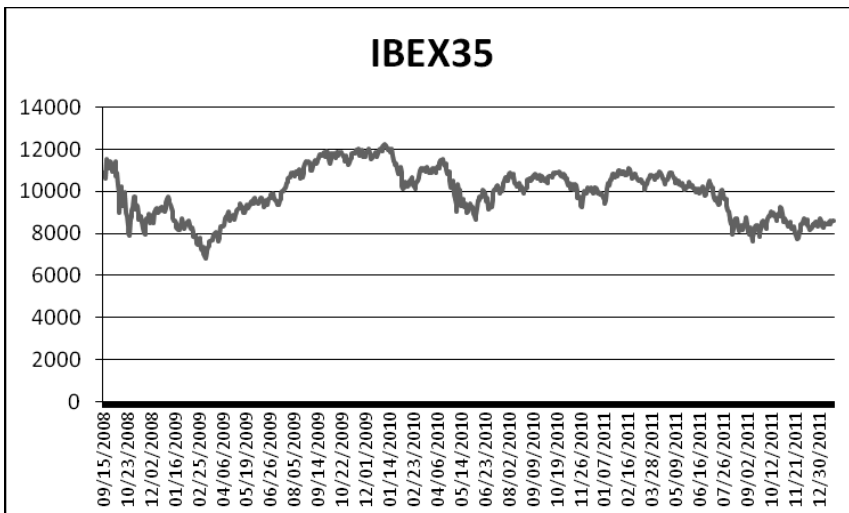
Source: Data from www.stooq.com.

Chart 4. Germany CDS prices between 15.09.2008 and 30.01.2012.



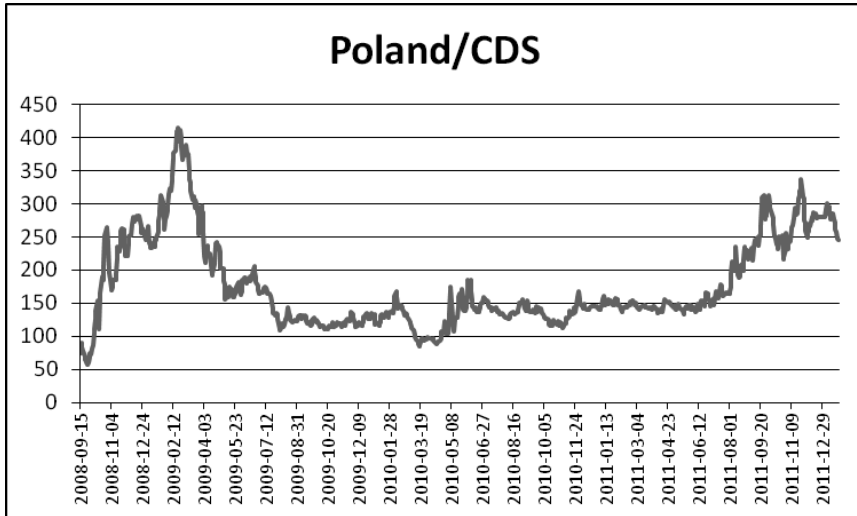
Source: Data from www.stooq.com.

Chart 5. Fluctuations of the WIG20 index between 15.09.2008 and 30.01.2012.



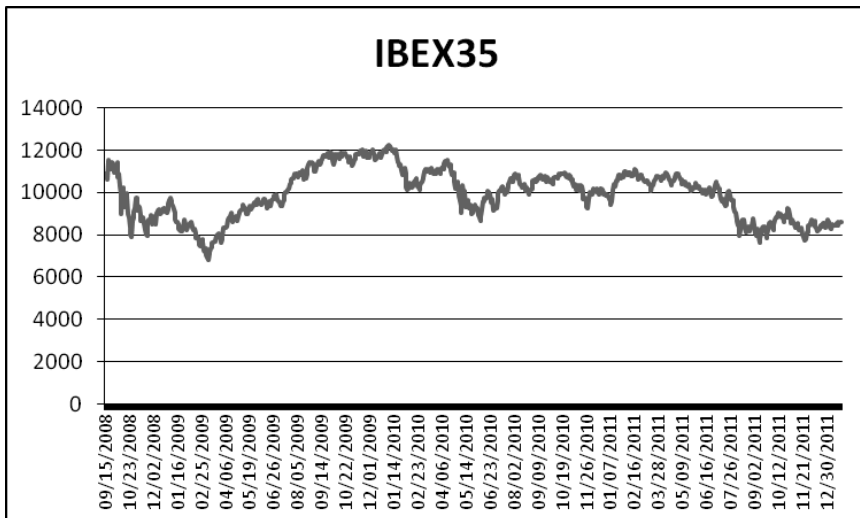
Source: Data from www.stooq.com.

Chart 6. Poland CDS prices between 15.09.2008 and 30.01.2012.



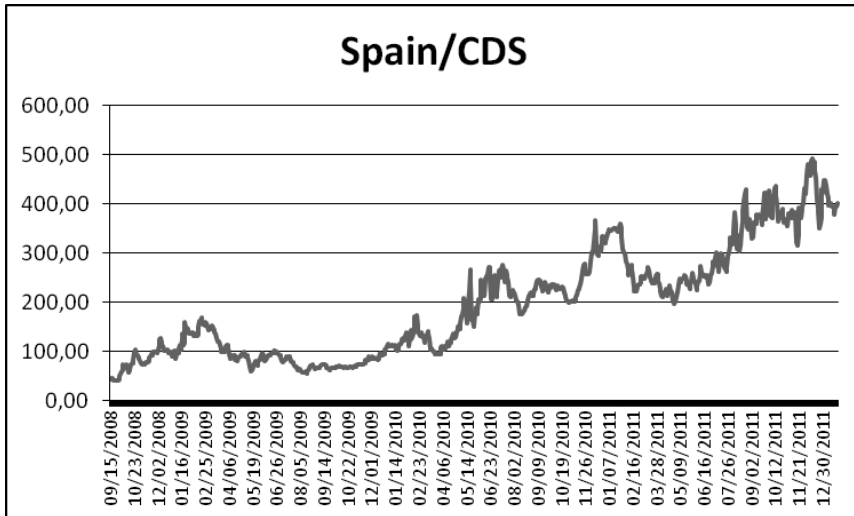
Source: Data from www.stooq.com.

Chart 7. Fluctuations of the IBEX35 index between 15.09.2008 and 30.01.2012.



Source: Data from www.stooq.com.

Chart 8. Spain CDS prices between 15.09.2008 and 30.01.2012.



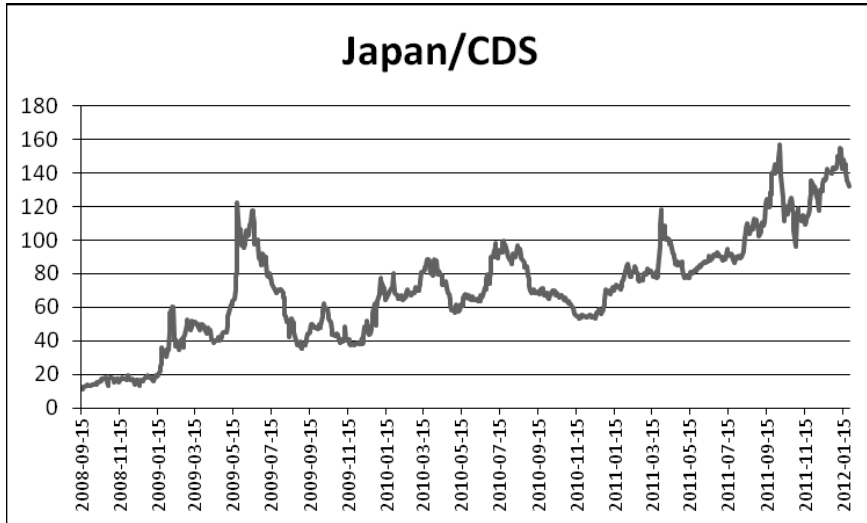
Source: Data from www.stooq.com.

Chart 9. Fluctuations of the NIKKEI1225 index between 15.09.2008 and 30.01.2012.



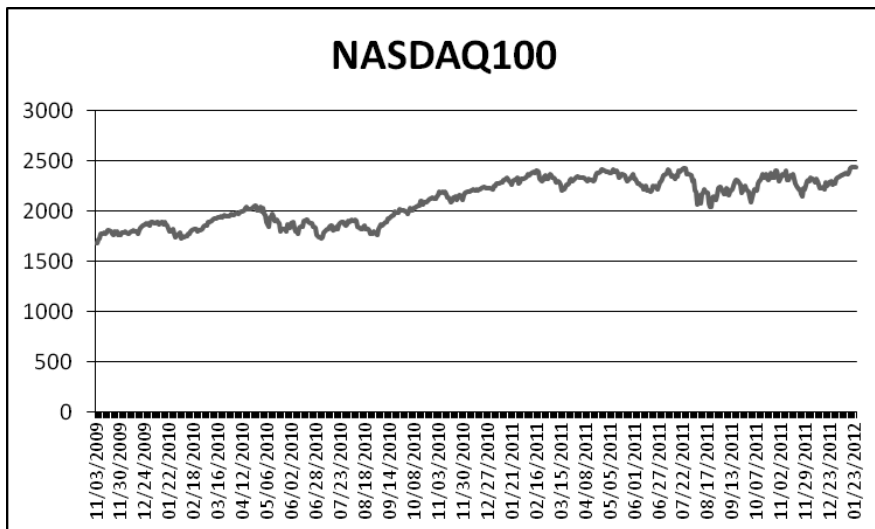
Source: Data from www.stooq.com.

Chart 10. Japan CDS prices between 15.09.2008 and 30.01.2012.



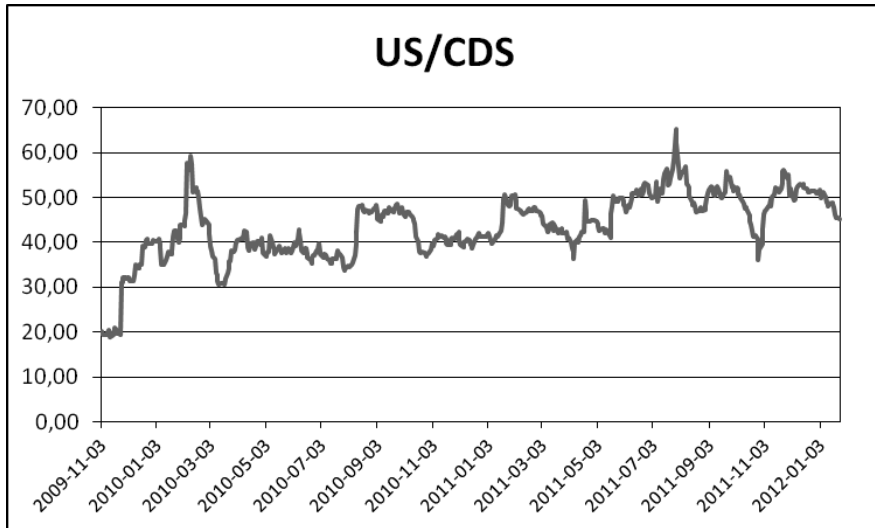
Source: Data from www.stooq.com.

Chart 11. Fluctuations of the NASDAQ100 index between 03.11.2009 and 30.01.2012.



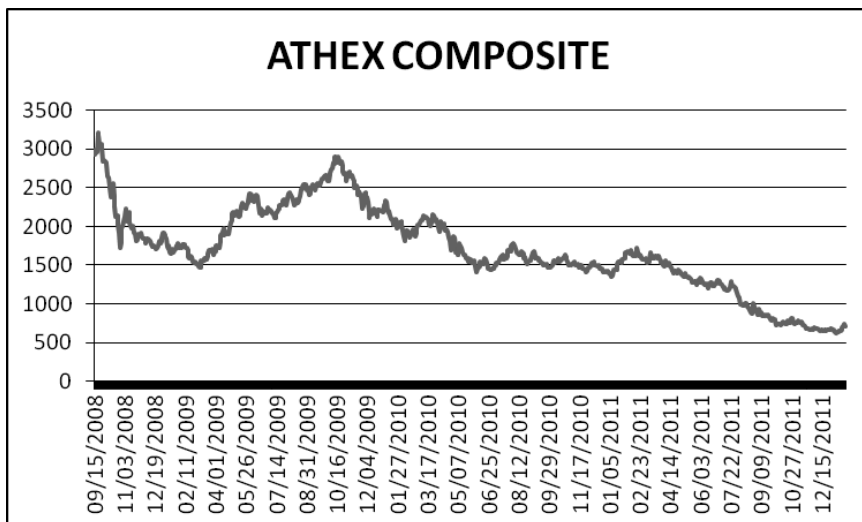
Source: Data from www.stooq.com.

Chart 12. US CDS prices between 03.11.2009 and 30.01.2012.



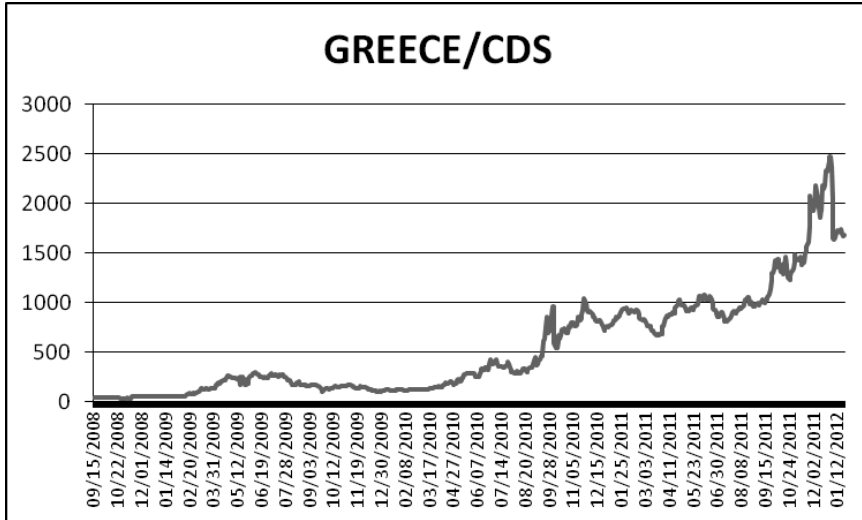
Source: Data from www.stooq.com.

Chart 13. Fluctuations of the ATHEX COMPOSITE index between 15.09.2008 and 30.01.2012.



Source: Data from www.stooq.com.

Chart 14. Greece CDS prices between 15.09.2008 and 30.01.2012.



Source: Data from www.stooq.com.

The European Central Bank sets out four points of the European CDS market that deserve attention:¹⁷

- The CDS market remains highly concentrated in the hands of small group of dealers
- The interconnected nature of the CDS market, with dealers being tied to each other through chains of OTC derivative contracts, results in increased contagion risk
- CDSs are widely and increasingly used as price indicators for other markets, including loan, credit and even equity markets, which makes these instruments play a broader role in the determination of prices
- The liquidity of this market that results in the significant widening observed in sovereign CDS spreads in mid-March 2009.

All the above-mentioned features, although discussed here only for Europe, could be extended to the global context. Together with the model risk and the

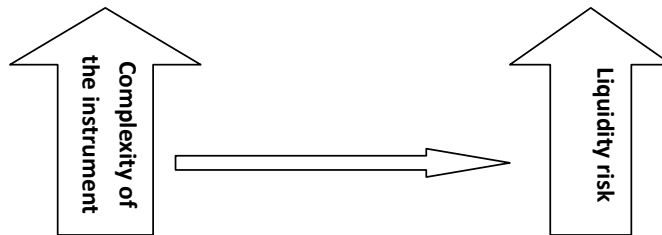
¹⁷ Credit Default Swaps and Counterparty Risk, European Central Bank, August 2009, p. 4 – 5.

influence of the financial leverage, they lead to the easy transfer of risk among all financial market participants, thus also to the mortgage market.

LIQUIDITY RISK

Credit derivatives valuation models are done on the assumption that there exists perfect liquidity of financial markets. Thus, the role of liquidity is marginalized and such events as the global financial crisis of 2007 – 2009 show that liquidity management is a crucial element of risk management.

Figure 4. The relation between the complexity of the instrument and the liquidity risk.



Source: Author.

Liquidity risk takes two forms:¹⁸

- **Asset liquidity risk** which arises when a transaction cannot be conducted at prevailing market prices due to the size of the position relative to normal trading lots.
- **Funding liquidity risk** which refers to the inability to meet payments obligations, which may force early liquidation, thus transforming “paper” losses into realized losses.

Both kinds of liquidity risk influence the market of both derivatives and cash market instruments, however they are not incorporated into pricing models. Asset liquidity risk is especially extreme on OTC exotic derivatives markets, as well as on emerging markets, whereas the funding liquidity risk is especially important for leveraged transactions conducted mostly by hedge funds but these are not only financial institutions that apply leverage in their transactions.

¹⁸ P. Jorion, *Value at Risk. The New Benchmark for Managing Financial Risk*, McGraw-Hill, New York 2001, p. 17 – 18.

FINAL CONCLUSIONS

As it was shown, credit derivatives let manage the credit risk, however at the same time, they generate new types of risks that must be taken into consideration in the risk management process. Because many mathematical models do not cover them, it is necessary to create the risk management system which will consider the so called model risk.

BIBLIOGRAPHY:

Black F., M. Scholes, The pricing of options and corporate liabilities, *Journal of Political Economy* nr 81, May/June, 1973.

Choudhry M., *The Bond and Money Markets*, Butterworth-Heinemann, Oxford 2003

Crabbe M., Central banks seek more data on credit derivatives, *Risk*, June 2004.

Credit Default Swaps and Counterparty Risk, European Central Bank, August 2009.

Crouchy M., D. Galai, R. Mark, *Risk Management*, McGraw-Hill, New York 2001.

Das S., *Credit Derivatives and Credit Linked Notes*, John Wiley & Sons, Singapore 2000.

Fama E.F., Risk, return and equilibrium: some clarifying comments, *Journal of Finance*, Vol. 23, No. 1, March 1968.

Instefjord N., Risk and hedging: do credit derivatives increase bank risk?, *Journal of Banking and Finance*, vol. 29, iss.2, February 2005.

Jackowicz K., Pochodne instrumenty kredytowe (II). Zastosowania pochodnych instrumentów kredytowych i związane z tym problemy, *Bank i Kredyt*, April 2001,

Jorion P., *Value at Risk. The New Benchmark for Managing Financial Risk*, McGraw-Hill, New York 2001.

Markowitz H., Portfolio selection, *The Journal of Finance*, Vol. 7, No. 1, March 1952

Moser J.T., *Credit Derivatives: Just-in-time Provisioning for Loan Losses, Economic Perspectives*, Federal Reserve Bank of Chicago, Fourth Quarter 1998.

Patel N., F. Haddow-Allen, Rating agencies debunk credit derivatives misconceptions, *Risk*, January 2004.

Pruchnicka-Grabias I., Kredytowe instrumenty pochodne. Systematyka, wycena, zastosowanie. Struktury standardowe i egzotyczne, Wydawnictwa Fachowe CeDe-Wu, Warsaw 2011.

Sharpe W.F., Capital Asset Prices: A Theory of Market Equilibrium Under Conditions of Risk, *Journal of Finance*, Vol. 19, No. 3, September 1964.

Tavakoli J.M., *Credit Derivatives: a Guide to Instruments and Applications*, John Wiley & Sons, Inc., 1998.

ZUR ZUSAMMENARBEIT DES AUFSICHTSRATES EINES KREDITINSTITUTS MIT INTERNEN STELLEN (INNENREVISION, COMPLIANCE-OFFICER ETC.)

- Zu den Grenzen einer vorstandsunabhängigen
Informationsbeschaffung

von Prof. Dr. Urban Bacher und Florian Göpferich,
Hochschule Pforzheim

ABSTRACT

The idea of cooperation between the supervisory board and internal auditing bodies can give rise to conflict. The expectations put on supervisory bodies are not always fulfilled, which is not necessarily caused by inadequate knowledge or lack of information demand, i.e. expectations. Rather, the information available is in itself often insufficient. In principle, information flow from the internal bodies to the supervisory board goes through the management board. It is only exceptionally that the supervisory board can and should directly involve an internal auditing body for its supervisory tasks.

JEL Classification: H83, M42

Keywords: supervisory board, supervisory bodies, supervisory tasks, internal auditing, compliance, information flow

1 PROBLEMSTELLUNG

Banken unterliegen besonderen gesetzlichen Rahmenbedingungen, die Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) ist für die Bankaufsicht zuständig. Im Zuge der Finanzkrise wurden die bereits bestehenden Mindestanforderungen an das Risikomanagement für Banken (MaRisk) weiter überarbeitet, 2010 hat die BaFin Mindestanforderungen an die Compliancefunktion für Wertpapierdienstleistungen (MaComp) erlassen. Insgesamt soll die Governance-Struktur der Institute gestärkt sowie den Aufsichtsorganen eine erweiterte Auskunftsbefugnis zugestanden

werden. Denn effiziente und vertrauenswürdige Kreditinstitute sind Voraussetzung für ein funktionierendes Kreditwesen, was essentiell für unsere Volkswirtschaft ist. Die nachfolgende Arbeit beleuchtet die Kontrollfunktion der internen Überwachungsorgane näher und diskutiert die Frage, ob und unter welchen Voraussetzungen der Aufsichtsrat direkt auf interne Stellen - wie Innenrevision und Compliance – zugreifen darf und soll.

2 ABGRENZUNG DER BETRIEBLICHEN ÜBERWACHUNGS- UND KONTROLLORGANE

2.1 DAS DEUTSCHE „DUALE SYSTEM“

Das in Deutschland als „duales System der Corporate Governance“ bezeichnete Prinzip schreibt generell eine strikte Trennung zwischen Vorstand und Aufsichtsrat vor.¹ So darf nach § 105 Abs. 1 AktG ein Mitglied des Vorstandes nicht gleichzeitig dem Aufsichtsrat angehören. Durch das strenge Trennungsprinzip können dem Aufsichtsrat auch keine Aufgaben der Geschäftsführung übertragen werden.² Bedingt durch das dualistische Trennungsprinzip kommt der formalen und inhaltlich korrekten Information des Aufsichtsrats für eine gewissenhafte Überwachung der Geschäftsleitung eine besondere Bedeutung zu. Während das Gesellschaftsrecht die strikte Trennung von Geschäftsführung und Aufsichtsorgan vorsieht, befürworten die Mindestanforderungen an das Risikomanagement (MaRisk) neben der Information durch die Geschäftsleitung den direkten Kontakt zwischen der internen Revision und dem Aufsichtsrat.³ Da auch dem Aufsichtsrat im Kern seiner Aufgaben eine zentrale Überwachungsfunktion zukommt, stellt sich die Frage, inwieweit es sinnvoll und tragbar ist, ein direktes Zusammenarbeiten von Aufsichtsräten und der internen Revision bzw. der Compliance zuzulassen und wie viel Gefahren- bzw. Risikopotenzial sich darin birgt.

¹ Vgl. *Kunze* (2007), S. 52. Ausnahme: Bei einer GmbH kann der Gesellschafter mittels Weisungen in die Geschäftsführung eingreifen (vgl. § 37 GmbHG).

² Vgl. *Paul* (2010), S. 6.

³ Vgl. *BaFin* Rundschreiben 11/2010 (BA), MaRisk AT 4.4 Tz 2 S. 3 und *Paul* (2010), S. 16.

2.2 AUFSICHTSRAT

Die Hauptaufgabe des Aufsichtsrats ist neben der Bestellung des Leitungsorgans⁴ dessen Überwachung. Gesetzlich normiert ist diese Kontrollfunktion in § 111 Abs. 1 AktG sowie indirekt in § 25a KWG. Im Kern soll der Aufsichtsrat sowohl die Einhaltung rechtlicher Rahmenbedingungen als auch die Überwachung einer zweckmäßigen und wirtschaftlichen Unternehmensführung gewährleisten.⁵ Diese Funktion wird im Rahmen einer vergangenheitsorientierten Prüfung, einer gegenwärtigen Kontrolle sowie einer zukunftsgerichteten Aufsicht ausgeübt.⁶ Zur effizienten Ausübung der zahlreichen Funktionen des Aufsichtsrats ist deshalb eine adäquate Informationsversorgung unumgänglich.⁷

2.3 DIE INNENREVISION EINES KREDITINSTITUTS

Die Innenrevision - auch interne Revision genannt - ist als Instrument der Geschäftsführung zu sehen und auch nur gegenüber dieser weisungsgebunden.⁸ Damit eine unabhängige Überwachung erfolgen kann, ist die interne Revision als Stabsstelle nicht in die Geschäftsprozesse integriert.⁹ Dadurch sollen Interessens- bzw. Zielkonflikte vermieden werden.¹⁰ Die Aufgaben dieses internen Prüfungsorgans sind vielfältig und einem ständigen Wandel unterworfen, wobei grob zwischen „Operational Auditing, Financial Auditing und Management Auditing“ differenziert werden kann.¹¹ Die Innenrevision hat „risikoorientiert und prozessunabhängig die Wirksamkeit und Angemessenheit des Risikomanagementsystems [...] zu prüfen und zu beurteilen.“¹²

Für Kreditinstitute ist eine interne Revision von besonders hohem Stellenwert. Sie prüft Aktivitäten und Geschäftsprozesse des jeweiligen Instituts, trägt zu des-

⁴ Sowie der Bestimmung der Regelungen zum Dienstverhältnis. Im negativen Fall geht es um die „Abberufung“ und um die Beendigung des Dienstvertrages. Daneben steht der Aufsichtsrat dem Leitungsorgan beratend zur Seite und hat ausgewählte Mitwirkungs- und Zustimmungsrechte.

⁵ Vgl. *Kunze* (2007), S. 65.

⁶ Vgl. *Salzberger* (2000), S. 759.

⁷ Vgl. *Eibelshäuser* (2011), S. 91.

⁸ Grundlegend zur Innenrevision und deren Aufgaben, vgl. *Bacher* (2011), S. 90/91.

⁹ Vgl. *Kunze* (2007), S. 63.

¹⁰ Vgl. *Hannemann/Schneider* (2011), S. 288.

¹¹ Vgl. *Böhmer* u.a. (1981), S. 17 und 21, *Kunze* (2007), S. 64.

¹² *Hannemann/Schneider* (2011), S. 295.

sen Erfolg bei und hat nicht zuletzt für die Bankenaufsicht eine herausragende Bedeutung.¹³ Seit einigen Jahren ist die Notwendigkeit auch gesetzlich in § 25a Abs. 1 Satz 3 Nr. 1 KWG normiert. Indirekt wird solch eine Einrichtung auch in § 91 Abs. 2 AktG gefordert.¹⁴ Ziel dieser Tätigkeiten ist eine Verbesserung der Geschäftsprozesse, des Risikomanagements sowie der Führungs- und Überwachungsstrukturen.¹⁵

Nach AT 4.4 Tz 2 S. 3 der MaRisk besteht seit der Veröffentlichung der zweiten MaRisk-Novelle vom 14.08.2009 ein direktes Auskunftsrecht des Aufsichtsratsvorsitzenden gegenüber dem Leiter der internen Revision, allerdings nur unter Einbeziehung der Geschäftsleitung.¹⁶ Dieses direkte Auskunftsrecht birgt sowohl Chancen als auch Risiken, die einen Rückschluss darauf geben können, ob eine engere Zusammenarbeit zwischen Aufsichtsrat und interner Revision nun für gut oder schlecht empfunden werden kann.

2.4 DIE COMPLIANCEFUNKTION EINES KREDITINSTITUTS

Unter dem Begriff „Compliance“ sind Maßnahmen und Regelungen zu verstehen, die ein gesetzeskonformes Verhalten aller Mitarbeiter - also auch der Geschäftsleitung - fördern und gewährleisten sollen.¹⁷ Dabei werden neben externen Richtlinien, wie beispielsweise Gesetze, auch betriebs- oder institutsinterne Compliance-Grundsätze entworfen.¹⁸ Es ist zu beachten, dass nicht lediglich Gesetze einzuhalten sind. Vielmehr sollen Strukturen geschaffen werden, die auf ein korrektes Verhalten hin ausgerichtet sind und den Normen und Werten des Unternehmens gerecht werden.

Das Primärziel der Compliance ist die Überwachung und Sicherstellung von Gesetzen, Verordnungen und Richtlinien sowie vertragliche Verpflichtungen und dass freiwillig eingegangene Selbstverpflichtungen eingehalten werden. Ziel ist also die Bildung einer Compliance-Organisation, in der die Gesetze und Werte aus Überzeugung heraus gelebt werden. Die Risiken, die aus Gesetzesverstößen oder

¹³ Vgl. *Hannemann/Schneider* (2011), S. 284.

¹⁴ Vgl. *Hannemann/Schneider* (2011), S. 288.

¹⁵ Vgl. Revisionsstandard Nr. 1, in: ZIR (2001), Tz. 34 ff.

¹⁶ Vgl. *Paul* (2010), S. 16.

¹⁷ Grundlegend zur Compliance vgl. *Bacher* (2011), S. 52 ff.

¹⁸ Vgl. *Jäger* u.a. (2009), S. 25.

anderen Missständen resultieren, können verheerend sein. Das Unternehmen hätte mit straf- und zivilrechtlicher Konsequenzen, aber auch mit Reputationsschäden zu rechnen.¹⁹ Es wird deshalb sogar mit positiven Effekten hinsichtlich strategischer Vorteile durch eine funktionierende Corporate Compliance gerechnet.²⁰

Bei Kreditinstituten, die in der Regel auch Wertpapierdienstleistungen nach dem WpHG erbringen, ist in die Organisation nach § 33 WpHG zwingend auch eine Compliance-Funktion einzugliedern. Der so genannte Compliance-Officer ist für die Schaffung und Kontrolle der zuvor erläuterten unternehmensinternen Verhaltenskodizes und Richtlinien verantwortlich.²¹ Konkret soll er die operativen Bereiche beraten und die im Unternehmen aufgestellten Grundsätze und eingerichteten Verfahren sowie die zur Behebung von Defiziten getroffenen Maßnahmen bewerten und überwachen. Der Compliance-Officer berichtet gegenüber der Geschäftsleitung und dem Aufsichtsorgan. Er nimmt seine Aufgaben unabhängig wahr. Diese Unabhängigkeit zeigt sich darin, dass der Compliance-Officer²² nur der Geschäftsleitung weisungsgebunden ist.²³ Der Vorsitzende des Aufsichtsrats hat aber die Möglichkeit, unter Einbeziehung der Geschäftsleitung direkt Auskünfte beim Compliance-Beauftragten einzuholen.²⁴

2.5 WEITERE „INTERNE STELLEN“ EINES KREDITINSTITUTS

Neben der Innenrevision und der Compliance hat ein Kreditinstitut weitere Stabstellen einzurichten, die sich mit Prävention- und Kontrollmaßnahmen beschäftigen. So ist nach § 25c KWG eine „zentrale Stelle“ für Organisations- und Kontrollmaßnahmen für die umfassende Prävention von Geldwäsche, Terrorismusfinanzierung und sonstigen strafbaren Handlungen einzurichten. Der Geldwäschebeauftragte kümmert sich um die besonderen Anforderungen des Geldwäschegesetzes mit dem Ziel, die Einschleusung von illegalen Geldmitteln, Edelmetallen und Wertpapieren zu verhindern. Hinzu kommen weitere Stellen, die jedes Unternehmen einzurichten hat, wie z. B. Beauftragte für Datenschutz und für Gleich-

¹⁹ Vgl. Rodewald, in: Maschmann (Hrsg.) (2009), S. 32.

²⁰ Vgl. Vetter, in: Wecker/van Laak (Hrsg.) (2009), S. 33.

²¹ Vgl. Steinberg (2011), S. 243.

²² Oft auch Chief Compliance Officer oder Compliance-Beauftragter genannt.

²³ Vgl. BaFin Rundschreiben 4/2010 (WA), MaComp BT 1.1.1.

²⁴ Vgl. BaFin Rundschreiben 4/2010 (WA), MaComp BT 1.1.

stellung. Sofern der Gegenstand der Überwachungsaufgabe zentrale Rechtsbereiche der Gesellschaft berührt, ist auch an die Rechtsabteilung zu denken.

3 DAS DIREKTE AUSKUNFTSRECHT DES AUFSICHTSRATES

Primärziel der Bankenaufsicht bei der Gewährung des direkten Auskunftsrechts stellt die effektivere Wahrnehmung der Überwachungsfunktion durch den Aufsichtsratsvorsitzenden und damit die Stärkung der Corporate-Governance-Strukturen dar.²⁵ Hierdurch ergibt sich eine zusätzliche Informationsquelle für das Aufsichtsorgan, die deren Unabhängigkeit weiter stützen soll und die Verbesserung der Überwachungsaufgabe vorantreibt. Des Weiteren könnte dieser direkte Informationskanal auch der Beschleunigung des Informationsprozesses dienen, indem bei Fachfragen direkt der Leiter der jeweiligen internen Stelle kontaktiert werden kann.

So einleuchtend die Chancen des direkten Auskunftsrechts auch erscheinen mögen, darf eine Betrachtung potenzieller Risiken nicht außenvorbleiben. Es stellt sich die Frage, ob dieses direkte Auskunftsrecht nicht eine Misstrauenskultur des Aufsichtsrats gegenüber der Geschäftsleitung schürt, da der eigentliche Weg der Informationsbeschaffung in der Regel nur über das Leitungsorgan geht.²⁶ Alle Mitarbeiter unterstehen dem Leitungsorgan und dessen Direktionsrecht. Greift der Aufsichtsrat direkt auf Mitarbeiter der Gesellschaft zu und arbeiten interne Stellen auch direkt vertrauensvoll mit dem Aufsichtsrat zusammen, kann dieses „Dienen zweier Herren“ eine Reihe von Folgeproblemen auslösen. In anderen Worten: Ist die Informationslinie nicht mehr eindeutig, sind Loyalitäts-, Vertrauens-, Kommunikations- und Effizienzprobleme nicht mehr fern.²⁷ Eine weitere Gefahr besteht darin, dass durch das direkte Auskunftsrecht ein Informationsdefizit des Vorstandes entstehen kann und die Gesellschaft nicht mehr mit „einer Zunge spricht“.

4 GRENZEN EINER KOOPERATION DER BETRIEBLICHEN ÜBERWACHUNGS-ORGANE

²⁵ Für die Innenrevision vgl. *Paul* (2010), S. 19/20.

²⁶ Vgl. *Paul* (2010), S. 20.

²⁷ Vgl. *Paul* (2010), S. 20.

4.1 ÜBERWACHUNGSPFLICHT DES AUFSICHTSRATES

Wie bereits dargestellt ist eine Kernaufgabe des Aufsichtsrates die Überwachungsfunktion. Grundlage der Überwachungstätigkeit sind die Berichte bzw. Vorlagen des Vorstandes. Nach § 90 AktG berichtet der Vorstand - und nur er! - an den Aufsichtsrat. Der Aufsichtsrat kann jederzeit Bericht verlangen. Auch nur ein einzelnes Mitglied kann Auskunft verlangen, jedoch nur an den Aufsichtsrat insgesamt.²⁸ Die Berichte sind möglichst rechtzeitig und in der Regel in Textform zu erstatten und haben den Grundsätzen einer gewissenhaften und getreuen Rechenschaft zu entsprechen.²⁹

4.2 VORSTANDSUNABHÄNGIGE INFORMATIONSBESCHAFFUNG

Die Überwachung kann über das Verlangen einer Auskunft bzw. eines Berichts hinausgehen. Der Aufsichtsrat kann gemäß § 111 auch unmittelbar selbst prüfen und hat danach ein direktes Zugriffs- und Einsichtsrecht auf Informationen.

Es ist jedoch strittig, in welchem Umfang direkt, und somit ohne vorherige Zustimmung des Vorstandes, auf Informationen zugegriffen werden darf. Ein direkter Kontakt zu den Mitarbeitern zur Informationsbeschaffung ist gesetzlich nicht vorgesehen. So sollen nach § 109 AktG an den Sitzungen des Aufsichtsrates und seiner Ausschüsse Personen, die weder dem Aufsichtsrat noch dem Vorstand angehören, nicht teilnehmen (§ 109 AktG). Allerdings können zur Beratung über einzelne Gegenstände Sachverständige und Auskunftspersonen zugezogen werden.

Beim Amt des Aufsichtsrats handelt es sich typischerweise um eine nicht hauptberuflich ausgeübte Tätigkeit. Vielmehr wird die Aufsichtsfunktion im Rahmen eines Nebenamts ausgeführt.³⁰ Dies macht einmal mehr deutlich, dass die Aufsichtsratsmitglieder in die Geschäftsprozesse nicht in gleichem Maße involviert sein können, wie dies bei einer hauptamtlichen Tätigkeit der Fall sein würde. In der begrenzt zur Verfügung stehenden Zeit eines Aufsichtsrats können daher nur die wesentlichen Vorgänge überwacht werden.³¹

Die Informationen erhält der Aufsichtsrat direkt von der Geschäftsführung, also der Instanz, die überwacht werden soll. In Abwandlung des Zitats von Brecht „nur

²⁸ § 90 Abs. 3 Satz 2 AktG.

²⁹ § 90 Abs. 4 AktG.

³⁰ Vgl. *Potthoff/Trescher* (1993), S. 32.

³¹ Vgl. *Potthoff/Trescher* (1993), S. 32.

die dümmsten Kälber füttern ihren Metzger selber“ ist diese Informationsversorgung nicht ideal. Der Ruf nach weiteren Informationsquellen für eine vernünftige und effiziente Überwachung durch den Aufsichtsrat wird laut und deutlich.³² *Kunze* betont die Potenziale, die zum einen in einer verbesserten Kontrolle operationeller Risiken, aber auch in einer intensiveren Kooperation der Überwachungsorgane und damit einer verbesserten Überwachungsqualität liegen.³³

Geiersbach plädiert für einen besseren Informationsaustausch zur Reduktion der asymmetrisch verteilten Informationen. Denn die Geschäftsleitung hat zwar die Pflicht, dem Aufsichtsrat die erforderlichen Informationen zukommen zu lassen, allerdings kann hier von einem „Informationsvermittlungsmonopol des Vorstands“³⁴ gesprochen werden. Dies bedeutet, dass der Vorstand den Informationsfluss hinsichtlich Umfang sowie Zeitpunkt steuern kann, also eine gewisse Filterung der Informationen möglich ist. Auch bei der oben erläuterten indirekten Berichterstattung liegt diese Problematik vor.³⁵

4.3 FALLGRUPPEN FÜR EINE VORSTANDSUNABHÄNGIGE INFORMATIONSBESCHAFFUNG

So verständlich der Ruf nach einer generellen vorstandsunabhängigen Informationsbeschaffung auch ist, so überzeugen nach Abwägung doch die Nachteile eines direkten Zugriffs des Aufsichtsrats auf Mitarbeiter. Die bisherige „Gewaltenteilung“ von Vorstand und Aufsichtsrat hat sich im Prinzip bewährt. Im deutschen, dualen System wird die Gesellschaft vom Vorstand geleitet. Jede Durchbrechung verwässert die Verantwortung und schürt neue Konflikte. Jedes generelle Hineinregieren in das Leitungsorgan schürt Misstrauen und stellt einen Eingriff in die ureigene Leitungskompetenz des Vorstandes dar. Die bankspezifischen Regelungen nach MaRisk und MaComp sind zu recht zurückhaltend formuliert und verlangen, dass bei Informationen an den Aufsichtsrat grundsätzlich die Geschäftsleitung eingebunden ist. Im Ergebnis unterliegt die Aufsichtsratsstätigkeit hinsichtlich der vorstandsunabhängigen internen Informationsbeschaffung engen Restriktionen³⁶, die

³² Vgl. *Kunze* (2007), S. 209.

³³ Vgl. *Kunze* (2007), S. 315.

³⁴ *Geiersbach* (2011), S. 259.

³⁵ Vgl. *Geiersbach* (2011), S. 259.

³⁶ Vgl. *Geiersbach* (2011), S. 289.

im Folgenden anhand von Fallgruppen aufgezeigt werden und in der Praxis am besten noch in Geschäftsordnungen konkretisiert werden.

Fallgruppe „wesentliche Mängel, grobe Verfehlungen des Vorstandes“: Nach § 109 Abs. 1 Satz 2 AktG können Sachverständige und Auskunftspersonen zur Beratung im Aufsichtsrat zugezogen werden. Ein Sonderfall ist dabei die Beratung mit Mitarbeitern der Gesellschaft, da diese in einem Loyalitätsverhältnis zum Vorstand stehen und dessen Direktionsrecht³⁷ unterliegen. Ein direkter Zugang des Aufsichtsrates zu Mitarbeitern bzw. eine Unterrichtung des Aufsichtsrats von internen Stellen „am Vorstand vorbei“ greift in die Kompetenzkompetenz der Gesellschaft ein, stellt ein Vertrauensbruch gegenüber dem Vorstand dar und muss daher die absolute Ausnahme bleiben. So muss die interne Revision bei „schwerwiegenden Mängeln der Geschäftsleitung“ der (gesamten) Geschäftsleitung unverzüglich Bericht erstatten, die dann unverzüglich den Aufsichtsratsvorsitzenden und die Aufsichtsbehörden zu informieren hat.³⁸ Nur in dem unwahrscheinlichen Fall, dass die Geschäftsleitung ihrer Berichtspflicht nicht nachkommt und keine sachgerechten Gegenmaßnahmen trifft, ist ein direkter Zugang zum Aufsichtsrat vorgesehen.

Fallgruppe „Unzureichende Vorstandsinformation“: Kann der Aufsichtsrat aufgrund der vom Vorstand zur Verfügung gestellten Informationen seiner Überwachungspflicht überhaupt nicht nachkommen, sind weitere - auch vorstandsunabhängige Informationsquellen - in Anspruch zu nehmen.³⁹ Hierzu können interne Stellen befragt werden. Jedoch gilt hier das bei obiger Fallgruppe Gesagte („wesentliche Mängel des Vorstandes“) analog. Die Befragung des Aufsichtsrates von Mitarbeiter darf nur als „ultima ratio“ bei wichtigen Fragestellungen erfolgen und erst dann, wenn am Vorstandsbericht ernsthafte Zweifel bestehen und eine weitere Aufklärung durch den Vorstand dem Aufsichtsrat erfolglos scheint.

Fallgruppe „GmbH“: Im Gegensatz zur Aktiengesellschaft hat das Leitungsorgan der GmbH - die Geschäftsführung - keinen rechtlich garantierten Kompetenzbereich. Nach § 37 GmbHG haben die Geschäftsführer die Weisungen der Gesellschafter einzuhalten. Rechtlich sind bei der GmbH die Gesellschafter den Geschäftsführern übergeordnet, die Gesellschafter haben das Recht, jederzeit aktiv in die Geschäfte der Gesellschaft einzugreifen. Dieses Recht können die Gesell-

³⁷ Innenrevisoren und Compliance-Beauftragte handeln unabhängig. Das Direktionsrecht ist insofern eingeschränkt.

³⁸ Vgl. *BaFin* Rundschreiben 11/2010 (BA), MaRisk, BT 2.4 Tz 5.

³⁹ Vgl. *Geiersbach* (2011), S. 290.

schafter auf einen Aufsichtsrat oder Beirat übertragen.⁴⁰ Besteht jedoch ein obligatorischer Aufsichtsrat⁴¹, gilt nach der zwingenden Regelung nach § 111 Abs. 4 S. 1 AktG dieses Weisungsrecht nicht mehr uneingeschränkt. Im Ergebnis gilt jedoch für das Management in der Rechtsform der GmbH, dass hier Gesellschafter und deren Überwachungsorgane von Rechtswegen in das operative Geschäft der Geschäftsführer eingreifen können und damit direkt auch auf interne Stellen zugreifen können. Ungeachtet davon ist das Aufsichtsorgan gut beraten, genau zu überlegen, ob ein direktes Eingreifen der Zusammenarbeit der Organe und internen Stellen dienlich und förderlich sowie organisatorisch geschickt und überwachungseffektiv ist.

Fallgruppe „Krise“: In einer Krise - zum Beispiel im Falle der Sanierung einer Gesellschaft - hat der Aufsichtsrat erhöhte Überwachungs- und Sorgfaltspflichten. Die Frage, ob der Aufsichtsrat in der Krise Sonderrechte ausüben muss oder kann, ist zu verneinen. Grund: Auch in der Krise müssen das Vertrauensverhältnis von Vorstand und Aufsichtsrat und die Kompetenzregelungen gewahrt bleiben. Die besonderen Anforderungen, die die Krise an die Gesellschaft stellt, verlangt ein besonders enges (konstruktiv kritisches) Zusammenspiel von Aufsichtsrat und Vorstand. Der Aufsichtsrat sollte gerade im Fall der Krise von eigenen Wegen der Informationsbeschaffung grundsätzlich Abstand nehmen. Eine direkte Zusammenarbeit mit internen Stellen darf auch in dieser Fallgruppe nur die „ultima ratio“ darstellen, z. B. dann wenn schwere Mängel in der Leitung erkennbar sind oder der Vorstand offensichtlich unzureichend informiert.

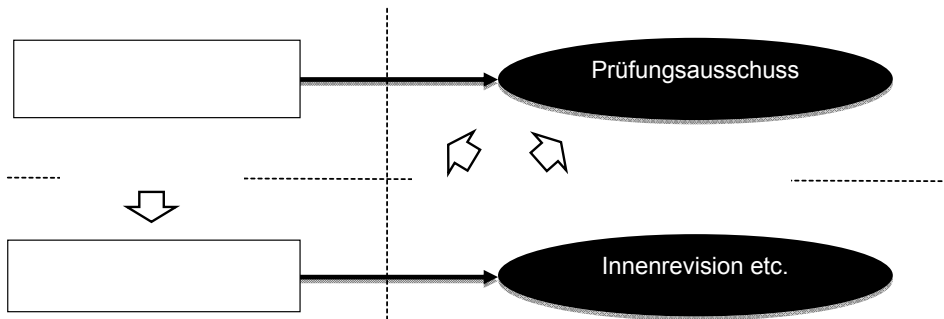
Fallgruppe „Prüfungsausschuss“: Nach *Geiersbach* kann eine Kooperation der internen Stellen⁴² im Prüfungsausschuss erfolgen. Rechtsgrundlage für den Prüfungsausschuss ist § 107 Abs. 3 AktG, der in erster Linie den Aufsichtsrat entlasten und zur Optimierung der Überwachungsfunktion beitragen soll. Die folgende Abbildung zeigt eine mögliche Strukturierung des innerbetrieblichen Informationsflusses:

⁴⁰ In der Regel regelt das die Satzung.

⁴¹ Zu denken ist an § 6 Abs. 1 MitbestG und § 1 Abs. 1 DrittelbG.

⁴² Im Fokus steht hier die interne Revision.

Externalisierung von Information:



„----- gesellschaftsrechtliche Schranken“ in Anlehnung nach *Geiersbach* (2011), S. 292

In diesem Modell erhält die Innenrevision einen stärkeren „externen“ Bezug.⁴³ So wird dem Aufsichtsrat beispielsweise ein Zustimmungsvorbehalt für bestimmte Entscheidungen eingeräumt und so die Unabhängigkeit der internen Revision gestärkt bzw. das Sanktionspotenzial des Vorstands geschwächt. Wie in der Abbildung dargestellt wird durch die Einführung einer „vertikalen gesellschaftsrechtlichen Schranke“⁴⁴ ein direkter Informationstransfer zwischen den Überwachungsinstanzen unter Ausschluss des Vorstands ermöglicht. Grundlage hierfür sollte aber eine entsprechende Rahmenvereinbarung bzw. Geschäftsordnung sein.

5 FAZIT

Die Idee einer Zusammenarbeit von Aufsichtsrat und internen Stellen birgt Konfliktpotenzial. Dass die Erwartungen an die Überwachungsorgane nicht immer erfüllt werden, liegt nicht zwangsläufig an mangelndem Wissen oder einer unzureichenden Informationserwartung. Vielmehr sind die zur Verfügung gestellten Informationen selbst oft unzureichend. Der Informationsfluss von internen Informationen an den Aufsichtsrat geht grundsätzlich über den Vorstand. Nur in Ausnahmefällen kann und sollte der Aufsichtsrat direkt interne Stelle für seine Überwachungsaufgaben einbinden.

⁴³ *Geiersbach* (2011), S. 291.

⁴⁴ Vgl. *Geiersbach* (2011), S. 292.

LITERATURVERZEICHNIS

- Bacher, Urban (2011): Bankmanagement kompakt – Kompendium der Betriebswirtschaftslehre der Banken, 3. Auflage, Konstanz.
- Böhmer, Georg-August u.a. (1981): Interne Revision - Ein Handbuch für die Praxis, hrsg. von: Deutsches Institut für Interne Revision e. V., Berlin.
- Eibelshäuser, Beate (2011): Unternehmensüberwachung als Element der Corporate Governance, Diss. Wiesbaden.
- Geiersbach, Karsten (2011): Der Beitrag der Internen Revision zur Corporate Governance, 1. Auflage, Wiesbaden.
- Hannemann, Ralf; Schneider, Andreas (2011): Mindestanforderungen an das Risikomanagement (MaRisk), 3. Auflage, Stuttgart.
- Jäger, Axel; Rödl, Christian; Nave, José A. Campe (2009): Praxishandbuch Corporate Compliance, 1. Auflage, Weinheim.
- Kunze, Britta (2007): Überwachung operationeller Risiken bei Banken, 1. Auflage, Diss. Wiesbaden.
- Paul, Angelika (2010): Direktes Auskunftsrecht des Aufsichtsorgans gegenüber der Internen Revision in den MaRisk, hrsg. von: Disch, Wolfgang, in: Diskussionsbeiträge der DHBW Nr. 10/10, Diss. Villingen-Schwenningen.
- Potthof, Erich; Trescher, Karl (1993): Das Aufsichtsratsmitglied, Stuttgart.
- Rodewald, Jörg (2009): Corporate Compliance und Arbeitsrecht, in Maschmann, Frank (Hrsg.): Mannheimer Schriften zum Unternehmensrecht, Band 15, Baden-Baden.
- Salzberger, Wolfgang (2000): Die Überwachung des Risikomanagements durch den Aufsichtsrat, in: Die Betriebswirtschaft, S. 756-773, 60. Jahrgang, Stuttgart.
- Steinberg, Richard M. (2011): Governance, Risk Management and Compliance, New Jersey.
- Wecker, Gregor; van Laak, Hendrik (Hrsg.) (2009): Compliance in der Unternehmenspraxis, 2. Auflage, Wiesbaden.
- Zeitschrift Interne Revision ZIR (2001): IIR Revisionsstandards, Revisionsstandard Nr. 1: Zusammenarbeit von Interner Revision und Abschlussprüfer, 36. Jahrgang, Berlin.

DIE BEDEUTUNG DER TRANSAKTIONSKOSTEN BEI DER BILANZBEWERTUNG VON KREDITFORDERUNGEN

Edward Pielichaty, Ph.D.¹

¹Wirtschaftsuniversität Wrocław, Lehrstuhl für Finanzrechnungswesen und Kontrolle, Poland, edward.pielichaty@ue.wroc.pl

ABSTRACT

In the last years the banking sector has experience a number of significant changes in terms of liabilities measurement from credits, loans and securities emission, therefore, the dominant positions in any banks' assets. The new regulation in financial accounting, which has been in practice since 2005, introduced an amortized cost method at effective interest rate to the measurement of credits and others.

The following paper is devoted to the problem of including transaction costs into the credit measurement. The paper particularly points out the influence of transaction costs clearance on the bank's final activity results.

Transaction costs constitute a very important and not entirely explored area of economics. Their existence could be attributed to imperfect information as well as limited human cognitive abilities and human error. Transaction costs occur on the market level (friction of market forces) and in the business as managerial costs.

1. EINLEITUNG

Im Bankensektor ist es in den letzten Jahren zur bedeutenden Veränderung bei der Bewertung von Forderungen aus Krediten, Darlehen oder schuldrechtlichen Wertpapieren gekommen, d.h. auf Grund von dominierenden Posten im Bankvermögen. Die neuen Regulierungen in den International Financial Reporting Standards (IFRSs) und im Polnischen Gesetz über Rechnungswesen, die schon seit 2005 in Kraft sind, haben zur Bewertung u.a. von Kreditforderungen eine neue Methode eingeführt, die Methode der amortisierten Kosten nach dem Effektivzins.

Der vorliegende Artikel beschäftigt sich mit der Problematik der Einbeziehung von Transaktionskosten bei der Bilanzbewertung von Krediten. Eine besondere Aufmerksamkeit wird dem Einfluss der Abrechnung von Transaktionskosten auf die Ergebnislage der Banken geschenkt.

2. DAS WESEN DER TRANSAKTIONSKOSTEN

Der Begriff der Transaktionskosten ist in den 30er Jahren des 20. Jh. in der Wirtschaftswissenschaft erschienen, vor allem auf Veranlassung von Ronald H. Coase¹. Er hat behauptet, dass jedes in der Wirtschaft abgeschlossene Geschäft von verschiedenen Kosten begleitet wird, die, wenn sie zusammengezählt werden, den Reibungskräften im physischen System entsprechen.

Transaktionskosten bilden einen sehr wichtigen und nicht ganz erforschten Zweig der Wirtschaftslehre. Sie bestehen als Folge einer unvollkommenen Information und dessen, dass die Menschen ein begrenztes Erkenntnis- und Berechnungsvermögen besitzen sowie Fehler begehen. Transaktionskosten treten auf dem Niveau des Marktes (Reibung von Marktkräften) und auf dem Niveau der Firma (des Unternehmens), als Managerkosten auf. Eine wörtliche Interpretation des Begriffs „Transaktionskosten“ sagt vor, dass es hier um gewisse Kosten (Verluste) geht, welche bei der Vorbereitung, Ein- und Ausführung von Marktgeschäften² getragen werden. Die Kategorien von Transaktionskosten sind daher nicht identisch und man sollte eine Unterscheidung zwischen den Kosten treffen, die vor dem Geschäftsabschluss und diesen, die nach dem Geschäftsabschluss entstehen. Die Kosten ex post verbinden sich vorwiegend mit der Überwachung (Kontrolle) zwecks einer richtigen Abwicklung der Transaktion.

Coase hat darauf hingewiesen, dass den Transaktionskosten bei der Erarbeitung von rigorosen ökonomischen Modellen ziemlich wenig Beachtung geschenkt wird, wodurch Theorien von wirtschaftlichem Verhalten weit entfernt werden. Ein großer Teil von ökonomischen Theorien funktioniert so, als ob es keine Transak-

¹ Im Jahre 1937 hat R. H. Coase seinen Artikel „The nature of the firm“ vorgelegt, der oft für einen Anfang der neuen institutionellen Wirtschaftswissenschaft gehalten wird, die eine Probe der Modifizierung und Erweiterung der neoklassischen Wirtschaftswissenschaft ist. Die neue Strömung in der Ökonomie akzeptiert neoklassische Haupttrichtlinien, lehnt aber instrumentelle Behandlung der Rationalität als eines immer wirksamen, von nichts begrenzten und bei vollem Zugang zu Informationen funktionierenden Mechanismus ab. (R. H. Coase, The nature of the firm, *Economica*, 4, 1937, S. 386-405).

² Also u.a. Kosten von Suchen, Verhandlungen und Kontrolle.

tionskosten gäbe, obwohl sie in der Praxis immer positiv sind. Coases Einwände scheinen berechtigt zu sein, man muss aber zugeben, dass eine Formalisierung der Transaktionskosten erhebliche Schwierigkeiten bereitet. Schwierig ist schon das Problem einer Identifikation dieser Kostenkategorie³. Außerdem muss man sich zu helfen wissen, wie man die Ungewissheit einkalkulieren soll, die immer jede Transaktion begleitet, weil in der Praxis jeder Vertrag unvollständig (lückenhaft) ist und weil wir von unseren Geschäftspartnern opportunistisches Verhalten erwarten können. Die Wahrscheinlichkeit vom Auftreten solcher Verhaltensweisen hängt ausschließlich von der nicht möglichen Quantifizierung einer moralischen Charakteristik der an der Transaktion teilnehmenden Subjekte ab.

Man muss aber zugeben, dass die Bemerkungen von Coase erlauben, besser den Sinn der Einführung von günstigen institutionellen Lösungen zu verstehen, z. B. von einem transparenten und wirksamen Rechtssystem. Diese haben eine sehr starke Begründung, weil sie die Wirkung der ökonomischen „Reibungskräfte“ d.h. der Unzuverlässigkeit des Marktes mildern, die in jedem Wirtschaftssystem auftreten, wo man mit Transaktionskosten zu tun hat. Zusammenfassend kann man sagen, dass gute institutionelle Lösungen eine effektive Ausführung von Verträgen und eine Minimalisierung von unerwünschten Transaktionskosten ermöglichen, trotz selbstverständlicher Schwierigkeiten bei ihrer Darstellung in der Geldform.

3. GEBÜHREN UND ANLAUFKOSTEN BEI EINEM BANKKREDIT

Das Problem der Quantifizierung und Beachtung von Transaktionskosten kommt auch im Rechnungswesen der Finanzinstrumente zum Vorschein. Die Bewertung mancher von ihnen mit Hilfe des Effektivzinses lässt die Beachtung von Transaktionskosten zu, die den von jeweiliger Bank festgelegten internen Schuldenzinssatz des Finanzinstrumentes korrigieren. Laut der Anwendungserklärungen (AE §13), die für International Financial Reporting Standards (IFRSs) 39 verlegt wurden, werden zu Transaktionskosten, die mit Vertragsausführung auf Finanzinstrumenten verbunden sind, Gebühren und Provisionen gezahlt, d. h. Gebühren und Provisionen, die den Agenten, Beratern, Vermittlern und Maklern ausgezahlt werden, mit Gebühren, die durch Regelungsagenturen und Börsen belegt werden. Als Agenten (Vermittler) werden auch Mitarbeiter erkannt, die als Verkäufer von Finanzinstrumenten tätig sind. Zu Transaktionskosten werden aber keine Prämien

³ Meistens findet man zusätzliche Kosten, die früher nicht beachtet wurden – d.h. Grenzkosten (Marginalkosten).

oder Diskonte von Schuldfinanzinstrumenten, keine Finanzierungskosten, keine Erhaltung von Finanzinstrumenten oder Verwaltungskosten gezählt.

Das oben erwähnte Problem der Fixierung und Erkennung von Transaktionskosten ist im Fall der Bewertung von Kreditgeschäften in Banken besonders aktuell. Bis Ende 2004 waren Kreditforderungen (Gebühren) in der Bilanz nach den Grundlagen des historischen Nominalismus eingetragen, mit Berücksichtigung der bisherigen Rückzahlungen und Bildung von Zielreserven. Zinsen waren mit dem vertraglichen Zinssatz berechnet und Provisionen sowie andere Gebühren waren in der Regel einmalig bei der Krediteinräumung entrichtet und auf die Gewinn- und Verlustrechnung bezogen, wo sie einen getrennten Teil der Erträge einer Bank bilden.

Zurzeit werden Kredite mit der Methode der amortisierten Kosten bewertet, deren gemäß Kredite, die zunächst zum Nominalwert gemeldet werden, einer Korrektur unterliegen um:

- Kapitalabzahlung,
- Tilgung aller Differenzen zwischen dem Anfangswert und dem Wert bei Fälligkeit, berechnet nach dem Effektivzinssatz,
- Abschreibung auf Wertverlust, auf uneintreibbare Schuld oder auf Bildung von Zielreserven.

Durch effektiven Zinssatz wird ein erwarteter Strom von künftigen Geldzahlungen zu einem laufenden Bilanzwert netto durch erwartete Lebenszeit des Finanzinstrumentes diskontiert. Formell wird der Effektivzinssatz für ein Schuldinstrument nach dem folgenden Muster berechnet:

$$P_0 = \sum_{t=1}^n C_t (1 + r_e)^{-t}$$

wo:

P_0 - laufender Wert von einem Schuldinstrument,

C_t - Zahlungen, die aufgrund des Besitzes von diesem Instrument zu tätigen sind, im Zeitraum $t=1,2,\dots, n$,

r_e - Effektivzinssatz, genannt Zins bis seiner Einlösung.

Die Festsetzung eines Kreditzinses umfasst alle durch die Bank bezahlte oder erhaltene Gebühren, die einen integralen Teil des Effektivzinssatzes⁴ bilden sowie direkt verbundene Transaktionskosten. Provisionen bilden einen effektiven Teil der Rentabilität bei Krediten und sie werden u.a. für solche Tätigkeiten erhoben, wie Bewertung der Finanzlage eines Kreditnehmers, Bewertung und Festsetzung rechtlicher Sicherheiten oder Vorbereitung von Kreditunterlagen.

Die Transaktionskosten wurden im §9 IFRSs 39 als Grenzkosten definiert, als solche Kosten, die nicht getragen worden wären, wenn die Einheit keine Transaktion abgeschlossen hätte, und die direkt der gegebenen Transaktion zugeordnet werden können.

Die Transaktionskosten umfassen:

- Externe Kosten, wie z.B. Gebühren und Steuern, die mit der Transaktionsabschluss verbunden sind und
- Interne Kosten, wie z.B. Gehälter für Mitarbeiter, die direkt an der Transaktion beteiligt sind.

Als Beispiele für externe Kosten können folgende Kosten genannt werden: Kosten der Bewertung und Festsetzung von Kreditsicherheiten auf ihre Rückzahlung, oder Kosten von Leistungen, die das Büro für Kreditauskunft AG (Biuro Informacji Kredytowej S.A.) erbringt, sowie Kosten, die Kreditmaklern gezahlt werden oder Kosten für Kreditversicherungen. Zu internen Kosten kann man Provisionen für diese Mitarbeiter zählen, die als Kreditverkäufer tätig sind, unter der Bedingung, dass sie präzise einem konkreten Kreditvertrag zugeteilt sind⁵. In der Berechnung eines Effektivzinses kann man weder Verwaltungskosten, noch Werbekosten oder Kosten einer Kreditüberwachung berücksichtigen. Man kann auch keine Kosten bei der Betreuung von Kreditanträgen beachten, wenn auf diese Anträge keine Kredite erteilt worden sind. Das kann z.B. auf die Kosten von Berichten des Büros für Kreditauskunft AG (Biuro Informacji Kredytowej S.A.) zutreffen, die sich auf Informationen über Kunden beziehen, denen kein Kredit eingeräumt wurde.

⁴ IFRSs 18, § 30a; IFRSs 39, §9 und AE 5-AE 8 IFRSs 39.

⁵ Z.B. aufgrund der Arbeitszeitmenge, die für konkrete mit der Krediteinräumung verbundene Tätigkeiten bestimmt ist.

4. DIE ABRECHNUNG VON TRANSAKTIONSKOSTEN UND IHR EINFLUSS AUFS FINANZERGEBNIS DER BANK

Erträge aus den vom Kunden bezogenen Provisionen (Gebühren) netto, die mit dem Effektivzins abgerechnet werden, werden auf die Gewinn- und Verlustrechnung der Bank im Rahmen der Zinserträge gebucht. Die Beachtung der Transaktionskosten in der Berechnung des effektiven Zinssatzes beeinflusst eine Senkung von Kosten für Banktätigkeit in der laufenden Berichtsperiode und bewirkt eine Änderung der Struktur der Gewinn- und Verlustrechnung einer Bank. Diese Kosten werden nämlich aufs Finanzergebnis bezogen, in der Zeitperiode bis zur Kreditfälligkeit, und nicht im Zeitpunkt, in dem diese Kosten getragen werden. Einem Zeitaufschub unterliegen auch Provisionseinkünfte; das bildet aber keine besondere Lösung. Im Einklang mit dem Grundsatz der Vergleichbarkeit von Erträgen und Kosten sowie dem Grundsatz über ein Memorandum waren die Banken verpflichtet, Provisionen in der Zeit (lineare Methode) auch vor der Novellierung des Gesetzes über Rechnungswesen abzurechnen.

Das unten dargestellte Beispiel veranschaulicht die Ergebniswirkungen bei der Änderung der Bewertungsprinzipien von Bankkrediten nach dem 1. Januar 2005, die bei ihrer Bewertung die Transaktionskosten zu berücksichtigen ermöglichen.

FALLBEISPIEL

Eine Bank hat 10 Kredite bei der Laufzeit von 4 Jahren, jeder über 100 000 Zloty, jeweils mit der Verzinsung von 12% erteilt. Die bezogene Provision hat von jedem Kredit 2% betragen, die Transaktionskosten bildeten:

- Eintragungen in die Hypothek: $10 * 200 \text{ Zloty} = 2000 \text{ Zloty}$,
- Berichte des Büros für Kreditauskunft (BIK S.A.): $10 * 50 \text{ Zloty} = 500 \text{ Zloty}$.

Die Kredite werden in den gleichen Raten – Kapital und Zinsen zu je 32 500 Zloty abbezahlt.

Man soll eine Bewertung von Krediten aufgrund amortisierter Kosten am Bilanztag durchführen. Der Effektivzinssatz wird mit Hilfe der Finanzfunktion IRR berechnet und beträgt:

$$P_0 = \sum_{t=1}^n C_t(1+r_e)^{-t} P_0 = \sum_{t=1}^n C_t(1+r_e)^{-t}, \text{ d.h.}$$

$$982.500 \text{ Zloty} = \sum_{t=1}^4 325000(1+r_e)^{-t} \rightarrow r_e = 12,2240\%$$

Die Berechnungen für amortisierte Kosten zeigt die untenstehende Tabelle.

Jahr	Amortisierte Kosten am Jahresanfang	Zinsen nach dem Effektivzins	Geldströme in dieser Zeitperiode	Bewertung aufgrund amortisierter Kosten am Laufzeitende
1	982 500	120 100,6	325 000	777 600,6
2	777 600,6	95 053,7	325 000	547 654,3
3	547 654,3	66 945,1	325 000	289 599,4
4	289 599,4	35 400,6	325 000	0

Im Fall, in dem keine Transaktionskosten der durchgeführten Kreditgeschäfte berücksichtigt werden, wären die Berechnungsergebnisse wie folgt (der Effektivzins betrug 12,3454%):

Jahr	Amortisierte Kosten am Jahresanfang	Zinsen nach dem Effektivzins	Geldströme in dieser Zeitperiode	Bewertung aufgrund amortisierter Kosten am Laufzeitende
1	980 000	120 985,1	325 000	775 985,1
2	775 985,1	95 798,59	325 000	546 783,7
3	546 783,7	67 502,72	325 000	289 286,4
4	289 286,4	35 713,61	325 000	0

Aus den in diesen Tabellen gefassten Berechnungen kommt es hervor, dass die Beachtung von Transaktionskosten bei der Bewertung von Krediten verursacht, dass die Tätigkeitskosten aus der ersten Berichtsperiode um 2 500 Zloty niedriger sind; auch Erträge aus der Banktätigkeit werden um 884,50 Zloty (120 985,1 – 120 100,6) niedriger, das Finanzergebnis brutto vergrößert sich dagegen um 1615,5 Zloty (2 500 – 884,5). Auf diese Weise erfolgt ein Aufschub der Transaktionskosten, der eine entsprechende Ergebniswirkung auch in den nächsten Perioden der Kreditlaufzeit hervorruft. Für entsprechend große Zahl der eingeräumten Kredite werden Änderungen in der Struktur der Gewinn- und Verlustrechnung der Bank bedeutend.

5. SCHLUSSTEIL

Die Erwägungen über die Bewertung der Kreditforderungen beendend soll man bemerken, dass der Katalog von Transaktionskosten eine wesentliche Bedeutung hat; es geht um die Transaktionskosten, die durch die Bank bei der Überwachung des effektiven Zinssatzes angenommen wurden. Insbesondere betrifft das Handelsbanken, die in ihren Portefeuilles große Mengen von Kreditverträgen haben. Wenn z. B. einem konkreten Kreditvertrag Prämien für Mitarbeiter (Bankangestellten) für den Verkauf von Krediten zugeschrieben werden, erlaubt das den Banken Gehaltskosten zu senken und Kennzahlen zur Effektivität der Beschäftigung zu verbessern.

Eine gediegene Zuordnung mancher Kosten der Banktätigkeit als Grenzkosten zu abgeschlossenen Kreditverträgen ist jedoch keine leichte Aufgabe. Beispielsweise können gewisse von der Bank getragene Allgemein-Verwaltungskosten einen Verdacht auf sich lenken, dass sie einen Transaktionscharakter haben (z.B. Druckkosten von Vertragsmustern, Herstellung von Kreditkarten); man soll jedoch daran denken, dass die Anwendungserklärungen, die für IFRSs 39 veröffentlicht wurden, die Möglichkeit einer Beachtung von Verwaltungskosten bei der Kreditbewertung ausschließen.

Eine unberechtigte (falsche) Zuordnung der Kosten für die Bankhandlung zu Transaktionskosten für Grundtätigkeit d.h. - für Banktätigkeit, die bei der Kreditbewertung berücksichtigt werden sollen, kann ihren langjährigen Aufschub (z. B. im Fall von Hypothekarkrediten) und eine unbegründete Überhöhung der laufenden Bankgewinne bewirken. Es scheint daher, dass eine präzise Bestimmung bei der Inlandsregulierung für externen Katalog und im besonderen für innere Transaktionskosten bei Kreditgeschäften alle Zweifel über ihre Unterscheidung und Anerkennung erklären könnte. Außerdem würde das in der Praxis erlauben, die Möglichkeiten einer unberechtigten Versetzung von Kosten zwischen verschiedenen Sparten in der Banktätigkeit zu begrenzen, um ihre Rentabilität zu verbessern.

LITERATURVERZEICHNIS

- 1) T. Bakalarski, Wycena za pomocą skorygowanej ceny nabycia (Bewertung mittels des korrigierten Anschaffungspreises), Rachunkowość Nr. 1/2003.
- 2) J. Bieniowski, Instrumenty finansowe i efektywna stopa procentowa (Finanzinstrumente und Effektivzinssatz), Bank Nr. 10/2002.

- 4) M. Marcinkowska, Skorygowana cena nabycia – nowa kategoria ceny (Korrigierter Anschaffungspreis – eine neue Preiskategorie), *Rachunkowość* Nr. 10/2002.
- 5) Międzynarodowe Standardy Sprawozdawczości Finansowej (MSSF) 2007 (International Financial Reporting Standards(IFRSs)) 2007, Stiftung des Komitees für International Financial Reporting Standards, London 2007.
- 6) E. Pielichaty, Wycena należności kredytowych w świetle regulacji krajowych i Międzynarodowych Standardów Rachunkowości (Bewertung von Kreditforderungen angesichts der inländischen Regulierungen und Financial Reporting Standards) in: Standardy rachunkowości wobec wyzwań współczesnej gospodarki (Financial Reporting gegen Herausforderungen der modernen Wirtschaft) unter der Leitung von Z. Messner, B. II, PN AE Katowice, Katowice 2006, S. 357-368.
- 7) Rozporządzenie MF w sprawie szczegółowych zasad uznawania, metod wyceny, zakresu ujawniania i sposobu prezentacji instrumentów finansowych z dnia 12.12.2001 (Verordnung des Finanzministeriums über ausführliche Grundlagen für Anerkennung, Bewertungsmethode, Veröffentlichungsumfang und Präsentationsweise von Finanzinstrumenten) (Gesetzblatt vom 22. Dezember 2001 Nr. 149, Pos. 1674), mit nachträglichen Änderungen.
- 9) Ustawa o rachunkowości (Gesetz über Rechnungswesen). Gesetzblatt Nr. 121 vom 29. September 1994, mit nachträglichen Änderungen

PUBLIC
ECONOMICS

FISCAL EFFECTS OF STATE OWNERSHIP OF ENTERPRISES

Boris Crnković, Ph.D.¹, Željko Požega, Ph.D.¹, Goran Sučić, Ph.D.²

¹Assistant Professor, Josip Juraj Strossmayer University of Osijek,

Faculty of Economics in Osijek, Croatia

bcrnko@efos.hr, zpozega@efos.hr

²Senior Lecturer, University of Split, Faculty of Philosophy, Croatia, goran.sucic@ffst.hr

ABSTRACT

The interest of the majority of scientists dealing with the issue of state-owned enterprises is primarily focused on the reasons for the existence of state-owned enterprises. The key issue in these debates is whether the state should be the owner of enterprises in which cases these ownership can be justified. Furthermore the focus of a large number of scientists is the question of microeconomic (in)efficiency of state-owned enterprises. On the other hand, when talking about privatization as one of the primary goals of privatization are fiscal effects putted forward. There are only few authors and papers that studied the issue of fiscal effect of (not-privatized) state-owned enterprises. The aim of this paper is to explore theoretical and practical experience of fiscal effects of state ownership of Enterprises, with special reference to the fiscal effects of state-owned enterprises in the Republic of Croatia.

JEL Classification:G32

Key words: State Owned Enterprises, State Budget, Privatization, Microeconomic efficiency; Fiscal Effect

1. INTRODUCTION

Views towards state ownership on the one hand and private property on the other hand throughout history have changed often. However, strengthening the role of government in the economy which is driven by the great economic crisis of the late twenties to thirties of last century, and continued with the end of the Second World War led to a significantly more active role of state ownership in many economies. In the decades after World War II, the vast majority of European gov-

ernments, regardless of political viewpoint, were largely harmonious about using strong role of government in their national economies.

However, in the western economies in the late seventies nationalized industries have begun to lose their popularity. Disappointment with state ownership has begun to grow along with the perception that state enterprises were inefficient, which resulted with the launch of privatization programs, among which is certainly one of the most famous in Britain during the mandate of the prime minister Margaret Thatcher. With recognizing the big need for adjustments of market economies of Eastern type, in Eastern European countries, however, privatization has become an important factor in the fall of socialist economic policies.

The interest of the majority of scientists dealing with the issue of state-owned enterprises is primarily focused on the reasons for the existence of state-owned enterprises. The key issue in these debates is whether the state should be the owner of enterprises in which cases these ownership can be justified. Furthermore the focus of a large number of scientists is the question of microeconomic (in)efficiency of state-owned enterprises. On the other hand, when talking about privatization as one of the primary goals of privatization are fiscal effects putted forward. There are only few authors and papers that studied the issue of fiscal effect of (not-privatized) state-owned enterprises. The aim of this paper is to explore theoretical and practical experience of fiscal effects of state ownership of Enterprises, with special reference to the fiscal effects of state-owned enterprises in the Republic of Croatia.

The paper is organized as follows: in the second chapter which bears the name sums up the theoretical considerations of state ownership of enterprises as well as the arguments for and against its existence, as well as the arguments for and against the privatization of state-owned enterprises. In the third chapter, on a simple theoretical model perceive the potential effects of state ownership of enterprises as well as the effects of privatization on the state budget. The fourth chapter outlines the evolution of the portfolio of the Croatian state and reviews the effects of state ownership of enterprises in the Croatian state budget. The fifth chapter describes the basic conclusions of the study.

2. EVOLUTION OF STATE OWNERSHIP OF ENTERPRISES

Direct government intervention in the economy, although it has been present since ancient civilizations, is particularly intense in the 20 century as a result of major depression and other financial crises, World War II and the related industry and

infrastructure destruction and disintegration of colonial empires. Reconstruction after World War II forced the government to take a direct role in the economy, and thereby nationalize or create enterprises in strategic sectors (particularly in energy, transport and banking segment).

According to Toninelli (2000), there are four main groups of state-owned enterprises:

- utilities such as electricity, water, communications and transport;
- basic products such as coal, oil and steel;
- financial services, such as banks, insurance companies and social security and
- social services such as education and health.

So, in addition to state-owned companies that provide utility services, which are often subject to natural monopoly, a range of commercial activities that can engage in state-owned enterprises is quite broad, and the share of state enterprises in national economies varies according to historical changes in the political climate and ideological powers; from a completely central-managed economies of the Soviet type on one hand, to a completely open market based on private property on the other hand. The ultimate extremes on both sides are not common, but throughout history there have been movements in both directions along this spectrum, partly because, as stated by Toninelli (2000), the historical development shows that the failure of the government is almost as often as downfall of market. In addition to political and ideological motivation for the establishment of state-owned enterprises, according to Toninelli (2000), there are three key reasons for their existence: market failure; promoting economic growth based on long-term planning and industrial and financial rehabilitation as a consequence of the economic crisis. Megginson (2005) also states that the role of state ownership often changed through history, and contemporary economic theory supporters justify the existence of state ownership through three key arguments:

- The first reason is the fact that state ownership is considered a good way of ensuring balance between economic and general social goals in companies and avoiding the orientation of afore mentioned companies on solely maximizing profits.
- Second, state ownership is motivated as a response to problems and questions of market failure, especially the challenges of the economic feasibility of

natural monopolies and challenges of internalization of externalities (such as pollution, for example).

- And third, state ownership is justified in circumstances where there is information asymmetry between the principal (society as whole) and agent (company leadership), when complete and quality contracts cannot be made and carried out.

The assumption justification of state ownership in all three cases is that the governments act benevolently and accordingly with the goal to increase the general social welfare, and that consequently the property of the state is economically efficient. Certainly, the state property was also imposed a lot of times in history with stances of certain political parties or ideologies especially as a precondition for the redistribution of wealth and income from less to more “deserving” members of society, but this issue is primarily a question of political power and the justification of an ideology, not issue of serious economic analysis.

When we talk about the reasons against the existence of state ownership of enterprises, or the reasons for privatization, the most frequently highlights the belief that state ownership is inefficient. Therefore, most of the literature deals with precisely this issue, the issue of inefficiency of state ownership.¹ When it comes to the issue of inefficiency of state ownership there have been developed numerous theories, all of which can be reduced to two issues: the behavior of managers of state enterprises and the behavior of politicians as a representative of the owner of the company. If we focus on the managers of state enterprises is then considered inefficient state enterprises due to the fact that managers of these enterprises are not sufficiently controlled (compared to managers of private enterprises) and therefore to them goal to maximize profit may not be the most important goal. For the state-owned enterprises there is no danger of bankruptcy, there is no danger of takeover and the market for managers is not developed. Therefore managers can use the opportunity to promote some of their own goals which need not to coincide with the goal of maximizing profit. If we turn the focus on politicians as the owners of the company (or representatives of the owner) it is clear that their main goal is winning the next election and they will try to use the state-owned enterprises as a means

¹ For example: Kay & Thompson (1986), Vickers & Yarrow (1988), Stiglitz (1991), Yarrow (1986), Laffont & Tirole (1990), Willig (1993), Galal, Tandon & Vogelsang (1994), Tirole (1994), McLindon (1996), Shleifer & Vishny (1996), Schmidt (1990), Perotti & Guney (1993), Shleifer (1998), Nellis (1994)

of achieving this goal. For example they can use the state companies to maximize employment as an important tool in winning elections.

Therefore, when promoting privatization programs, the basic goal set is to increase the efficiency of state enterprises after privatization. Almost always among the goals the goal of improving the budgetary position of the government is comprised. In fact, according to Eckstein, Rozevich and Zilberfarb (1993), this goal is even mentioned as the main goal of privatization in many countries. Does this mean that the state enterprises themselves without privatization realize negative effects on a state budget? Answers are offered in the next chapter.

3. FISCAL EFFECTS OF STATE OWNERSHIP OF ENTERPRISES – THEORETICAL CONSIDERATIONS

According to Guisla (1997) goal of budgetary and financial improvements focuses on improving the position of the government, in the sense that the sale of the state owned enterprises, as a rule, generate recurring revenue for state budget that can be used for current expenses, reduce taxes, reduce public sector deficits or public debt. In addition, if the privatized company was the recipient of subsidies from the state, privatization, if anything, can result in reduced financial pressure on the budget, and as such improve the government's cash flow. On the other hand, according to Heller and Schiller (1989), there are two elements in the fiscal impact of privatization. First is the net change in the revenue flow to the government arising from the size and timing of the net revenue stream to the government from the privatized firm, relative to the revenue flow if the firm had remained public. The second is the change in the net wealth position of the government. It often happens that only the first change related to change in revenue is taken into account, while completely neglecting the change in net asset value of the state. Through the next model² we show that both changes are important. Assumptions of this model are:

- privatization does not lead to changes in the results of the enterprise after privatization;
- the enterprise was sold at a price that corresponds to the amount of discounted future after-tax profits of enterprises;
- the amount of future profits is positive.

² Taken and adjusted according to Islam (2001)

In these situations, what happens to government revenues? At the selling point of course the state will reduce its deficit for the price at which it sold the enterprise. So at the time of privatization, the deficit is reduced. However, assuming that the amount of profits is positive as it is indicated in future periods, the state will lose revenue that they would collect through dividends if the enterprise has remained in state ownership.

If the discount rate at which the discounted amount of future profits of the privatized companies that are equal to the interest rate then the state can negative impact on future deficits resulting from loss of revenue from dividends remove by purchase of another financial assets that will in the future bring revenue for the above mentioned interest rate. Privatization in this case will only mean a exchange of property between private and public sector, or change the structure of state property, without affecting either short- or long-term government deficit. But if the government decides to use the revenues from privatization in current spending, privatization will at this point, therefore, have an impact on reducing the deficit but the deficit would be larger in the future.

If we change the assumption that the company which operates is privatized positively and include the situation that the company that is privatized operates at a loss, we will see that the situation has not substantially changed.

Privatization is often advocated in exactly those cases when an enterprise operates with a loss. Of course here we still take in account the assumption that the privatization of enterprises does not cause changes in the business performance of enterprises. Thus, it is expected that the enterprise will continue to operate with a loss in the future. If an enterprise has negative future revenue from profits, i.e. when it does not generate profits but losses, then the price at which the government sells an enterprise also have be negative. Namely, because the expected loss in the future buyer will seek a subsidy (usually in form of tax debt write-off) from the government, which must equal to the present value of future losses, or the buyer will seek a series subsidies in the future which must be equal to future losses. The most likely outcome is that the government would agree to a one-time subsidy, which will mean a higher deficit at the time of sale, and a smaller deficit in the future. However, since the government would likely borrow the funds that would give like a subsidy to the buyer, in the future it will in future have to pay the cost of that debt so that it will have deficit which is equal to that which would it have by remaining the owner of the enterprise which operates at a loss.

As we have seen from above mentioned two examples, privatization does not affect the size of the state budget deficit for the short and long term effects of privatization of opposite sign and therefore annihilate each other (valid only under the assumption that there is no change in the operational result of privatized enterprises). Namely, if privatization leads to increased efficiency of enterprises, it will in the future bring higher profits (or smaller losses). Impact on deficit reduction in this case is obvious. Namely, since the price at which the privatized company was sold equals discounted future profits the state will be able to ask for a higher price for the company because of expected increase of future profits. In this case, higher price leads to decreased deficit.

Likewise, we can observe the impact of privatization on the net value of state assets. If we make an analysis that is analogous to the previous analysis, we will see that the results are analogous to the earlier ones. If there is no change of corporate performance after privatization net value of state assets would remain unchanged. In this case come only changes in the structure of assets that is owned by the state. And if the privatized enterprise would operate with higher profits there would be an increase in net worth of government asset. The previous arguments are valid of course only if the state is able to efficiently charge the price for the enterprise and efficiently charge future tax.

Analysis conducted above shows that privatization is not necessarily in the long run connected with increase in state revenue. On the contrary, state ownership of enterprises is to be regarded as ownership of any other property which over time brings a return and then state ownership and without privatization can have positive effects on the budget. The key is effective management of state enterprises, because only effective management can maximize returns. If governments want positive effects of state ownership of enterprises on budget they would have to behave in the same manner as private owners treat their businesses and seek for profit maximization. Are governments able to introduce effective management, remains an open question?

4. FISCAL EFFECTS OF STATE OWNERSHIP OF ENTERPRISES IN CROATIA

Before analyzing the impact of state ownership of enterprises on Croatian state budget it is necessary to briefly review the evolution of state ownership of enterprises in Croatia. Most of the state ownership of enterprises managed by the CPF in fact represents the stocks and shares that remained non-privatized in the early stages of privatization in Croatia. But in Croatia appears an absurdity, and this is the fact that

ownership before the fall of socialism was not state, but socially, and only later became state. The Transformation Act³ (of socially owned enterprises), which was the initial step in the privatization process in Croatia, has predicted that social ownership that after transformation does not become private becomes state. Ownership is transferred to an agency for privatization, which has the task to privatize it. Although the vast majority of enterprises privatized first through transformation, and later through privatization, until today a large number of enterprises is not privatized.

It is very difficult to conduct any analysis of state-owned enterprises in the Republic of Croatia because it is extremely difficult to find adequate and complete data. But in 2010. and 2011. two documents are published that contain a large number of useful information on the performance of state owned enterprises. The first is a report on the performance of enterprises of special national interest⁴ in 2009.⁵ The report covers 69 companies in which the state has from 22.33% to 100% stake in the ownership structure of provided that the state owns only 19 companies (100%), in 5 companies the state is in minority-owned (50%) while in other companies, the state is majority owner(> 50%). Croatian Privatization Found (2011): Report of the Supervisory Board of the CPF on the work of the CPF in 2010.⁶ The following analysis will be based primarily on the second document.

Croatian Privatization Fund⁷ managed in 2010.⁸ with shares in 730 enterprises, of which 478 joint stock companies and 252 companies with limited liability. Of

³ Transformation Act, Official Gazette of the Republic of Croatia no. 19/91, 83/92, 84/92, 94/93, 2/94, 9/95, 21/96, 118/99.,

⁴ They are listed on the proposal of the Croatian Government by the Croatian Parliament. The last on the list of decisions was adopted in 2009. (Odluka o popisu trgovačkih društava od posebnog državnog interesa – NN 132/2009.)

⁵ The report on the performance of enterprises of special national interest in 2009 is a material which contains an analysis of 69 operations of Companies/Groups in accordance with the decision of the Croatian Parliament on the list of companies of special state concern. According to the present list, 66 companies/groups are declared a special state interest. The report includes analysis of the business for two institutions; Hrvatske vode (Croatian Waters), Hrvatska Radiotelevizija (Croatian Radio Television) and for financial agency which were until the adoption of the decision (concluded by the report of the companies which are owned in majority by the state for 2008.) were integral part of business reports that the Ministry of Finance suggested to the Government of Republic of Croatia for approval. (Government of Republic of Croatia, 2010.)

⁶ Croatian Privatization Found (2011)

⁷ Croatian Privatization Fund was discontinued in 2011, and its function was taken over by the Agency for State Property Management (AUDIO)

⁸ All the data according to Croatian Privatization Found (2011)

478 joint stock companies in which 217 enterprises were listed on capital markets, and 261 enterprises were not listed in the capital market. Total nominal value of shares of 217 companies managed by the CPF, which are listed on the ZSE, is HRK 9,320,455,415.00, and the market value of these shares, the final price for the shares of companies listed on the Zagreb Stock Exchange in 2010. year amounted to HRK 8,817,272,858.00, i.e. 5.39% less than nominal value. Total nominal value of shares of 261 companies managed by the CPF, which are not listed on the Zagreb Stock Exchange, is HRK 3,194,369,708.00. Total nominal value of shares 252 companies with limited liability managed by the CPF amounted to HRK 655,216,594.00.

Although from the report it is difficult to isolate the pure effects of state ownership of enterprises on the Croatian budget from the following data can be read out certain trends and drawn some conclusions:⁹

- In 2010. year to the CPF is paid on the amount of HRK 10,255,909.41 based on the dividend. This amount is not a dividend of companies in 2010, but it is a payment on account of the CPF on the basis of which the dividend was paid in 2010. year and preceding year, and was acquired by the CPF for the enforcement of unpaid dividends of companies from previous years.
- The total amount of bank loans to the CPF on the beginning 2010. year was HRK 523,321,085.78 and the total amount of bank loans to the CPF at the end of the 2010. year was HRK 628,121,085.78, an increase of HRK 104,800,000.00 compared to the beginning of 2010. year, or an increase of 20.10%.
- At the end of 2010. The CPF has a short-term loans receivable from companies in the total amount of HRK 374,356,536.72, from 27 companies, based on a total of 94 contracts awarded on the short-term loans, as well as the collection of funds from the issuance of insurance.
- CPF has started to extend short-term loans to enterprises in 1997. , and since then until 2010. The Company paid short-term loans as the amount of HRK 1,583,031,630.97. This amount is the amount paid short-term loans CPF companies, not the total amount of approved short-term loans CPF Company, whichever is greater. From the total amount of paid short-term loans of HRK 1,583,031,630.97 is:

⁹ All the data according to Croatian Privatization Found (2011)

- HRK 331,813,907.70 collected from companies (only principal)
- HRK 201,199,264.88 turned into fundamental stake in the company (principal + interest),
- HRK 381,750,398.16 written off
- HRK 5,486,342.20 initiated law suit (principal + interest),
- HRK 1,228,121,266.98 reported to the bankruptcy estate (principal + interest), and
- HRK 374,356,536.72 recorded as receivables (principal + interest)

These data, and discovered secret documents¹⁰ of the Croatian Government on write off of tax debts for some companies (mainly state-owned) in the amount of over HRK 2.5 billion, indicate a potentially negative effects of state ownership of enterprises on state budget. In terms of fiscal consolidation and the necessary reduction the deficit, these data suggest the need of reduction the negative effects of state-owned enterprises to the state budget. There are two solutions how this can be achieved. The first is privatization, which is not real in the current economic situation. Another way is to establish a system of management of state enterprises, which will guarantee to these more effectively management which is extremely challenging task.

5. CONCLUSION

State ownership of enterprises, historically speaking, comes from a very large spectrum of reasons and depending on the historical period, economic point and above all a political point it is sometimes more advocated, and sometimes less. The main reasons to justify the existence of state ownership are the beliefs that it is a good solution for the market failure situation (e.g. natural monopoly) and the situation of information asymmetry between owners and managers of enterprises. Further state ownership of enterprises is a good tool for achieving other economic and noneconomic goals (e.g. regional development) except the profit maximization. On the other hand, the state-owned enterprises are criticized due to inefficiency,

¹⁰ Poslovni.hr (2012): Otkrivena privilegirana poduzeća kojima je bivša Vlada otpisala dugove, available at <http://www.poslovni.hr/vijesti/otkrivena-privilegirana-poduzeca-kojima-je-bivsa-vlada-otpisala-dugove-198786.aspx>, acces: (10-03-2012)

and when advocating the privatization of key objective is to increase the efficiency of privatized enterprises.

In addition to increasing the efficiency one of the most frequently mentioned goals of privatization is improving the fiscal position of the government. But in the work conducted analysis shows that privatization is not necessarily in the long run connected with increase in state revenue. On the contrary, state ownership of enterprises is to be regarded as ownership of any other property which over time brings a return and then state ownership and without privatization can have positive effects on the budget. The key is effective management of state enterprises, because only effective management can maximize returns. If governments want positive effects of state ownership of enterprises on budget they would have to behave in the same manner as private owners treat their businesses and seek for profit maximization. Are governments able to introduce effective management, remains an open question?

REFERENCES

- Barnett, S. (2000): Evidence on the Fiscal and Macroeconomic Impact of Privatization. IMF Working Paper WP/00/130, International Monetary Fund, Washington
- Croatian Privatization Found (2011): Izvješće Nadzornog odbora HFP-a o radu HFP-a u 2010. godini (2010), Croatian Privatization Found, Aviable at <http://www.sabor.hr/fgs.axd?id=1801>, acces: (10-01-2012)
- Eckstein, S., Rozevich, S. & Zilberfarb, B.-Z. (1993): Privatization in Israel in Ramanadham, V.V. (ed) (1993): Constraints and Impacts of Privatization, Routledge, London
- Galal, A., Jones, L., Tandon, P. & Vogelsang, I. (1994): Welfare Consequences of Selling Public Enterprises: An Empirical Analysis, World Bank & Oxford University Press, New York
- Government of Republic of Croatia (2010): Izvješće o poslovanju trgovačkih društava od posebnog državnog interesa za 2009. godinu, Zagreb, Aviable at www.sabor.hr/lgs.axd?t=13&id=35628, acces: (10-01-2012)

- Guislai, P. (1997): *The Privatization Challenge: A Strategic, Legal, and Institutional Analysis of International Experience*, World Bank Regional and Sectoral Studies, World Bank, Washington, D.C.
- Heller, P.S. & Schiller, C. (1989): The fiscal impact of privatization, with some examples from Arab countries, *World Development*, 17 (5): 757-767.
- Islam, A. (2001): *Privatization: A Panacea or a Palliative*. Development Papers, No. 22, United Nations Economic and Social Commission for Asia and the Pacific, New York
- Kay, J.A., & Thompson, D.J. (1986): Privatisation: a policy in search of a rationale, *The Economic Journal* 96, nr. 381, p. 18 - 32
- Laffont, J.-J. & Tirole, J. (1990): *Privatization and Incentives*, MIT, Cambridge
- Mackenzie, G.A. (1998): The macroeconomic impact of privatization, *IMF Staff Paper* 45, nr. 2, p. 363-373.
- McLindon, M.P. (1996): *Privatization and Capital Market Development*, Praeger Publishers
- Meggison, W. L. (2005): *The Financial Economics of Privatization*, Oxford University Press, New York,
- Meggison, W. L., & Netter, J. M. (2001): From State to Market: A Survey of Empirical Studies on Privatization, *Journal of Economic Literature* 39, nr. 2, p. 321 - 331
- Nellis, J. (1991): Privatization in Reforming Socialist Economies, in Bohm, A. & Kreacic V. (eds.) (1991): *Privatization in Eastern Europe: Current Implementation Issues*, International Centre for Public Enterprises in Developing Countries, Ljubljana, p. 15-23
- Nellis, J. (1994): *Is Privatization Necessary?*, FDP Note No.7, The World Bank, Washington
- Perotti, E., & Guney, S. (1993): The Structure of Privatization Plans, *Financial Management*, nr. 22, p. 84-98
- Poslovni.hr (2012): Otkrivena privilegirana poduzeća kojima je bivša Vlada otpisala dugove, available at <http://www.poslovni.hr/vijesti/otkrivena-privilegirana-poduzeca-kojima-je-bivsa-vlada-otpisala-dugove-198786.aspx>, acces: (10-03-2012)

- Schmidt, K.M. (1990): *The Costs and Benefits of Privatization*, Discussion Paper A-287, University of Bonn, Bonn
- Shleifer, A. (1998): *State versus Private Ownership*, Mimeo - Harvard University,
- Shleifer, A., & Vishny, R. (1996): *A Theory of Privatization*, *Economic Journal*, nr. 106, p. 309–319
- Stiglitz, J. (1991): *Theoretical Aspects of the Privatization: Applications to Eastern Europe*. Institute for Policy Reform Working Paper Series, Institute for Policy Reform,
- Tirole, J. (1994): *The Internal Organization of Government*, *Oxford Economic Papers*, nr. 46, p. 1–29
- Toninelli, P. (2000): *The rise and fall of state-owned enterprise in the western world*, Cambridge University Press, Cambridge
- Transformation Act, *Official Gazette of the Republic of Croatia* no. 19/91, 83/92, 84/92, 94/93, 2/94, 9/95, 21/96, 118/99.,
- Vickers, J., & Yarrow, G. (1988): *Regulation of Privatized Firms in Britain*, *European Economic Review*, nr. 32, p. 456 – 472
- Whitfield, D. (1992): *The Welfare State - Privatization, Deregulation, Commercialisation of Public Services: Alternative Strategies for the 1990s*, Pluto Press, London
- Willig, R. D. (1993): *Public versus Private Regulated Enterprise*, *Proceedings of The World Bank Conference on Development Economics*, World Bank
- Yarrow, G. (1986): *Privatization in Theory and Practice*, *Economic Policy*, nr. 2, p. 324–364.

THE PUBLIC SECTOR (IN)EFFICIENCY: CROATIAN EXPERIENCE

Ivana Barković Bojanić, Ph.D.
J.J. Strossmayer University of Osijek
Faculty of Law in Osijek
Croatia
Mirta Šaban, LL.B.

ABSTRACT

The efficiency is one of the basic questions in each organization, no matter are they functioning in the public or private sector. An efficient organization is considered to produce the maximum possible outputs given its inputs, or to produce a certain level of output with the minimum amount of inputs.

While the importance of efficiency in the public sector is widely recognized, its measurement in the public sector remains a challenge due to its complexity. The purpose of this paper is to present a notion and concept of the efficiency in the public sector. In the light of theoretical concept of efficiency, the paper will briefly discuss the (in)efficiency of the public sector, i.e. public administration of the Republic of Croatia.

JEL Classification: H0, D61, G14

Keywords: public sector, efficiency, effectiveness, Republic of Croatia

1. INTRODUCTION

There are many challenges that the countries of European Union (EU) and beyond have been facing that require more efficient public sector in general and public administration in particular. These challenges mainly stem from demographic changes (higher spending on life-long learning, pensions and long term care) and globalization (adjustment costs, mobile taxpayers). Namely, globalization, demographic changes, possibilities of economic growth and development in the very

competitive and changing environment require an efficient public sector. New jobs are created due to the economic growth, which is a result of the private investments, and these investments, to the large degree, depend upon the new role of the state, i.e. they depend upon: efficiency of the public administration, its procedures and the quality of justice system. Thus, it is not surprising that the theoretical discussion on the role of the state has been shifting towards empirical assessments of the efficiency of the public sector and its activities. There is growing number of empirical studies dealing various effects of public sector activities such as stabilization, allocation and distribution of public expenditure (see, for example, Gupta and Verhoeven, 2001, Gwartney et al. 2002, Afonso et al., 2006).

The Republic of Croatia does not differ when it comes to being pressured by the necessity to improve the efficiency of its public sector, which is continuously evaluated as one of the most problematic areas in the effort to increase the competitiveness of the Croatian economy (see for example, reports of the National Competitiveness Council 2002-2008).

While the importance of efficiency in the public sector is widely recognized, its measurement in the public sector remains a challenge due to its complexity. The purpose of this paper is to present a notion and concept of the efficiency in the public sector. In the light of theoretical concept of efficiency, the paper will briefly discuss the (in)efficiency of the public sector, i.e. public administration of the Republic of Croatia.

2. CONCEPT OF EFFICIENCY IN THE PUBLIC SECTOR

More than fifty years ago, Farrell (1957) introduced the methodology to measure efficiency and accentuated its importance for economic policy makers by stating that it was important to know how far given industry can increase its output by increasing its efficiency without absorbing further resources.

The efficiency – measured as the input-output ration - is one of the basic questions in each organization, no matter are they functioning in the public or private sector. An efficient organization is considered to be one that produces the maximum possible outputs given its inputs, or one that produces a certain level of output with the minimum amount of inputs.

The efficiency in the economy is treated in terms of *the production* and in terms of the *allocation*. *Efficient production* is achieved when a product is created at its low-

est average total cost. In another words, efficient production relates to the ability to produce a good using the fewest resources possible. *Allocative efficiency* means that scarce resources are used in a way that meets the needs of people in a Pareto-optimal way. One could say that this is morally optimal way to use scarce resources. Measuring organization's efficiency can be viewed as following sequences: (1) inputs and outputs need to be defined and measured; (ii) it is necessary to define what outputs could be achieved for any given set of inputs; and (iii) the organization's actual inputs and outputs are compared with the set of feasible inputs and outputs (Mandl et al., 2008). This may be simple in the case of private firm selling its outputs in the competitive market whereby prices are known and output can be quantified.

However, defining and measuring efficiency of the public sector¹ remains challenging. Majority definitions of public sector efficiency found in the literature (e.g. Grossman et al., 1996, Abedian and Biggs, 1998) call upon the pioneering work of Samuelson (1954) regarding the efficient provision of the public good. The Samuelson conditions for allocative efficiency in public sector requires that the sum of individual marginal rates of substitution between a public good and the private numeraire equals the marginal cost of the public good. Different theoretical cases on public sector efficiency can be traced in the literature. For example, Grossman et al. (1996) discussed about the public sector inefficiency in large US cities. Tiebout (1956) suggested that the competitive forces produced by people 'voting with their feet'² might lead to approximate efficiency, while Brueckner (1982) argued that community maximization of property values leads to efficiency.

Measuring efficiency in the public sector is exigent because there is a problem of establishing a clear relationship between input and output in the public sector. Namely, public sector organizations usually produce goods that are provided either free at the point of use or at a price that is not determined by market forces. This makes it quite difficult to define the (aggregate) output of the public service provider such as school or police force. Also, a large number of services provided are intangible such as, for example, policy advice (Curristine et al., 2007). Thus, the efficiency of the public sector is neither easy to define nor to measure.

¹ Even though the authors are aware of the distinction between public sector, public spending and public services, these notions are treated in an interchangeable manner in this paper.

² "Voting with their feet" figuratively means to express one's dissatisfaction with something by leaving, especially by walking away.

Efficiency is often confused or used in a transposable manner with the notion of the effectiveness. While efficiency relates the input to the output, the effectiveness relates the input or the output to the final objectives achieved. The best is to illustrate the difference by using the education system as an example. Namely, efficiency of the education system may be measured in terms of performance or attainment rates of pupils in certain age. The effectiveness is related to achieving the objective such as educational qualification of the working-age population as whole.³

2.1. Why public sector organizations are inefficient?

“Governments are not famous for efficiency”.
Mancur Olson (1973)

There is a widely accepted attitude among economists that the public sector organizations are inefficient compared to the private sector organizations. The public supports such an attitude, associating government and public sector with the red tape, bureaucracy and other obstacles to more efficient provision of public goods and services.

Academic scholars (e.g. Olson 1973, Tuckman, 1985, Stiglitz, 1999, Mandl et al., 2008), have identified various sources of public sector inefficiency. For example, public sector faces difficulties in production of collective goods and services and must deal with externalities. Its production of goods and services is not motivated by the profit, thus it does not have the same incentives to maximize productivity. The public sector is affected by institutional and structural factors or other country-specific features which go beyond the control of public authorities; the public sector is constrained by the regulatory environment, the institutional setting or even climate. When it comes to human resource management, public employees are limited in their freedom to work and behave since they are subjected to many rules and procedures. Also, due to the limiting nature of their salaries on one hand and the fact that their job is somewhat more secure than the job in the private sector, they tend to be less motivated for improving individual work performance. Public sector organizations are protected by the government in times when they would be bankrupted or closed under the market rules.

³ See more detailed elaboration on the distinction between efficiency and effectiveness in the Mandl et al. (2008).

Should public sector organizations be inefficient by default? Contemporary economic theory states that both public and private organizations are equally efficient if all assumptions about perfect market, complete information and full agreements are met. The rivalry in the automobile industry between French car producers Peugeot and Renault is often used to support the idea that both public and private organizations can be equally efficient and competitive. After the World War II, the family-owned firm was expropriated from Louis Renault posthumously by French government and was formally nationalised as *Régie Nationale des Usines Renault*. In the period from 1945 until 1996 when it was privatized, the company introduced many innovations in the car industry/market and was the biggest competitor to Peugeot even though it was state-owned. Even though this example is simplified argument for considering both public and private organisations to be able to be equally efficient, it is very indicative.

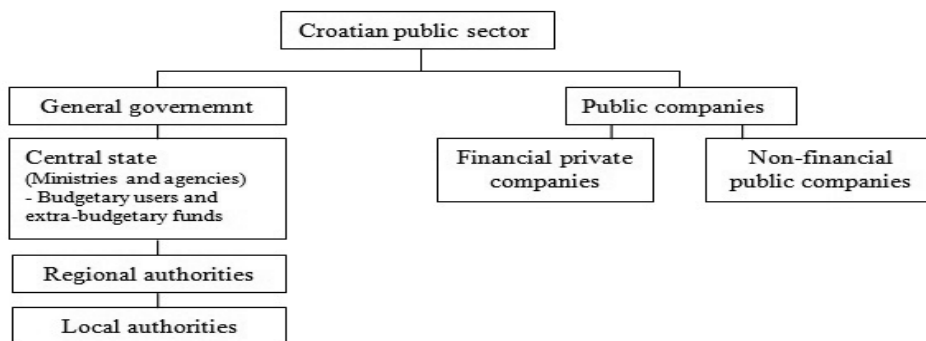
The need for the public sector to increase its level of efficiency has been recognized in the new public management. The new public management represents one of most dominant paradigms for public management and advocates reforms that shift traditional public administration to public management. The new public management does not question what the state should do, but how to do it better. Main elements of the new public management include various forms of decentralizing management with public services, for example, the creation of autonomous agencies and devolution of budgets and financial control, increasing use of markets and competition in the provision of public services (e.g., contracting out and other market-type mechanisms), and increasing emphasis on performance, outputs and customer orientation. In a nutshell, the new public management represents a set of reforms which should encourage public sector to apply managerial skills and techniques from the private sector (Larbi, 1999).

3. PUBLIC SECTOR OF THE REPUBLIC OF CROATIA

3.1. The structure of public sector

The public sector in Croatia consists of institutions that are owned by the state and provide public goods and services (figure 1). It embodies the state at all levels of its authority, central bank, various state funds, agencies and companies that are owned by the state.

Figure 1 The structure of the Croatian public sector



Ministries represent central government bodies. They perform professional activities that are related to scope of work of ministry itself as well as other professional activities that have been given to their authority by the special Acts. Currently, Croatia counts 20 ministries and 29 different agencies and extra-budgetary funds.

It is considered that approximately 25% of total employment in Republic of Croatia works in public sector (see table 1). The mentioned includes employees in government bodies, public services and public companies. The exact number of employees is known for those employed in government bodies (civil servants and employees) as well as in the Croatian Government offices and professional services.

Table 1 Civil servants and employees in 2010

	Total
Central government bodies	49044
Ministries	44941
Central government offices	112
State administrative organizations	3991
Croatian Government Offices	525
County Government offices	3087
Public administration altogether	52656

Source: Budak (2011).

In the category of budgetary users, next to government bodies, employees in agencies, institutes, extra-budgetary funds, etc., should also be mentioned. According to some analysis, Croatian public sector had 388000 employees in year 2008.⁴

3.2. (In)efficiency of the public sector

The importance of improving the public sector efficiency has been highlighted not only by globalization and demographic trends but also by the aspiration to become a fully-fledge member of the European Union. Even though the necessary reform process has been going on, the inefficiency of the public sector remains an Achilles heal of the Croatian economy/society. This is continuously emphasised by the annual reports of the National Competitiveness Council (2002-2008). The public and political debates support the thesis that the Croatian public sector is too big, claiming that it hinders economic growth and jeopardizes the macroeconomic stability in the context of current economic crises.

According to comparative analysis of the Croatian public sector with public sectors of EU countries conducted by Bejaković et al. (2012) the results imply that the Croatian public sector is not too big, except when it comes to the share of public organization's employees in total employment which is 13.8%. This percentage is higher than the EU average ranging between 6.20-7.13%. The 9.92% share of the general government budget expenditures for compensation of employees in GDP in Croatia is lower than the average share of EU countries (10.73-11.15%), but it was a little higher than the average share of countries of Central and Eastern Europe. The share of total general government expenditures in GDP in Croatia is 37.88% which is lower than the corresponding shares in EU (40.05-44.34%) and Central and Eastern European countries (39.7-40.53%).

The public sector reform in Croatia has been regarded as a necessity for creating the conditions to achieve better efficiency and effectiveness in the sector. Much has to be done to fully succeed in meeting following goals⁵:

- creating professional and effective administration that protects public interests and equality of all citizens and entrepreneurs while reducing operating costs;
- increasing the competence, professionalism and public administration know-how;

⁴ Source of data: Public Finance Institute (2010).

⁵ See for more details (Dalić, 2006).

- increasing the public administration labor transparency and campaigns against corruption;
- developing of the electronic administration and networking;
- reducing the operational costs.

In order to achieve the abovementioned goals, the following actions are required (Benazić, 2008):

- public administration reform *Public administration reform strategy for the period 2008 - 2011* has been made, according to which is necessary to increase the efficacy and cost-effectiveness in public administration system in order to accomplish better standard for Croatian citizens and also faster association of Republic of Croatia to European Union);
- enhancing of stability and professionalism of the public administration by reforming the organization, professional development and rewarding;
- elimination of organizational fragmentation;
- implementation of rewarding and promotion system by connecting salaries to work results;
- reducing the large salary differences compared to private sector.
- strengthening the public administrative transparency as one of the presumptions for corruption reduction;
- strengthening the use of the electronic administration, information-communication technology and enabling working and communication by electronic means in order to reduce costs as well (e-applications, work hours adjusted for users, updated information on the website);
- new legislations and removal of old decrees, etc.

The Government of Croatia (2009) also adopted *the Civil Service Human Resources Development Strategy for 2010-2013*, in order to develop human resources through training system improvement, recruitment and retention of employees that are good in their jobs. The goal of the strategy is to make the business practice of the authorities in Croatia fully functioning as a modern and efficient public administration that provides quality services to its users. According to the *Implementation Activities Plan of the Economic Recovery Program* (Government of the

Croatia, 2010), the drafting of the *Register of public sector employees*⁶ is in progress. The public administration efficiency principle should be placed before the scope of public administration problem. The sole aim of reducing the number of employees in public administration by stopping the new employments (or conditioning of employment only to vacant public places) does not lead to raising the level of competence of public employees. Necessary measures for increasing the efficiency of public administration consist of legislative changes that facilitate and encourage the employment according to capabilities, mandatory training, relocation by the needs of service, as well as the dismissal of insufficient effective employees. Such flexible employment policy and numerous reforms will lead to greater efficiency of the public administration.

According to the European Commission (2010), Croatia has shown limited progress on the public administration reform. In order to achieve tangible results, European Commission suggests stronger political commitment and closer coordination between the key stakeholders at central, regional and local levels are required. Considerable further efforts are needed to finalise the legal framework and to implement it efficiently across the board.

4. CONCLUDING REMARKS

Governments across the world are forced to increase their efficiency and effectiveness in order to respond better to the challenges of contemporary trends, such as increasing pressure of globalization, aging population and the like. According to OECD (2007), there are key elements necessary for improvement of the public sector efficiency: *i*) practices ensuring increased results orientation, such as budget practices and procedures and performance measurement arrangements; *ii*) arrangements that increase flexibility, including devolution of functional and fiscal responsibilities from central to sub-national governments, agencification, intra-governmental coordination, human resource management arrangements and e-government; *iii*) methods for strengthening competitive pressures through privatisation and other means; and *iv*) various workforce issues, including workforce size, its composition, the extent and nature of unionisation and the attractiveness of the public sector.⁷

⁶ More details on the *Register of public sector employees* can be obtained from the <http://www.uprava.hr/default.aspx?id=12121> (15.02.2012.)

⁷ For more detailed elaboration on these key elements see Currista et al., 2007.

The issue of public sector efficiency should be approached from the organizational aspect. Namely, one of the main failures of public sector organizations is their inability or unwillingness to change. According to Senge (1990), ability to adapt to changes requires that the organization becomes a learning organization which in turn requires that it achieves competences for so-called five learning disciplines *Systems Thinking, Personal Mastery, Mental Models, Shared Vision and Team Thinking*. These competences would enable public sector organizations to change behaviour, practices and attitude towards work, which should lead to better efficiency and effectiveness – a holy Grail of public sector reforms.

LITERATURE

Abedian, I. Biggs, M. (1998). *Economic Globalisation and Fiscal policy*. Cape Town. Published by IDASA. Creda Press.

Afonso, A., Schuknecht, L., Tanzi, V. (2006). *Public Sector Efficiency: Evidence for New EU Member States and Emerging Markets* (January 2006). ECB Working Paper No. 581. Available at SSRN: <http://ssrn.com/abstract=876945>

Bejaković, P., Bratić, V., Vukušić, G. (2012). *Komparativna analiza zaposlenosti i naknada za zaposlenje u javnom sektoru u Hrvatskoj i Europi* (eng. International Comparison of Employment and Compensation of Employees in the Public Sector of Croatia and European Union), *Društvena istraživanja*, god. 21, br. 1(115), Zagreb: 101-119.

Benazić, A. (2008). *Organizacijske promjene i efikasnost državne uprave* (eng. Organizational Change and efficiency of the public administration). Available at <http://oliver.efri.hr/~javnisek/zbornik/benazic.pdf>

Budak, J. (ed.) (2011). *Deset tema o reformi javne uprave u Hrvatskoj* (eng. Ten issues about the public administration reforms in Croatia), Ekonomski institut, Zagreb.

Brueckner, J. (1982). A test for allocative efficiency in the local public sector, *Journal of Public Economics*, 19: 311-331.

Currista, T., Lonti, Z., Jourmard, I. (2007). *Improving Public Sector Efficiency: Challenges and Opportunities*, *OECD Journal on Budgeting*, Volume 7, No. 1.

Dalić, M. (2006). *Strateški okvir za razvoj* (eng. Strategic Framework for Development), Vlada Republike Hrvatske, Zagreb.

European Commission (2010). *Croatia 2010 Progress Report*, Brussels, 09 November 2010, SEC(2010) 1326.

- Farrell, M. (1957). The Measurement of Productivity Efficiency. *Journal of the Royal Statistics Society*, series A, 120, part 3: 253–90.
- Government of the Republic of Croatia (2009). *Civil Service Human Resources Development Strategy for 2010-2013*, Ministry of Administration, Zagreb.
- Government of the Republic of Croatia (2010). *Plan provedbenih aktivnosti programa gospodarskog oporavka* (eng. Implementation Activities Plan of the Economic Recovery Program), Zagreb.
- Grossman, P., Mavros, P., Wassmer, R. (1996). *Public Sector Inefficiency in Large Cities*. Available at http://localgov.fsu.edu/papers/archive/Grossman_001.pdf
- Gupta, S. and Verhoeven, M. (2001). The efficiency of government expenditure: Experiences from Africa, *Journal of Policy Modelling* 23, 433– 467.
- Gwartney, J., Lawson, R., Park, W., Wagh, S., Edwards, C. de Rugy, V. (2002). *Economic Freedom of the World: 2002 Annual Report*. Vancouver, the Fraser Institute.
- Larbi, G.A.(1999). The New Public Management Approach and Crisis States, *UN-RISD Discussion Paper*, No. 112, September.
- National Competitiveness Council 2002-2008. Available at <http://www.konkurentnost.hr/Default.aspx?sec=36>.
- Olson, M.(1973). Evaluating Performance in the Public Sector, in Moss, M. (ed.): *The Measurement of Economic and Social Performance*, UMI, ISBN: 0-870-14259-3: 353-410. Available at <http://www.nber.org/books/moss73-1>.
- Public Finance Institute (2010). *Employment in Croatian Public Sector Analysis*, Zagreb, June.
- Samuelson, P. (1954). The pure theory of public expenditure, *Review of Economics and Statistics* 26: 387-398.
- Stiglitz, J. (1999). *Economics of Public Sector*, third edition, Norton & Company, New York.
- Tiebout, Charles, 1956, A pure theory of local expenditures, *Journal of Political Economy*, 64: 416-424.
- Tuckman, J. (1985). Alternative Approaches to Correcting Public Sector Inefficiency, *American Journal of Economics and Sociology*, Vol 44, No. 1, January.

HEALTH,
EDUCATION
AND
WELFARE

IMPACT OF CAPABILITIES ON PERFORMANCE IN PRIVATE ACUTE HOSPITALS IN SWITZERLAND

Zoran Alimpic, MBA¹,

¹ Former technical director at Hirslanden AG in Zurich/ Switzerland. Since 2009: COO for the Alpiq EcoServices AG in Zurich/ Switzerland, zoran.alimpic@ggaweb.ch

ABSTRACT

The Swiss health care landscape is changing. On the one hand, there are increasing costs in patient treatments and a lack of effectiveness and efficiency in the organisation of a hospital. On the other hand, hospitals will see decreasing revenues with the introduction of the new patient classification and tariff system DRG by 2012. For every DRG, hospitals will receive a fixed price, regardless the actual costs of the patient treatment.

Due to the higher rivalry in future, hospitals are forced to choose an effective strategic orientation and to develop an appropriate strategy to remain highly competitive. We argue in this paper that Swiss hospitals will only achieve a position of sustainable competitive advantage with superior performance by knowing the crucial capabilities, and bundles of these capabilities, which are the basis for the strategy formulation.

We started our research with the evaluation of capabilities, with questionnaires for attending physicians and hospital managers. The next step was the categorising of hospitals due to its strategic orientation into two groups: the 'prospector' and 'defender' hospitals. With a factor analysis and a structural equation modelling for each hospital group, in relation to performance, it was possible to evaluate bundles of capabilities that might be important for future strategies.

The results are that the five prospector hospitals see themselves as learning organisation with an effective strategic management, based on a modern infrastructure and a powerful marketing. In contrast, in the eight defender hospitals the emphasis is to build up a good culture with an effective learning, strong strategic and relationship management.

The substantive contribution of this paper is the effective analysis of capabilities and bundling of them. Such capabilities will increase the level of knowledge and will lead to a higher financial performance. The long-term result is a better reputation which helps to outperform competitors in a changing environment and thus to reach sustainable competitive advantage.

JEL Classification: I13

Keywords: private acute hospitals, DRG (Diagnosis Related Groups), moderately dynamic market, KPI (key performance indicators), RBV (resource-based view), capabilities, sustainable competitive advantage.

1. INTRODUCTION

Health care in Switzerland traditionally has been a regulated market in a relatively simple and static market environment. On the one hand, there are the state-subsidised University and 'Cantonal' hospitals; on the other, the private 'for profit' hospitals that have emerged in response to the demand for enhanced health care services.

This market environment is now changing. An aging population with more older and multi-morbid patients, new and converging technologies, changing regulatory environments, and evolving health care markets are driving the emergence of more dynamic and complex business environment. As a result, Swiss health care is embarking on a precarious path peppered with an imbalance in high costs, irregularities in the delivery of quality health care, frequent errors, and limited access to care [1]. These unsettling developments have not escaped the attention of the Swiss government. They will introduce the new finance system DRG by 2012. This is a patient classification system which originated in the USA and Australia and will be customised for Switzerland means. Invariably, the implementation of DRG's will exert pressure on hospitals to increase their level of effectiveness and efficiency, to reduce their costs related to patient treatment, and to optimise their health care processes.

The impending imperative to improve effectiveness and efficiency significantly has caught most Swiss hospital managers off guard. Most have little understanding of their hospital's intangible resources, especially capabilities and bundles of capabilities. However, hospital directors are forced to define a strategy. The result from qualitative interviews, during a strategy workshop with hospitals' top management,

was the definition of four expectations which could be the future key success factors for hospitals: E1 - Strategic management; E2 - Culture; E3 - The development of the medical and technical infrastructure; E4 - Organisational learning; and E5 - Strategic marketing.

2. OBJECTIVE

The crucial issue for private hospitals relates to finding the right strategy to move successfully in this new environment best described as a 'moderately dynamic market' [Figure 1]. However, it is difficult to define a common strategy for all hospitals. For example bigger hospitals with cardiology as main specialisation has another strategic orientation than smaller orthopaedics hospitals. Therefore, the objective of this article is to analyse on the one hand the strategic orientation of each hospital, on the other hand to evaluate the crucial capabilities and bundles of capabilities which might have a positive impact on financial performance. This elements must be integrated in the new strategy as starting point to reach sustainable competitive advantage.

2.1 Strategic orientation

As described in previous section, health care in Switzerland is moving from a regulated market environment toward a more dynamic, or what Eisenhardt (1989) termed as 'high velocity' market [2]; however, health care will hardly become a high velocity market. The Swiss healthcare market will change in the next few years in a 'moderately dynamic market' with a relatively stable industry structure in which change occurs frequently, but along roughly predictable and linear paths, with identifiable key players such as patients, physicians, competing hospitals and medical suppliers. In addition, it will have clear business models based on predictable outcomes, and detailed, analytical routines that rely extensively on existing knowledge. Hospital managers will analyse situations in the context of their existing tacit knowledge and rules of thumb, and then plan and organise their activities in a relatively ordered fashion (Burns and Stalker, 1966), based on the 'learning before doing', approach [2].

Therefore, it is important to analyse the current situation with the strategic orientation, crucial capabilities and bundles of capabilities, which are the basis for a new strategy development. However, discussions with hospital's top management have shown that it is very difficult to define a single strategy for hospitals with

different sizes and specialisations. Thus it is essential to see what strategic orientations these hospitals have. Snow and Hambrick (1980) [3] proposed four strategic orientation [table 2].

2.2 Capabilities

The emphasis of this research is on the resource base and especially of its capabilities. 'Capabilities' relates to the organisation's ability to adapt, integrate, and reconfigure internal and external organisational skills, resources, and functional individual competences to match the requirements of a changing environment [6].

According to Teece and Grant (1991), a firm's resource base includes all means at the disposal of the organisation for the performance of value-adding activities [6]. Other authors prefer the term 'assets', to emphasize that the resources belong to the firm. De Witt and Meyer (2010) [7] illustrated the resource base in [figure 3].

An important fact is that most private hospitals have a matchable level of tangible resources. They are located in cities with a similar standard of: buildings, infrastructure, medical equipment, and capex (capital expenditure). The differentiations between private hospitals are their intangible resources; however, the relational resources are often comparable due to the same relationship to the local government, to suppliers, and physicians. Thus they compete on a similar level of medical know-how, same processes, and reputation. The key differences are capabilities; therefore, it will be the emphasis of this research. Capabilities are part of the resource base and are illustrated in [figure 4].

Capabilities or 'simple' capabilities are 'first-order' and the basis for bundles of capabilities which are labelled as core capabilities. Tovstiga (2010, p.90) argue that the core capabilities can be a potential for competitive advantage, and dynamic capabilities as strategic options what a firm can do and what it might do [9].

Due to the fact that hospitals might be thought of as 'service factories', it is advisable to apply the RBV as theoretical foundation to such moderately dynamic markets too. However, the rationale is that the 'traditional RBV approach' has not adequately explained how and why certain firms have competitive advantage in situations of unpredictable change [2].

Therefore, in moderately dynamic markets it is more appropriate to apply the 'dynamic capability' framework which is an extension of the RBV (Erickson et al., 2006 [2]). Eisenhardt and Martin (2000) defined such dynamic capabilities as 'the

firm's processes that use resources to match and even create market change' [2]. In this conception, 'dynamic capabilities' take the form of organisational processes to adapt the strategic management, 'by which managers alter their resource base – acquire and shed resources, integrate them together, and recombine them to generate new value creating strategies'. By altering the organisation's resource base, dynamic capabilities could then open new strategic alternatives for the firm (Helfat, 1997 [10]).

One of the key differences between RBV and dynamic capabilities is that the latter looks at an organisation as consisting of a bundle of capabilities - that can change - instead of a bundle of static resources (Balaji et al., 2005 [10]). Thus this paper will analyse 'capabilities and bundles of capabilities', as illustrated in figure 4 above, for an appropriate strategic response to the forces that are driving irreversible change in the Swiss health care environment through their delivery of new forms of value in the face of the changing needs of relevant stakeholders.

There is a lot in the strategic management literature about such capabilities; however, it is nowhere described what the crucial capabilities and bundles of capabilities in private hospitals are, and how they are related to performance. In addition, no one has the knowledge how different capabilities interact with each other. According to Reeves and Ford (2004), capabilities and bundles of capabilities integrate organisational structures, human resources, and strategic planning processes in order to define and attain strategic objectives [11]. An important objective in private for-profit hospitals is to have superior financial performance. Therefore, such capabilities must be positively linked to performance.

2.3 Performance

On this stage it is important to clarify what performance is. Explaining, and often predicting, organisational performance is a primary research objective in the field of strategic management. Indeed, the quest to understand and control performance is an important way to distinguish strategic management from other organisational sciences (Hrebiniak, Joyce & Snow, 1989; Meyer, 1991; Summer et al., 1990 [12]).

The key to implementing strategy is to have everyone in the organisation clearly understand the corporate mission and vision, to align all organisational/ business units and resources with this vision, and to use a performance measurement for controlling. In various studies (Brealey et al., 2002; Zelman et al., 2005; Pink et

al. 2005; Nelson et al., 2005) the following KPI's are recommended for measuring the financial performance in hospitals, in this case the profitability and activity/efficiency [13+14+15+16]:

- OM (Operating Margin), TM: (Total Margin), ROA (Return on Assets), ROE (Return on Equity), EVA per Total capital, EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortisation) per Hospital Bed,
- TAT (Total asset turnover), and FAT (Fixed Asset Turnover).

Although the private hospitals in this study use mainly the EBITDA per hospital bed [14] as single KPI, it is in any cases reasonable to use an aggregated value as result from different KPI's as listed above.

3. METHODS

The goal of this research methodology is to see whether the four expectations below are relevant for hospitals or not:

- E1: Strategic marketing will have the highest impact on financial performance. This means that hospitals have to acquire more physicians who in turn bring new patients and thus increase the bed occupancy rate in hospitals.
- E2: Culture will have a positive impact on financial performance. It is assumed that hospitals with a good culture will have a high degree of key customers' satisfaction and thus a better performance.
- E3: The development of the medical and technical infrastructure will have a positive impact on financial performance. Because of new and converging technologies, hospitals must have the knowledge to develop the infrastructure cost-efficiently.
- E4: Organisational learning will have a positive impact on financial performance. It is assumed that only a 'learning organisation', as key issue from the RBV approach, can remain highly competitive.

The research was based on a survey questionnaire [tables 10+11] for the primary data collection in 13 Swiss private hospitals. These hospitals were categorised due to its strategic orientation (a). We choose a questionnaire to receive, on the one hand, 'insider information' from the key people in hospitals: the attending physicians and hospital managers, for the analysis of hospitals' capabilities and bundles of capabili-

ties (b). On the other hand it was possible to measure the outcome of the strategic orientation; in our case to analyse the financial performance (c).

This questionnaire consisted of two parts which sought to identify respondents' perceptions with regard to:

- Capabilities that support the group's core businesses in its internal and external competitive environments, with 43 questions for 67 attending physicians as well as 117 hospital managers.

Individual items queried respondents' perceptions in respect of two dimensions: 'importance', and 'performance', on the basis of a 5-point Likert scale. A preliminary version of the questionnaire was tested in a pilot study in two hospitals; one in the German speaking part, and the other in the French speaking part of Switzerland. The outcomes from the pilot survey were used to make appropriate adjustments to the survey instrument before it was launched for the full-fledged investigation.

The data from the survey questionnaire for both dimensions are matched together: the 'importance' values are multiplied by the 'performance' values which resulted into a 'weighted performance' (Fishbein and Ajzen, 1970 [17]). These values are used for the factor analysis with the PCA (Principal Component Analysis; SPSS software). This is a statistical approach that we used in this case to analyse the inter-relationships among these 43 capabilities and to explain these variables in terms of their common underlying dimensions. These bundles of capabilities are focused on supporting a hospital's strategic objectives.

Finally, we used the structural equation modelling (SEM), an extension of several multivariate techniques such as the factor analysis or the multiple regression analysis, to link the 'bundles of capabilities', as independent (predictor) variables, to performance as the single dependent (criterion) variable (d). In contrast to the other techniques which can examine only a single relationship at a time [17], SEM explains the relationships among multiple variables. SEM is known by many names: covariance structure analysis, latent variable analysis, and sometimes is even just referred to by the name of the specialised software package use. In this case, the AMOS 16 (Analysis of Moment Structure) is used for this investigation.

For the financial performance the aggregated values from eight financial ratios, over a time period of four years, are used. We labelled those 'bundles of capabilities' as 'core capabilities', which had a positive correlation to performance and a level of significance for regression weight: $p < 0.10$. With the SEM the six factors,

or bundles of capabilities, from the PCA are analysed in relation to the financial performance as illustrated in [figure 5].

$y = a + b_1x_1 + b_2x_2 + b_3x_3 + \dots + b_6x_6$; where:

- $y = F18$. For the financial performance the construct F18, as described in section (4), is used. It is the result from the sum of all variables divided by the number of variables (mean): $F18 = (OM + TM + ROA + ROE + EVA / \text{Total capital} + EBITDA / \text{bed}) / 8$.
- $a = \text{constant; intercept}$.
- x_1 to x_6 ; the factors' values are the mean from the six factors (F1-F6) as listed in section (6.2).
- b_1 to b_6 ; They are the standardised estimates, as result from the SEM (AMOS).

4. RESULTS

This chapter summarises all results. It starts with the evaluation of the strategic orientation (a) of all 13 hospitals and the analysis of the important capabilities and bundles of capabilities with a factor analysis (b). With the appraisal of financial performance (c) it is enabled to put these bundles of capabilities in relation to each other with the SEM (d).

4.1 Analysis (a): Strategic orientation

All 13 hospitals CEO's filled out a self-assessment questionnaire based on Miles and Snow's typology and classed their hospitals as follows:

- 5 hospitals identified themselves as 'prospector' hospitals, with cardiology as major specialisation.
- 8 hospitals identified themselves as 'defender' hospitals, with orthopaedics as major specialisation.

This result was double-checked by a team of eight health care experts who confirmed these strategic orientations. Finally this result was checked with a squared Euclidean distance method using the KPI: 'EBITDA per hospital bed', for a hierarchical cluster analysis in SPSS. This is a measure of similarity that represents the sum of the squared distances without taking the square root [17]. Thus the results above are confirmed again.

4.2 Analysis (b): Factor analysis; 13 hospitals

The field research yielded the following responses for the weighted performance, with an indication of very high levels of reliability (Cronbach's $\alpha \geq 0.70$ [17]) of the field research data, shown in [table 6].

Any decision of the number of factors to be retained should be based on several considerations [17]:

- Factors with Eigen values > 1.0 .
- Enough factors to meet a specific percentage of variance explained, usually at least $> 50\%$. With these six factors there are more than 55% explained and thus there is a data reduction from 43 to 24 variables. Hair et al (2006, p.197) recommended to have at least 5 observations per variable. In this case, the minimal observation would be 155; however, there are 8 observations per variable with a total of: $N = 184$ [17].
- The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy have to be assessed according to Hair et al's (1998) guideline and should exceed the recommended minimal value of 0.6 (Kaiser, 1974). With these KMO's above, and a significance < 0.05 , this analysis is relevant [17].

The result from the factor analysis is illustrated in [figure 7]. It shows the six most important 'bundles of capabilities' for all hospitals. There are labelled as follows:

1. 'Strategic management' and consists of 6 capabilities: X38 Change management in clinic; X36 Visionary, capable leadership in clinic, X27 Ability to gain knowledge to detect fast regulation shifts; X37 Decision making process in clinic; X25 Ability to gain knowledge about competitors' strengths/ weaknesses; and X35 Strategy implementation.
2. 'Organisational learning' and consists of 3 capabilities: X42 Performance measurement process in clinic; X43 Knowledge management in clinic; and X44 Quality management in clinic.
3. 'Infrastructure development' and consists of 4 capabilities: X54 Development of medical infrastructure of the clinic; X53 Development of technical infrastructure of the clinic; X51 Education and development of competence of technical staff in clinic, and X50 Education and development of competence of medical staff in clinic.

4. 'Organisational culture' and consists of 4 capabilities: X47 Communication between management and staff; X45 Nurturing of the culture for working in clinic; X48 Cooperation with physicians in clinic; and X46 Ability to unify confliction options and to generate motivation.
5. 'External relationship management' and consists of 3 capabilities: X18 Relationship of clinic with insurance companies; X19 Relationship of clinic with local government; and X20 Relationship of clinic with medical commissions/ state government.
6. 'Strategic marketing' and consists of 3 capabilities: X21 Reputation/ image / brand/ label of the clinic; X22 Strategic marketing of the clinic; and X23 Networking with physicians, politicians, and institutions.

4.3 Analysis (c): Performance

Financial performance is measured with an aggregated financial value per hospitals which consists of eight KPI's as listed in [table 8]:

This KPI's (Key Performance Indicators are based on a relative scale in which 100% refers to the highest KPI-value achieved in the overall 13-hospital group). Thus the five prospector hospitals have significant higher financial performance than the other eight defender hospitals. The exception is the TAT which has exactly the same value of 64.5%.

Therefore, the five prospector hospitals have significant higher financial performance than the other eight defender hospitals.

4.4 Analysis (d): Structural Equation Modelling (SEM)

The result from the SEM is the [table 8], based on the analysis of the six factors or bundles of capabilities as listed in section (6.2).

This analysis has shown that two factors, or core capabilities, have a positive impact on performance: V3: Infrastructure development, and V6: Strategic marketing. On the other hand the following factors: 4. organisational culture, and 5. External relationship management, have a negative impact.

4.5 Discussion

This investigation in both hospital groups, regarding the financial performance, has shown interesting results:

- The five prospector hospitals see themselves as learning organisation with an effective strategic management, based on a modern infrastructure and a powerful marketing. Such hospitals make relatively frequent changes in (especially additions to) their set of services/ facilities. They consistently attempt to pioneer by being 'first in' in new areas of service or market activity, even if not all of these efforts ultimately prove to be highly successful. In addition, prospector hospitals respond rapidly to early signals of market needs or opportunities.
- In contrast, in the eight defender hospitals the emphasis is to build up a good culture with an effective learning, strong strategic and relationship management. Such hospitals maintain a 'niche' within the health care system by offering a relatively stable set of services/ facilities. Generally these hospitals are not at the forefront of new services or market developments in healthcare. They tend to ignore changes that have no direct impact on current areas of operation and concentrates instead on doing the best job possible in their existing arena.

Both hospitals groups are successful; however, the prospector hospitals have a higher performance based on a more effective marketing and better infrastructure.

At this stage it is interesting to compare the results with the four expectations of Hospitals' directors for the new moderately dynamic market:

- E1: Strategic marketing will have the highest impact on financial performance. This expectation is not true; however, strategic marketing correlates positively to financial performance. Strategic marketing is a 'core capability' in prospector hospitals and thus an important factor for the future business in all other hospitals.
- E2: Culture will have a positive impact on financial performance. This expectation is not true due to the fact that culture has a negative impact on performance. However, a good culture, as integral part of the RBV, is very important for the future business.
- E3: The development of the medical and technical infrastructure will have a positive impact on financial performance. This expectation is true. A better infrastructure lead to a higher satisfaction of all stakeholders and thus to a better financial performance. Investments in the infrastructure are important;

however, it is thus recommended to invest in technical and medical equipment also in future.

- E4: Organisational learning will have a positive impact on financial performance. It was not possible to test this expectation, because this factor was not significant. However, organisational learning, as part of the RBV, is very important for current and future business and thus remains an important factor for hospitals to remain highly competitive.

5. CONCLUSION

Hospitals managers have the choice now 'to do nothing', to rely on 'ad hoc' problem solving within the different medical departments, and thus to minimise costs, or to invest in 'core capabilities' based on a 'best practise' approach. The former possibility may bring positive short-term results in departments, but not the expected long-term success after the DRG implementation with the intended increase of effectiveness and efficiency in the organisation of the entire hospital. Therefore, we propose to invest as first priority in 'Marketing' and 'Infrastructure' which are the foundation to build a bridge between the current situation with simple and static market environment, and the future environment in a moderately dynamic market.

The first step of implementation is to understand and improve the capabilities which shape together a core capability. Brown and Eisenhardt (1997) termed this property 'sequenced steps' with learning from the simpler and more predictable capabilities as listed below for the two core capabilities [2]:

- 'Infrastructure development' with the following 4 'first order capabilities': X54 Development of medical infrastructure of the clinic; X53 Development of technical infrastructure of the clinic; X51 Education and development of competence of technical staff in clinic, and X50 Education and development of competence of medical staff in clinic.
- 'Strategic marketing' with the following 3 'first order capabilities': X21 Reputation/ image / brand/ label of the clinic; X22 Strategic marketing of the clinic; and X23 Networking with physicians, politicians, and institutions.

Therefore, core capabilities consist of many well-known processes that have to be studied extensively. Their value for competitive advantage lies in their ability to alter the resource base: create, integrate, recombine, and release resources [2]. They

are thus not robust processes which lead per se to sustainable competitive advantage. It is the 'best practise process in moderate dynamic markets' which is essential: to know which 'first order capabilities' have an influence on performance, their constitution of different capabilities, the well-known learning mechanism how to modify the capabilities, and the resource configuration that hospital managers build using such capabilities.

The second step is to leverage such strategic and especially core capabilities, within the hospital or between hospitals, which leads to lower costs and time savings. According to Sirmon et al. (2007), leveraging refers to the application of a firm's capabilities to create value for customers and wealth for owners [18]. In hospitals the leverage by knowledge combination emphasises the creation of new know-how and thus reduces the probability of core rigidities. This means combining knowledge with other bundles of capabilities. Furthermore, knowledge and capabilities can be leveraged in a way which enables to increase the level of performance as well as eventually economies of scope and scale. Such combinative capabilities may contribute to the resolution of the hospitals' permanent struggle to find the right balance between exploration and exploitation as knowledge combination is simultaneous – exploration as well as exploitation (Argot, 1999 [19]). Effective leveraging of the hospital's capabilities will result in organisational learning and a culture of capability adaptation to meet the expectations of key customers' needs. Therefore, we suggest that the emphasis should be on core capabilities due to the fact that they are linked to performance and thus the support change.

This investigation has shown that different capabilities form together clusters which, if they are positively linked to financial performance, can be labelled as 'core capabilities'. They are not robust processes which lead per se to sustainable competitive advantage; they are 'best practise processes in moderate dynamic markets' which goal is a series of temporary competitive advantage in changing environments. Another important aspect is the leverage of such core capabilities by knowledge combination for the creation of new know-how. Effective leveraging of the hospital's capabilities will result in organisational learning and a better culture for the capability adaptation to meet the expectations of key customers. With an efficient management of these 'core capabilities', which may support change, hospitals can improve all processes and thus increase the level of knowledge. This leads to a higher customer satisfaction and a better reputation which helps to outperform competitors and to reach sustainable competitive advantage – also in moderate dynamic markets.

6. REFERENCES

- Porter, ME and Teisberg, EO, 2006. *Redefining Health Care; Creating Value-Based Competition on Results*. Boston: Harvard Business School Press.
- Eisenhardt, KM and Martin, JA, 2000. Dynamic Capabilities: What are they? *Strategic Management Journal*, Vol. 21, pp.1105-1121.
- Miles, RE, and Snow, CC, 2003. *Organisational Strategy, Structure, and Process*. 2nd edition. California: Stanford Business Books, University Press, Stanford.
- Miles, R, Snow, C, Meyer, A., and Coleman, H., 1978. *Organisational Strategy, Structure, and Process*. *Academy of Management Review* 3, p. 546-562.
- Ghoshal, S, 2003. Miles and Snow: Enduring insights for managers. *Academy of management Executive*, Vol. 17, No.4.
- Teece, DJ, Pisano, G, and Shuen, A, 1997. Dynamic Capabilities and Strategic Management. *Strategic Management Journal*, Vol. 18, No. 7, pp.509-533.
- De Wit, B, and Meyer, R, 2010. *Strategy Synthesis, resolving strategy paradoxes to create competitive advantage*. 3rd edition. London: Thomson.
- Wang, C, and Ahmed, PK, 2007. Dynamic capabilities: a review and research agenda. *International Journal of Management Reviews*, Vol. 9, No.1, pp.31-51.
- Tovstiga, G, 2010. *Strategy in practice; a practitioner's guide to strategic thinking*. John Wiley & Sons Ltd, Chichester, West Sussex.
- Helfat, CE, Finkelstein, S, Mitchell, W, Peteraf, MA, Singh, H, Teece, DJ, and Winter, SG, 2007. *Dynamic Capabilities; Understanding Strategic Change In Organizations*. Oxford: Blackwell Publishing.
- Reeves, TC and Ford, EW, 2004. Strategic Management and Performance Differences: Nonprofit versus For-Profit Health Organisations. *Health Care Management Review*, Vol. 29, No. 4, pp.298-308.
- Summer, C, Bettis, R, Duhaime, I, Grant, J, Hambrick, D, Snow, C, and Zeithaml, C, 1990. Doctoral Education in the Field of Business Policy and Strategy. *Journal of Management*, Vol. 16, No.2.
- Zelman, WN., McCue, MJ, Millikan, AR, and Glick, ND, 2004. *Financial Management of Health Care Organizations: An Introduction to Fundamental Tools, Concepts, and Applications*. 2nd edition. Oxford: Blackwell Publishing.

Nelson, CN, Rust, RT, Zahorik, A., Rose, RL, Batalden, P, and Siemanski, BA, 1992. Do Patients Perceptions of Quality Relate to Hospital Financial Performance? *Journal of Health Care Marketing*, Vol. 12, No. 4, pp.6-13.

Kumar, K, Subramanian, R, and Yauger, C, 1998. Examining the Market Orientation – Performance Relationship: A Context-Specific Study. *Journal of Management*, Vol. 24, No. 2, pp.201-233.

Pink, GH, Holmes, GM, D’Alpe, CD, Strunk, LA, McGee, P, and Slifkin, R., 2005. Financial Indicators for Critical Access Hospitals. *Journal of Rural Health*, Vol. 22, No. 3, pp. 229-236.

Hair, JF, Black, WC, Babin, BJ, Anderson, RE, and Tatham, RL, 2006. *Multivariate Data Analysis*. 6th Edition. Uppon Saddle River, New Jersey. Pearson.

Sirmon, DG, Hitt, MA, and Ireland, RD, 2007. Managing firm resources in dynamic environments to create value: looking inside the black box. *Academy of Management Review*, Vol. 32, No. 1, pp.273-292.

Winter, SG, 2003. Understanding dynamic capabilities. *Strategic Management Journal*, Vol. 24, pp.991-995.

7. APPENDIX

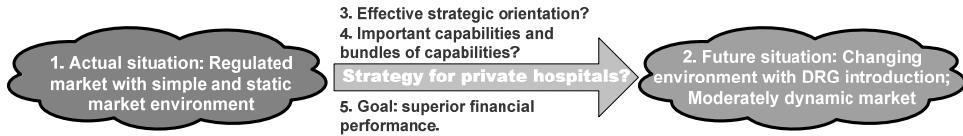


Figure 1: Changing environment in Switzerland (author’s calculations).

Orientation:	Dominant objectives:	Preferred strategies:	Environment:	Organisational characteristics:
Defender	Desire for a secure and stable niche in market.	Hold current market; stabilise; controlling price and service to defend current business; specialisation; marketing emphasis; tendency to vertical integration.	Stable	Tight control; centralised; production efficiency; low overhead; extensive use of formal planning.
Prospector	Evaluation of new product and market opportunities.	Innovate; find new market opportunities; growth through product and market development; take risks; constant monitoring of environmental change.	Dynamic, growing	Emphasis on flexibility; decentralised control; use of ad hoc measurements.
Analyser	Desire to match new ventures to present shape of business.	Maintain current market plus moderate innovation; stabilise; steady growth through market penetration; exploitation of applied research; followers in the market.	Moderate change	Tight control and flexibility; creativity; co-ordinating roles between functions; intensive planning.
Reactor	No clear objectives.	No clear strategy; react to specific conditions; drift.	Any condition	No clear organisational approach; depends on current needs.

Table 2: four identifiable strategic orientations as described by Miles, Snow, Meyer, and Coleman, 1978 [4+5].

Figure 3: Components of the Resource Base described by de Witt and Meyer, 2010 [7].

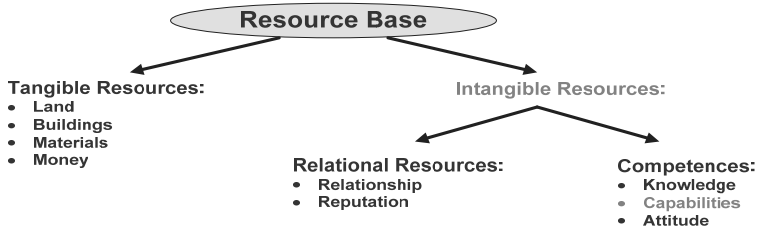


Figure 4: Hierarchy of resources and capabilities described by Wang and Ahmet, 2007 [8].

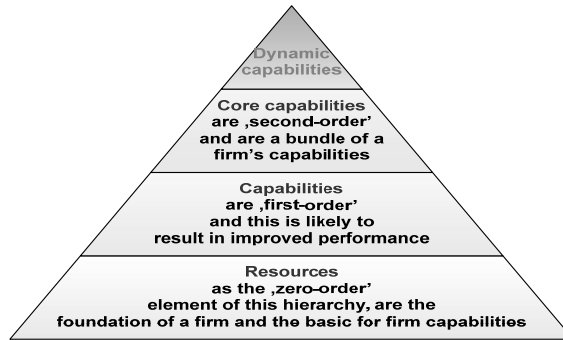
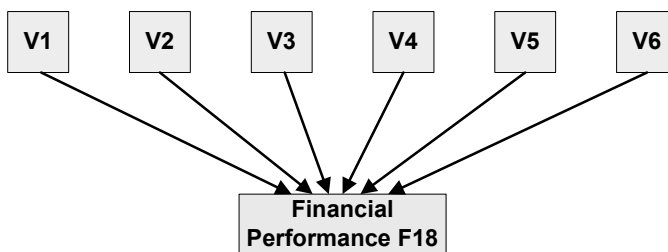


Figure 5: SEM model for financial performance (author's calculations).



Weighted Performance: import.(1) x perform.(2)	Five prospector hospitals; sample size (N)	Reliability: Cronbach's Alpha (α)	Eight defender hospitals; sample size (N)	Reliability: Cronbach's Alpha (α)
Attending physicians and hospital managers	25 + 56 = 81	0.94	42 + 61 = 103	0.96

Table 6: Reliability [Cronbach's Alpha (α)] for the 'weighted performance' with sample sizes >50. The minimal sample absolute size should be 50 observations [17] (author's calculations).

KMO² = 0.897; N = 184; Sig. = 0.000; Absolute values > 0.5

¹Extraction Method: Principal Component Analysis

²Kaiser-Meyer-Olkin Measure of Sampling Adequacy

³Variance explained (Rotation Sums of Squared Loadings)

Component ¹	Cluster identification:	% var ³	KMO ²
1	1. Strategic management: Key items: X38, X36, X27, X37, X25, X35	13.86	0.890
2	2. Organisational learning: Key items: X42, X43, X44	9.66	0.814
3	3. Infrastructure development: Key items: X54, X53, X51, X50	8.76	0.798
4	4. Organisational culture: Key items: X47, X45, X48, X46	8.11	0.785
5	5. External relationship management: Key items: X18, X19, X20	7.73	0.786
6	6. Strategic marketing: Key items: X21, X22, X23	7.32	0.704

Total variance explained = 55.4

Table 7: Six factors as result from the factor analysis (author's calculations).

Financial 'Key Performance Indicator' (KPI):	Mean of five prospector hospitals in % (**)	Mean of eight defender hospitals in % (**)
OM: Operating Margin	75.4	48.1
TM: Total Margin	51.5	15.0
ROA: Return on Assets ³	57.3	18.0
ROE: Return on Equity ³	63.2	19.7
EVA per Total capital	69.3	38.4
EBITDA per Bed in hospital ⁴	74.5	28.1
TAT: Total asset turnover	64.5	64.5
FAT: Fixed Asset Turnover	56.5	44.1

Table 8: KPI's (Key Performance Indicators; author's calculations) of two subgroupings of hospitals (**based on a relative scale in which 100% refers to the highest KPI-value achieved in the overall 13-hospital group).

Chi-Square = 62.3; 13df; GFI = 0.90; AGFI = 0.80

Significance: $p = 0.000$

Rank:	Cluster identification:	Standardised coefficient β
1	3. Infrastructure development: Key items: X54, X53, X51, X50	0.302***
2	6. Strategic marketing: Key items: X21, X22, X23	0.217***
3	4. Organisational culture: Key items: X47, X45, X48, X46	-0.298***
4	5. External relationship management: Key items: X18, X19, X20	-0.141**

Level of significance for regression weight:

* $P < 0.10$

** $P < 0.05$

*** $P < 0.01$

Table 9: Result from the SEM analysis. The GFI (goodness of fit index) above has the value of 0.90; therefore this model is considered as good [17]. The AGFI (Adjusted Goodness-of-Fit Index) is equal the value of 0.80; therefore this model is considered also as good [17] (author's calculations).

MANAGING QUALITY: TQM IMPLEMENTATION IN CROATIAN VOCATIONAL EDUCATION AND TRAINING SYSTEM

Ivana Ivančić, univ.spec.oec.¹

Nada Bosanac, B.Sc.¹

¹Ph.D. Candidate, Croatia, ivanai753@gmail.com, nadabosanac@net.hr

ABSTRACT

Croatian Vocational Education and Training (VET) system is involved in all development processes of the EU through common European principles, standards and tools. Holders of education policy introduce a new regulation in order to speed up the process of modernizing a vocational education level. The international quality management system standards were adopted and applied at the institutional level. Also, the institutional quality assurance system was documented and implemented. Self-assessment combined with external evaluation were adopting instruments of quality assurance and development for VET institutions.

This paper provides a discussion of quality assurance in Croatian VET and focuses on the impact of improvement and implementation of Total Quality Management (TQM) practices. It is suggested to implement modified TQM quality principles in VET as a basis for achieving excellence in secondary schools.

JEL Classification: H75, L15

Key words: vocational education, Croatia, quality assurance, Total Quality Management

1. INTRODUCTION

One of the most important goals of the society is to improve the quality of education. An education system is characterised by a large number of interested stakeholders such as students, teachers, parents, employers, government and society, each having its own expectations and perceptions of quality.

The purpose of secondary school education is to expand and deepen basic knowledge with the focus on a particular content and to enable students for performing business within the chosen profession. “The traditional structure of secondary education as a parallel bridge between primary education on one side, and higher education and world of work on the other, is changing. Workforce in this millennium is less involved in industrial production and isolated professions, and increasingly involved in knowledge work, services, communication and innovation. Economies and societies are therefore looking for ways to have their education systems more concentrated in building meta-cognitive and creative capitals that both are necessary resources for both individuals and nations to succeed in competitive knowledge-based and innovation-intensive world.” (Sahlberg; 2007,4)

Vocational education and training (VET) includes education and training programmes designed for a particular job and involves practical training as well as the learning of a relevant theory. It is in the function of the development of professional competencies that should satisfy the needs of a labour market. Qualification and training programs complement existing knowledge, capabilities and skills for work in a profession. Croatian VET schools are technical, industrial, trade and others, as defined by the type of instructional plan and program they offer, carrying out an instructional plan and program lasting from one to five years.

Since the ratification of the first European Common Quality Assurance Framework for VET in May 2004 by the European Commission¹, quality assurance and quality improvement have become increasingly important for institutions providing vocational education and training throughout Europe. In particular self-assessment, combined with external evaluation, is a promising instrument of quality assurance and development for VET institutions. Self-assessment can build on quality activities already in place at a VET institution, and it fosters partnerships and exchange between VET providers and the local community and labour market.

In July 2009 the European Parliament and the Council of the European Union published their final recommendation for the establishment of a European Quality Assurance Reference Framework for VET (EQARF-VET). The objective of this recommendation is to establish the EQARF-VET as a reference tool to help member states to monitor continuous quality improvement of their VET systems, and to examine how the existing quality assurance models work. The EQARF-VET has

¹ <http://www.asoo.hr/UserDocsImages/projekti/kvaliteta/Self-assessment%20Manual.pdf>

three strands, and a national discussion needs to take place as to what mechanisms, standards, and procedures should be developed that allow for self-assessment on system and provider level, external monitoring and evaluation, and collecting and analysing relevant data for the setting of key performance indicators.

The structure of the Croatian Quality Assurance System is divided into six priority areas that cover the areas of quality from the aforementioned law that VET providers need to address. Once customers' needs have been identified they have to be transformed into specifications in order to be able to measure whether VET providers' activities and processes meet those needs. Quality assurance involves all techniques and activities aimed at eliminating causes of unsatisfactory performance at all relevant stages – from the identification of needs to the assessment of whether these needs have been met. The main principle is that quality assurance is learner-centred and competence-based.

Despite policy specific regulations, the question whether total quality management (TQM) can be applied at VET in Croatia has become an important issue. In educational organizations quality can be explained as specific form of culture which includes a long-term process of continuous improvement towards perceived standards of excellence. Implementation of TQM approach depends of several factors such as organizational structure and culture, employee involvement and organizational communication. And for another, the community increasingly requires that the schools are also efficient in use of resources so as to achieve the best results possible. TQM means that without strongly accepting the need for change with employees' involvement and management support as key elements for implement, there is no successful adopting of TQM in educational organizations.

The objectives of the research are to identify the benefits of TQM implementation in educational institutions, provide and analyse the ways to TQM philosophy, identify the importance of customers and continuous improvement.

The following section discusses the idea of education quality and describes the principles of TQM.

2. QUALITY IMPLEMENTATION IN EDUCATION

Based on the criteria that the institutions establish to determine the quality of a product or service, quality can be defined as the level of effectiveness, the level of efficiency or customer satisfaction.

Whilst there are various concepts of quality, many authors have agreed to identify certain conditions or minimum standards of quality that products and services must meet are to be considered of quality (Flores-Molina, 2011:25). Among them:

- a) The involvement and commitment of all personnel of the organization, together with the elements of recognition, motivation, training, promotion, sense of belonging, in other words, satisfaction in the workplace.
- b) The extension of quality to all elements of the process, both those that may be considered critical for the production of goods or services and those that facilitate the effectiveness and efficiency in production.
- c) The implementation of quality at all times of the process, from conceptualization and design to its delivery and monitoring, through its design and development.

TQM is a concept of quality introduced by industry to establish standards that ensure the quality of products through continuous actions. It requires a change of attitude of organization's management and promotes the use of teams of workers to accept responsibility and must work cooperatively. The theoretical framework of TQM came from W.E. Deming, J.M. Juran and P. Crosby and K. Ishikawa. Their views differ on fundamental issues as the definition of quality, approaches of measurement, and the roles of management, production workers and quality professionals. All the "gurus" emphasize the importance of customer satisfaction as well as continuous improvement. It means that the customer decides whether a product is of high quality or not (Šiško Kuliš & Mrduljaš, 2009:71).

TQM provides feedback at various stages for comparison with standards and for initiating control action to bring about modification and changes at appropriate stages. Flores-Molina (2011:26) defined TQM as a management approach focusing on managing the organization to meet and exceed customer needs, and involving all the processes, resources and mainly people in the company, towards achieving organizational objectives.

The education system deals with human resources as main input, process and output elements. To make the output of educational system consumable at national and international market, quality is essential. The qualities of teaching, quality in the classroom as well as quality in the teaching-learning process are areas where the use of quality concepts has also been discussed.

To explain the appropriate quality implementation in education, a question is what a difference between industrial and educational sector is.

Kwan (1996: 28) determines four differences between these two sectors: objectives, processes, inputs and outputs. The main indicator of effectiveness in a business sector is a profit. The mission of education is a relatively long term and there is no indicator like profit which can reflect the effectiveness of achieving objectives. Teaching and learning are interactive processes between teachers and students. Therefore the procedures in the processes can't be present in a step-by-step format as those in the business line. Both of the parties are human beings whose behaviours are subjected to different motives and objectives. There can't be any specification regarding the standardized codes of practice in learning and teaching. Unlike business sector, schools can't control the quality of incoming materials (students), which adds to the difficulty of controlling the quality of outputs. Therefore, in order to have continual improvement in quality education, output must be clearly defined and measured.

TQM has become increasingly popular in education since 1990. A literature study on application of TQM in education reveals that many authors discuss and give reasons in support of TQM usage in educational system.

The most cited reference of articles written on quality in educational institutions is Deming's work known as "Deming's philosophy". His 14 points are recognized as the principles that can be applied everywhere in small or large organizations and services institutions or industry. Lunenburg (2010:1) recommends the framework for transforming schools using Deming's 14 TQM principles. The suggestion is that Deming's terminology needs to be translated to schools as well. For example, principals can be considered as management, teachers are employers, students are employees, the knowledge they acquire is the product, parents and society are the customers.

Motwani and Kumar (1997; 132) determined whether students should be involved as a customer in shaping the educational output because there are some differences between what students want from their educational institutions and what they need. Authors emphasize the importance to satisfy students, but in that case institutions may risk compromising society and labour market needs.

According to Mencer (2005:242) students experience educational quality through contribution to personal development and personal interest. Teachers perceive quality through good working conditions and good relationships with students during the transfer of knowledge. Employers define the quality as acquired knowledge and skills necessary for the achievement on labour market. State policy

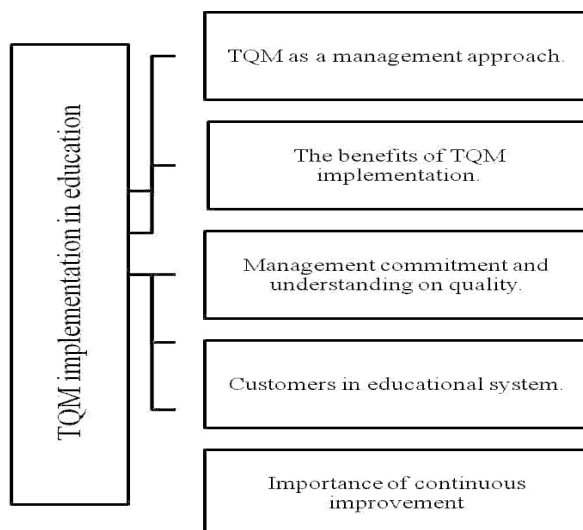
is interested in the application of accepted international standards and to reduce the cost of increasing number of graduates.

Essential to the concept of TQM is a customer-centred culture. In education, there are many customers: students, parents, potential employers and society in general. Kwan (1996:26) suggested that TQM is a management tool that aims for “total” and “quality assurance”. The author explained that TQM implies meeting the expectations of all the customers in the educational system: internal costumers and external costumers. It means that internal customers are students and employees and external customers are parents, future employers and society.

The effective TQM implementation in education means (Figure 1):

- Understanding of TQM as a management approach.
- The benefits of TQM implementation in education.
- The importance of management commitment and management understanding on quality.
- Understanding who are customers in educational system.
- Understanding the importance of continuous improvement.

Figure 1: The effective TQM implementation in education



This paper presents an opinion that main customers in VET system are future employers and society in general. This is because VET is in function of the develop-

ment of students' skills and knowledge that should satisfy the needs of employers. Also, VET plays a central role in preparing students for work, developing the skills of adults and responding to the labour market needs of the economy.

TQM depends on perfection and continual development. The question is can a TQM model be applied to vocational education institutions?

According to Ahuja, (2011:42) there are some points to a growing interest in applying TQM in vocational education. He emphasizes a direct relationship of human resource management, TQM and customer focus with technical education. In context of technical education TQM will mean continuous learning, innovation, quality in care of students, industrial and governmental customers, human training and development, providing leadership and performance planning. The emphasis is on doing the right things (effectiveness) plus doing things right (efficiency).

3. TQM MODEL IMPLEMENTATION IN VET

TQM depends on perfection and continual development. The question is can a TQM model be applied to vocational education institutions?

According to Ahuja, (2011:42) there are some points to a growing interest in applying TQM in vocational education. He emphasizes a direct relationship of human resource management, TQM and customer focus with technical education. In context of technical education TQM will mean continuous learning, innovation, quality in care of students, industrial and governmental customers, human training and development, providing leadership and performance planning. The emphasis is on doing the right things (effectiveness) plus doing things right (efficiency).

In this section, the issues which vocational education institutions should consider when implementing a TQM programme from the beginning of implementation are presented. The inputs for model in Figure 2 were generated from the review of literature.

The first phase is crucial to successful TQM model implementation. It means the school management must commit and support the change.

Without this commitment, the efforts will lead to employees' frustration and can cause the lack of motivation for involving in process. For this reason, all employees need to be informed and train to perform an internal quality assessment.

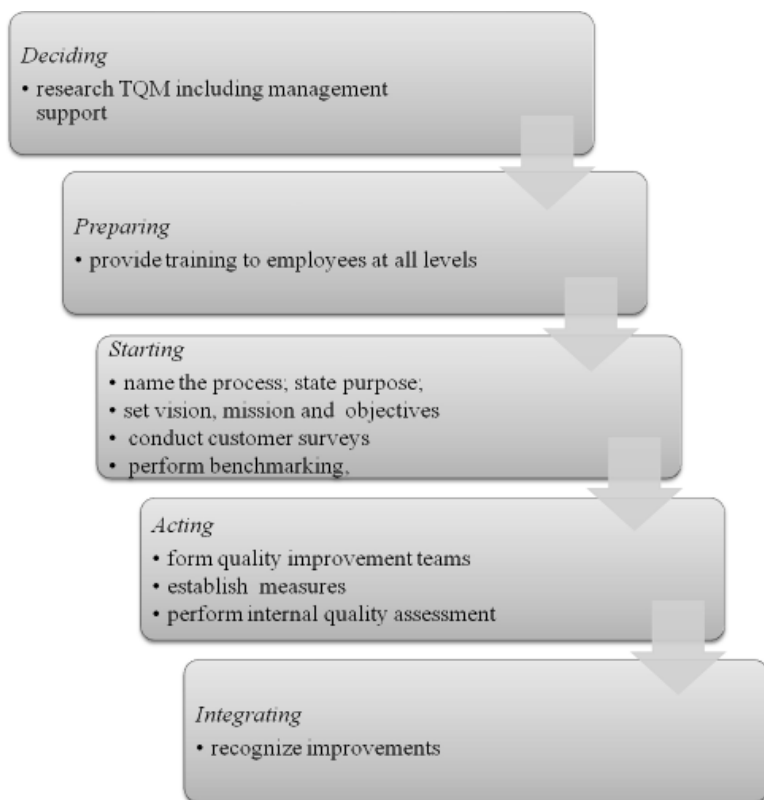
In the third phase, the mission, vision and objectives must be agreed in team and make this publicly available. The customers' surveys must be conducting to evaluate the current process. To compare performances to other institutions, it must be performed competitive benchmarking.

There is a need to form a quality improvement teams to oversee and regulate TQM process and perform internal quality assessment of the institution to identify strengths and weaknesses.

The fifth phase should involve recognizing and rewarding quality improvements. Recognition can be a valuable tool for improving employee's interest in TQM.

The final phase should involve evaluating either success or failure of the programme.

Figure 2: TQM model for vocational education and training



4. CONCLUSION

This paper discussed the importance of the improvement of education quality system and effective implementation TQM for enhancement the education quality. TQM advocates that quality is a responsibility of all stakeholders and can't be achieved if they have different ideas of what the quality means.

Experiences from the implementation of an education quality enhancement strategy at the VET were presented. It is suggested a six-faze model for implementing TQM within vocational schools.

Future work will involve the measurement and monitoring of performance over the short term period and the use of the results for the continuous improvement of policy and strategy for quality assurance in vocational education.

REFERENCES

- Ahuja, I.S. (2011). Quality assurance in technical education system through TQM paradigm, *International Journal of Business Continuity and Risk Management*, Vol. 2, No. 1, 442-55
- Flores-Molina, J.C. (2011). A Total Quality Management Methodology for Universities, FIU Electronic Theses and Dissertations, Paper 375, Dostupno na: <http://digitalcommons.fiu.edu/etd/375> Pristup: (02-02-2012)
- [http://www.asoo.hr/UserDocsImages/projekti/kvaliteta/Self-assessment%20 Manual.pdf](http://www.asoo.hr/UserDocsImages/projekti/kvaliteta/Self-assessment%20Manual.pdf)
- Kwan, P.Y.K. (1996). Application of total quality management in education: retrospect and prospect, *International Journal of Educational Management*, 10/5, 25-35, ISSN 0951-354
- Lunenburg, F.C. (2010). Total Quality Management Applied at Schools, *Schooling*, Vol.1, No.1, 1-6, Dostupno na: <http://www.nationalforum.com/Electronic%20Journal%20Volumes/Lunenburg> Pristup: (12-01-2012)
- Mencer, I. (2005). Osiguranje kvalitete i visokoškolske ustanove u Republici Hrvatskoj, *Ekonomski pregled*, Vol.56., No.3-4, 239-258, ISSN 0424-7558
- Motwani, J. & Kumar, A. (1997). The need for implementing total quality management in education, *International Journal of Educational Management*, 11/3, 131-135, ISSN 0951-354

Sahlberg, P. (2007) Secondary education in OECD countries, Common challenges, differing solutions, European Training Foundation, Dostupno na: <http://www.pasisahlberg.com/downloads/Secondary%20education%20in%20OECD%20countries%202007.pdf>, Pristup: (11-12-2011)

Šiško Kuliš, M. & Mrduljaš, Z. (2009). Gurui kvalitete, Tehnički vjesnik, Vol. 16, No. 3, 71-78, ISSN 1330-3651

FREQUENCY VIOLENCE AMONG CHILDRE IN THE SCHOOL COMMUNITY

Bisera Jevtić, Ph.D.¹

¹ University Ni, Serbia Faculty of philosophy Department of pedagogy, Republic of Serbia
bisera@vaspks.edu.rs, biseraj@filfak.ni.ac.rs

ABSTRACT

In a society in which we live is very widespread violence. In accordance with the fact that the problem of peer violence increasingly common in schools and at home and abroad, there is a growing need for research dealing with this current issue, and in order to obtain relevant data and information that would help prevent such behavior. The fact is that there are differences in the results of research on the prevalence and forms of peer violence. That's why we ask the following questions: Does the primary school students know how to recognize victims of violence? What forms of violence are most often exposed to what extent and how to react in situations of violent interactions? Schools in the violence-then and now? In accordance with the dilemmas which we find ourselves as the object of our research we set the frequency-peer violence, and prevention opportunities at school. The results showed that primary school students with varying success to recognize and evaluate different forms of peer interaction as peer violence. Gender proved to be variable with statistically significant differences occur. In addition, in this study, the author reveals the priority response to violent behavior of peers. Factorization of measuring variables indicated that it should increase awareness of victims and abusers, as the author suggests a new study. It is more cautiousness than decadence. This paper provides new insights about the violence of self-efficacy of students, and provides several new topics for further research.

JEL Classification: H75, I20

Keywords: bullying, bully, victim, forms of violence, prevention.

Bullying among school children and peers is certainly a very old phenomenon. Most of adults remember from their school days frequent and systematic harassments and attacks by their peers or a group of peers. There are few of those who don't remember the students in their class rejected by others, with whom nobody wanted to sit at the desk, who were laughed at by all class, teased and even bullied physically.

The first systematic research of peer bullying phenomenon initiated in the early 1970s (Olweus, 1973, 1978) in Scandinavian countries. Olweus was concerned with the problem that became very important in the public when three Norwegian boys committed suicide as a result of being bullied by their peers. Norwegian Ministry of Education initiated in 1983 a national campaign against bullying in schools, which denoted a new period in dealing with and solving this issue. It is also very important the fact that with this program, the problem of peer violence „has moved“ from individual and lonely scientific studies, to position of necessary interdisciplinary approach to this problem which has become a social issue of broad public interest.

The fact that bullying at school was in expansion in the late 1980s and in the early 1990s, resulted by a number of studies in other countries such as Japan, England, Canada, United States and Australia.

Nowadays, 30 years after the first studies of peer bullying, many experts emphasize that bullying at school is increasing in the world and also in our country. Accordingly, peer bullying as a manifestation of aggressive behavior grows in modern society. Even today many students face with bullying at school, like many teachers and parents as well.

Srna (2003: 3) defines bullying as illegal and immoral use of force that cause harm to others, themselves and ambience. Bullying involves deliberate and conscious intent to cause pain or hurt another person. According to this definition, there are two characteristics of a violent act: intent and injury. This kind of behavior endangers someone's life, physical, psychical and social integrity of an individual, its health and development. Unlike Milosavljevic, Srna has given a different definition of bullying, just connecting bullying with injury i.e. harm and adding an intent to it.

Popadic (2009) considers bullying as intentional and unjustified causing of damage to other person. What we call „causing of damage“, can be observed as

the most wide mark of negative behavior effects that causes harm to someone else. According to that, just causing of damage (itself) is not enough to talk about bullying, but it is necessary. Behavior that causes harm can be classified on verbal and non-verbal and it can be physical bullying, causing material damage or psychical harassment, such as bullying, shaming, social isolation etc. The terms bullying or aggression are mostly used as synonyms, although aggressiveness and aggression refer more to motivation to hurt other person and to disposition, while the term of bullying, in our opinion, suggests more prohibited cause of damage, often a part from an intent. Beside that, the difference between the term of aggression and bullying stands also in the level of emphasizing of unjustified act. In the definitions of aggression, unjustified cause of damage isn't mentioned, but it is meant, while it is important that bullying is considered as unjustified act.

Therefore, while for aggression the intent is in the centre and damage isn't always necessary, for bullying the unjustified injury is central and the intent isn't always necessary. In the practice these differences are not so significant because we usually consider with the behavior that has caused unjustified damage and with intent to cause harm, so it is bullying and aggression at the same time.

Olweus (1998:19) defines peer bullying as when a person is exposed repeatedly and over time, to negative actions on the part of one or more other persons. Here, peer bullying doesn't refer to some occasional insignificant attacks against one student. The term peer bullying is used when there is an imbalance of power, i.e. when a bullied student finds in difficult to defend himself and he is helpless in some way, towards a bully. Also, according to Olweus, the term bullying shouldn't be used in the case when two students of mostly equal strength (physical or social) fight or argue.

Considering this definition of peer bullying, we can conclude that peer bullying involves the following components: negative actions repeated over time and an imbalance of power or strength.

A similar definition of peer bullying was given by Farington who has defined it as „ any kind of physical or psychical frequent causing of damage by the most powerful and the strongest student (or a group of students) to a weaker one“, (according to Sinbad, 2005).

The first bigger initiatives for researching of bullying in schools started in early 1970s in Scandinavian countries and resulted by tragic cases of students' suicide.

During the 80s and 1990s school bullying is recognized as an important issue and resulted with numerous studies in Europe and elsewhere. Likewise, there were suggested and applied many intervening and prevention programs.

It is very difficult and risky to compare the obtained results because of the differences between peer bullying definitions, violence measuring methods and differences between samples used in the research.

One of the first bullying studies, was the Olweus one (Olweus, 1993) that involved 130.000 students from 8 to 16 years old, in 715 schools from all parts of Norway. The data gain in this study has shown that approximately 15 to 20 percent of students were involved in peer bullying, as victims or bullies. Approximately 9 percent of students were victims, 7 percent has bullied other students, and 1.6 percent of students were at the same time victims and bullies. The results obtained have shown also that in 60-65 percent of cases a victim is bullied by a group of 2 or 3 students and in 35-40 percent of cases peer bullying is started by an individual. This study also gave the data showing that the size of a school and a class doesn't influence the appearance of bullying at school, neither is important if it occurs at city school or somewhere in periphery or in village.

The USA and Israel are the countries where school bullying is a very big problem. In the USA during the 1990s violence among students and teachers has got the epidemic measures. According to the data from 1994, in high schools in the USA every fifth student takes with him some kind of weapon- a firearm, knife or similar; in 12 percent of criminal acts in school buildings the committers were armed; a half of criminal attacks on teenagers happens in school buildings, yards or in the street, and a number of homicides among people younger than 18 increased for 87 percent during a period from 1980 to 1990 (Gasic- Pavisic, 2004). In the end of 1990s, the reports of national studies showed that the school bullying situation had become worse and physical attacks were the most common form of violence. Nearly 70- 80 percent of students declared that they were witness of bullying at school during the school year and that it happened more often at school than in their home or neighborhood. In Israel, the school bullying issue is more serious than in most west countries, the coefficient of school bullying in this country is higher than in Russia or in the USA (which are, otherwise, considered as the most violent countries in this area).

An aggressive and violent behavior has become a part of every day of young people in Israel, and schools are the centers of this behavior acting.

Among west European countries there are those where more than a half of students are involved in school bullying. Based on data of the World Health Organization, school bullying in European countries (those involved in the study from 1998) is most frequent in Australia, Denmark, Greenland, Lithuania and Germany, and the smallest frequency is in North Ireland, Greece, Wales, Sweden and England.

Compared to the dark picture from the data studies in other countries, the situation in Serbian schools, for now, is more favorable. The data of studies show lower level of peer bullying in schools than in most other countries according to information available in the literature. In 1997 a group of researchers, under the leadership of Milosavljevic, published the first large and the most comprehensive study in Serbia, about frequency and related forms of peer bullying and adults violence.

On questions about bullying frequency at school, nearly more than one third of examinees answered that they had experienced being insulted or laughed at (36.7%), and out of school (26.8%). On the second place in frequency is verbal aggression such as treatments of kicking, and on the third place is robbery and destruction of things. On the fourth place in frequency they found being forced to do things they didn't want to. Hitting and physical injury by other children have experienced 3.8 percent of students in school and 4.5 percent of them out of school, sexual bullying 0.8 percent of students in school and 2 percent out of school. In these data we can see milder forms of violence (verbal bullying) that are more frequent than more severe forms, and they are more frequent at school than out of it.

Based on this study, males are more exposed to peer bullying than females. Males and females are equally exposed to physical attacks in school, and out of school males are more often beaten up by other children than females.

Sexual bullying in the research sample of students has relatively small frequency, but this fact doesn't decrease the heaviness of the problem when this kind of bullying occurs. The unexpected fact is that males are more exposed to sexual bullying than females.

Older students are exposed to treatments with hitting and arms, money robbery, insults or sexual harassments, more often than younger students. Concerning bullying at school, age differences were not significant. Younger students fight more often with their peers than older ones, and males do that more often than females, although approximately 9 percent of females participate in fights. A total number of students that participated in some kind of fight at school are 20 percent. Almost

a half of examinees, during a school year, were present in a situation when one kicks another student, and approximately one pentad of them wasn't witness of this kind of bullying. Males are more often witness of bullying in their environments, and younger students more than older ones (Knezevic- Floric, 2008: 175).

In the study from 2004, obtained results are not very different from those gain six years ago (Gasic- Pavisic; 2004). In this study 24 percent of students reported that they have experienced being bullied, and 76 percent gave negative answer. Verbal bullying is named as the most frequent type of bullying such as laughing at, insulting, name -calling or making fun of. The results gain in the researching program „ My school- school without bullying“ speak in favor of a small increase of all types of peer bullying. Although our schools are further more safe than in European countries, it doesn't mean that bullying among schoolchildren should be ignored, especially if we are aware of world's trend of bullying increase, and of the fact that children and young people in Serbia grow up in conditions favorable for aggression and violence- national armed conflicts in recent past, criminal and aggressive behavior in society, increase of drug addiction, aggressive models in media, breakdown of moral values, family crisis, poverty etc. Bullying appearance is influenced by all changes in political, social and educational society structure, and they are actually a reflection of the whole social situation. This, however, doesn't allow us to wait for better situation in society to initiate solving of bullying issue over and among children. The priority of the whole society, and particularly of a family and experts working with children, is to make an effort in prevention of bullying.

In accordance with the fact that the problem of peer bullying is more frequent in schools in our country and world wide, we need more studies about this actual issue, and with a purpose to give relevant information and facts which could help in prevention of this kind of behavior.

The fact is that there are differences in study results about frequency and types of peer bullying in our country (Gasic- Pavisic, 2004; Popadic& Plut, 2007). Thus, it has been imposed a question if student in our country knows how to recognize bullying, to which bullying type they are mostly exposed to, how often, how do they react in the situations of violent interaction and what does the school do to prevent these situations as well.

Concerning the doubts we found out on our way, we present as a subject of our study: **Frequency of peer bullying and possibilities of its prevention at school.**

The appropriate sample of the study involved 546 examinees, aged from 13 to 14, student 7 and 8 graded of primary school in Serbia.

Gain results have shown that students in primary school recognize and judge differently various peer interactions as a type of peer bullying. Most successfully they recognize physical bullying (96 percent of examinees), than sexual harassment as a type of peer bullying (85 percent), cyber bullying (82 percent). Therefore, student best recognize and judge open and direct types of peer bullying as violent actions. In addition there are insulting (64 percent of examinees recognize successfully this type of interaction between peers as peer bullying), expulsion (46 percent). Very interesting and significant results of the study tell us that primary school students have most difficulties to recognize gossip (only 24 percent) and spreading of rumors (38 percent of examinees) as a bullying type. These results indicate a possibility that bullying types such as emotional- psychological and social bullying, students consider to some extent the common way of peer interaction. The reasons for these results we can possibly find in educational practice, i.e. in adults reaction on a peer bullying. Namely, the adults (schoolmasters, teachers, pedagogues) react on direct types of peer bullying more often than on emotional, psychological and social types. Accordingly, when it comes to a physical injury or battery (bruise, scratch, breakage etc.) or visible damage, employees react more often even because they have to give some kind of explanation to parents for this visible damage. All the other that doesn't leave directly visible traces (insulting, spreading of rumors), sometimes doesn't cause the reaction of adults at school, or they don't react at all on this kind of behavior. Preoccupied with planned course contents, a number of methodological demand, plans and programs, deliberately or unintentionally teachers are not sensitive enough to recognize and notice the indirect types of peer bullying. This non-acting of adults in some extent can influence children recognition of different types of bullying. In the study sexual harassment has been considered as peer bullying which means harassment of a sexual identity of the victim by disdain or being forced on some kind of sexual communication. It can occur in different ways- verbally, physically, making gestures or using electronic means. Also, it can be taken as more or less serious, so it can be mild sexual harassment to more serious sexual harassment (Popadic, 2009). In our study the item about children's recognition of sexual harassment as a type of peer bullying is the following: „ *The violence is when they touch me in a way I don't like*“ and „ *The violence is when friends give me insulting comments*“. Therefore, for needs of the study, we took milder and more rigid criterion considering sexual harassment, as a type of peer bullying. This

form of peer bullying beside physical violence is mostly recognized by students (85 percent). Beside this result, we were interested in eventual differences in recognition of this bullying type considering examinees gender. Gain results show statistically significant difference in sexual harassment recognition considering examinees gender. When we deliberate the differences in gender, we can notice that females are statistically viewed much better in recognition of sexual harassment as bullying type, in comparison with males, if we talk about more serious but even milder criterion for sexual harassment. These results were expected and we can explain them with facts that female are more usually exposed to sexual harassment by their peers at school than males, and consequently they are more sensitive to recognize this type of peer interaction as violent.

Physical bullying is an open, direct type of bullying and it can be reactive and proactive, instrumental and hostile. We talk about this bullying type when there is a direct physical attack on the victim, when a student inflicts injury or tries to harm another one or inflicts some kind of discomfort upon another person. Thus, the same aggressive actions are visible, as well as body- consequences such as battery, bruises, scratches, hematoma etc. Before we deliberate an individual influence of independent variable (the gender) on recognition of this bullying type, we want to underline once more that as it has been shown in study results, this type of peer bullying is most successfully recognized as violent interaction (96 percent of examinees).

Obtained results about physical bullying have pointed out that there were no statistically significant differences between genders of examinees. The reason for this result we find in practice where we usually speak about physical bullying and consequences of this kind of violence are immediately visible, so that males and females are both equally sensitive to recognize this bullying type.

The next bullying type that we took in consideration is psychological bullying. This bullying type refers on immediate or long-term harassment of mental or emotional health or student's dignity. The procedures we have studied in this bullying type are the following: gossip, insulting and name-calling. What has attracted our intention in the study is to find out if there are statistically significant differences between males and females in recognition of these mental bullying types. Namely, considering insulting and name-calling we found statistically significant differences in recognition of this bullying type in favor of females. These results were expected as females are more likely to use indirect bullying than males. As already suggested,

females are biologically superior in verbal abilities than males. Therefore, when they are protagonists of violent interaction, they reach out for more subtle, manipulative and indirect methods. As they are more inclined to this bullying type, their sensibility to recognize this kind of violence is more articulated than within males.

The next type of peer bullying we studied is exclusion and spreading of rumors as types of social bullying. Verification of significant differences between recognition of rumors spreading and exclusion, have shown that there is no significant difference between males and females to recognize exclusion as a type of social bullying among children. Those results can be explained by inadequate reaction or the fact that adults and peers don't react at all on this bullying type. When it comes to false rumors, as a type of social bullying, the situation is very different. These results are in certain extent in accordance with the results of previous studies (Kerestes, 2004: according to: Knezevic- Floric, 2008) which confirms that females are more aggressive when it comes to social or indirect aggression and therefore their sensibility to recognize these bullying types is more developed.

Recently, has appeared a new method of bullying mostly characteristic for females. With development of computer technology and its widespread availability and implementation, appeared the term „cyber bullying“. It is about insulting, threats, teasing and gossip through messages, email, blogs or chat room exchanges. It is more frequent bullying type considering that a great number of children and young people have a cell phone and computer. We can only anticipate the consequences of this kind of bullying, because there are still no relevant facts about it: but for now it is very dangerous even the information from some studies in the world that 10 in 50 percent of young people are victims of this bullying type (Knezevic- Floric, 2008). Confronting groups to their gender, we have obtained the results showing that there is a statistically significant difference in recognition of cyber bullying. As it was expected, females recognize cyber bullying in statistically more adequate way.

CONCLUSIONS

Basic results show that primary school students more or less successfully recognize and estimate various peer interaction as type of peer bullying. The gender has been shown as variable with statistically significant difference: females are more successful in recognition of cyber bullying and sexual harassment, spreading of rumors as a type of social bullying, insulting and gossip as a form of psychological bullying.

Those results lead us to the conclusion that females are more sensitive to recognize indirect bullying methods than males, this was expected at some point, considering that females are more inclined to indirect aggression, i.e. females are aggressive in more sophisticated way than males, using subtle and manipulative methods.

In this paper we studied also reactions of children on peer violent behavior. It has been shown that children react in a different way on violent behavior. More than half of examinees involved in the study ask help from adults or friends when they experience bullying. Although, the percent (35%) of those who responded on bullying equally i.e. with bullying, is not neglecting. This kind of reaction brings with itself a danger to consolidate an aggressive model of communication and therefore a spreading of violence phenomenon. If we consider the gender structure of examinees, we come to conclusions that statistically significant difference between males and females reactions doesn't exist.

What we consider the optimistic fact in this study is that 85 percent of examined population when they are in role of onlookers try to inhibit further bullying over the victim, defending it or calling a teacher on duty. 1 percent examinees present the violent school core, considering when it comes to bullying, the examinees support the bullies. The independent variable (the gender) in the study was not statistically significant for gain results in this segment of the study.

When bullying occurs at school, students ask help from everyone who can possibly help them, mostly (52 percent) these are class teachers, than school pedagogues (13 percent), friends (12 percent) and finally parents (11 percent). The gender structure of students is not significant for the fact who they will ask for help in violent interaction with peers.

Considering the bullying prevention activities we came to information that the school acts in order to establish classroom rules of behavior at school and insists on them. Then there are: organization of lectures or workshops with bullying subject, through teaching and extracurricular activities and forming a peer teams for the support against peer bullying at school. In modern school they approach to this issue from the aspect of cause- consequence connections, from the aspect of nature, structure and dynamics of personality. The role of teacher has been changed significantly when we talk about peer bullying. The teacher isn't anymore a person who teaches, moralizes, judges, criticizes, gives advices, but who leads students to the cognition that violent behavior wouldn't be the best choice, so he finds out various acceptable strategies of non- violent ways to resolve a problem. As specified above,

the teacher's role would be to create educational activities in the class with the purpose to strengthen over time pro-social behavior that will accomplish by development of empathy and altruism, higher self- esteem and self- respect, than a skill of non- violent communication, bringing decisions and solving conflicts.

REFERENCES

1. Gasic- Pavisic, S.(2004). Measures and programs for bullying prevention in schools, Anthology of Institute for pedagogical studies, n. 36, 168- 178.
2. Knezević-Floric, O. (2008). Basis of social pedagogy. Novi Sad: Union of pedagogical societies of Vojvodina.
3. Olweus, D. (1993). Bullying at school: What we know and what we can do. Oxford: Blackwell.
4. Olweus, D. (1998). Bullying among school children-What we know and what we can do. Zagreb: School Book.
5. Popadic, D. & Plut, D. (2007). Violence in primary schools in Serbia: types and frequency. Psychology n. 40 (2), 309–328.
6. Popadic, D. (2009). Bullying at school. Belgrade: Institute of Psychology, UNICEF.
7. Sinobad, S. (2005). Characteristics of peer bullying in schools, (Electronic version). Temida n.3, 19-23.
8. Srna, J. (2003). Violence. Belgrade: ALBULJ.

ACCREDITATION OF MEDICAL HEALTH INSTITUTIONS IN THE REPUBLIC OF CROATIA

Anita Kedačić, M.Sc.¹

¹Public Hospital „Dr. Josip Benčević“, Croatia, anita.kedacic@bolnicasb.hr

ABSTRACT

Medical Health Institutions provide and implement high quality contractual obligation with the Croatian Institute for Health Insurance which is primarily related to providing health care to patients in order to accomplish effectiveness of medical procedures. In order to ensure and improve the quality in health care, the same established the organizational structure for health care quality system in accordance with the Regulations on the accreditation standards for medical health institutions.

Each medical health institution individually carried out education of teams. After the education they will work on the establishment of a system for quality improvement as the basis for hospital accreditation and will create the Quality Handbook based on accreditation standards for medical health institutions and including participation of all employees in certain activities in their clinics or departments.

Accreditation is a proof of quality and safety of medical health institution providing health care in a manner that continuously and effectively develops, maintains and improves the quality of health care by introducing standards and benchmarks for quality assessment. Accreditation of medical health institutions will be conducted by the Agency for quality and accreditation, and all costs will pay Croatian Institute for Health Insurance.

The aim of this paper is to show the importance, necessity, utility and manner of the accreditation procedure for medical health institutions in order to harmonize, secure and improve the development of health systems with emphasis on the quality of the needs of patients.

JEL Classification: I19

Keywords: accreditation, accreditation procedure, standards, quality, medical health institution

1. INTRODUCTION

After the finished procedure of the classification of medical health institutions in the Republic of Croatia with the aim of achieving minimal standards of medical protection quality as well as of equal development of the same in all areas of the Republic of Croatia, in 2011, Ministry of Health and Social Welfare has started with the procedure of accreditation of medical institutions. The procedure of accreditation¹ of medical institutions will be conducted by the Agency for Quality and Accreditation in Health and Social Welfare².

Every medical health institution has its profile considering accommodation, equipment, i.e. number of beds, wards, services, human resources, medical equipment and ways and methods of conducting every procedure in relation to providing medical protection. The establishment of quality systems as well as implementation of quality standards of medical protection will enable the management and the control that are intended to fulfill the quality demand.

2. CONDITIONS FOR THE BEGINNING OF ACCREDITATION PROCEDURE

One of the conditions for the beginning of the accreditation procedure is to educate employees within medical health institutions. The same will be conducted by certified educators who have passed the course for the education on accreditations of medical health institutions organized by Agency for Quality and Accreditation

¹ The accreditation procedure is the procedure of evaluation of the work quality of a medical institution, a trading company that performs a medical activity i.e. private medical workers based on the evaluation of their work under determined optimal standards for the activity they perform. (a2 Pravilnik o standardima kvalitete zdravstvene zaštite i načinu njihove primjene, Narodne novine 79/2011;a 2 s 17,Zakon o kvaliteti zdravstvene zaštite i socijalne skrbi, Narodne novine 124/2011)

² With the Law on the Quality of the Health Protection and Social Welfare, one has founded the Agency for Quality and Accreditation in Health and Social Welfare. When this law became effective, the Law on the Quality of the Health Protection stopped being effective. The Agency for Quality and Accreditation in Health, founded by the Law on the Quality of the Health Protection stops being effective when the the Agency for Quality and Accreditation in Health and Social Welfare entered the Court Register. Until the new Regulations have been brought from the Art. 62 the Law on the Quality of the Health Protection and Social Welfare stays effective: The Regulation on the quality standard of the medical protection and its usage, the Regulation on the accredited standards for medical health institutions and the Plan and Programme of Measures for the Security, Improvement, Promotion and Monitoring of the Medical Quality Protection. Therefore, the Agency for Quality and Accreditation in Health i the Agency for Quality and Accreditation in Health and Social Welfare will be used in work depending on the period of 2011 and the source of information.

in Health in the period from 31 May-3 June 2011. Its aim is to gain new knowledge and skills for the further education of medical health institutions.

The education will last for 16 hours (2 days of eight hours). Medical health institutions that have joined the education in the period from July to November of 2011 are the following hospitals(<http://www.aaz.hr/aktualno.php?AktualnoID=121>):

General Hospital Zadar, General Hospital Varaždin, General Hospital Vukovar, General Hospital Zabok, General Hospital „Dr. Josip Benčević“ Slav. Brod, Special Hospital for Medical Rehabilitation Daruvarske toplice, Special Hospital for Medical Rehabilitation Stubičke toplice, Special Hospital for cardio-vascular surgery and cardiology Magdalena, General Hospital Koprivnica, General Hospital Bjelovar, Clinical Hospital Merkur, General Hospital Šibenik, General Hospital Pula Special Hospital for Medical Rehabilitation of the Primorsko-goranska county Thalasso therapia Crikvenica, Clinical Hospital Dubrava, General Hospital Dubrovnik, Clinic for Infectious diseases “Fran Mihaljević”, General Hospital Gospić, Clinical Medical Center “Sestre milosrdnice” County Hospital Čakovec, General Hospital, General Hospital „Hrvatski ponos“ Knin, General Hospital Virovitica, General Hospital „Dr. Ivan Pedišić“ Sisak, Special Hospital for Medical Rehabilitation Kalos Vela Luka, Special Hospital for Medical Rehabilitation Krapinske toplice, General Hospital Vinkovci and Neuropsychiatric Hospital “Dr. Ivan Barbot” Popovača.

In July 2011 Agency has invited public tenders ³for the accreditation procedure of ten medical health institutions (one Clinical medical Center, two clinical hospitals and seven General hospitals) who have been the first ones to apply and meet the tender conditions. The same will be conducted by Agency for Quality and Accreditation in Health, while the expenses will be at the expenses of the Croatian Health Insurance Institute.

³ In order to apply to the tender and to gain conditions for the accreditation procedure, medical health institutions ought to have established organizational structure of the health protection quality in accordance with the Regulation on the accredited standards for medical health institutions, documents for the quality system that involve documented policy and aims for quality as well as Manual for Quality, documented procedures for the management of documents, records, implementation of internal evaluation and patients' safety. The same ought to have a developed system for the management of patients' complaints. They also have to perform quality control of the medical documentation and effectively manage infectious waste and dangerous medical waste, educated employees from the area of quality and a possibility of harmonization and functional connection with e-ordering.

The tender applied by twenty- two 4medical health institutions finished in October 2011. After a thorough examination of the tender documentation, the medical institutions that have met the tender conditions are: Clinical medical center Zagreb, Clinical Hospital Dubrava, Clinical Hospital Merkur, General hospital Zadar, General Hospital Karlovac, General Hospital „Dr. Tomislav Bardek“ Koprivnica, General Hospital Dubrovnik, General Hospital Vukovar, General Hospital Pula and General Hospital Šibenik.

After the first tender when ten medical health institutions have been selected, the Ministry of Health and Social Welfare, the Croatian Health Insurance Institute and Agency for Quality and Accreditation in Health published another invitation for tenders for accreditation procedure of medical health institutions in the duration of 10 days.

Based on the conducted public tender for the financing of the expenses of the accreditation procedure of medical health institutions published in NN 132/11, the manager of the Agency made a Decision on the choice of the medical health institutions for the financing of the expenses of the accreditation procedure.

The following medical health institutions have been selected (<http://www.aaz.hr/aktualno.php?AktualnoID=127>): Clinical Medical Center „Sestre milosrdnice“, Clinical Hospital „Sveti duh“, Clinic for Infectious diseases „Dr. Fran Mihaljević“, General Hospital Bjelovar, General Hospital Čakovec, General Hospital Gospić, General Hospital Varaždin, General Hospital „Dr. Josip Benčević“ Slav. Brod, General Hospital Virovitica, General Hospital Zabok and General Hospital „Hrvatski ponos“ Knin.

3. THE ACCREDITATION PROCEDURE

In the Regulations on the quality standard of the medical protection and the way of its application (NN 79/2011) one has defined the quality standards of the medical protection that includes:

- ongoing improvement of the quality of clinical and non-clinical procedures ,
- the safety of patients and staff,
- medical documentation,
- rights and experiences of patients and satisfaction of staff,
- infection control,

⁴ Medical health institutions that applied to the tender: 3 clinical medical centers, 3 clinical hospitals, 15 general hospitals and 1 clinic

- death cases and obductions,
- monitoring of side-effects and harmful events connected to medical products,
- internal grade
- security supervision as well as the improvement of the medical protection quality.

Considering the establishment, development and maintenance of the quality system, medical institutions with more than forty (40) employees are obliged to form a special unit for security and improvement of medical protection quality. Other medical institutions, trading companies and private medical workers performing medical activities are obliged to name a responsible person for medical protection quality.

In 2011 one has started with the accreditation⁵ of the medical institutions in the Republic of Croatia.

Using it one checks the accreditation standards to which medical health institutions have to adapt to if they want to get accredited. This involves transparency and quality under certain measures.

Accreditation standards for medical health institutions have been established with the Regulation on the accredited standards. These involve:

- system of protection and improvement of medical protection quality
- management of medical health institutions,
- employees of a medical health institution,
- review of the usage of medical services,

⁵ The accreditation procedures are implemented by an accreditation body determined by the act of foundation, statute and other general acts. They have to be based on International and European standards i.e. national standards and documents of European and International organizations for accreditation. (a.7 Zakon o akreditaciji, Narodne novine 158/2003)

The accreditation body is obliged to make an agreement with every legal and physical person that wants to get an accreditation. When making the agreement, the accreditation body has to inform the legal and physical person with the demands for getting an accreditation. The agreement also determines the obligations of the signed person and the implementation of the accreditation procedure in accordance with the standards and documents stated in the Article 6 of this Law.(Zakon o akreditaciji, Narodne novine 158/2003)

The given accreditation is time limited. The accredited body has to fulfill the demands for the assignment of the accreditation during the time the accreditation lasts.(Zakon o akreditaciji, Narodne novine 158/2003)

- patients⁶ rights
- medical documentation service,
- health care,
- release planning,
- infection control
- the system of security management.

Based on the above mentioned standards according to which the accreditation procedure is done, medical health institutions are obliged to plan⁷, secure and prove the quality improvement ⁸of the medical protection.

The Regulation also contains the instruction for the evaluator for the evaluation and monitoring of the standard application in all areas mentioned in the standard demands according to the Regulations.

The founding and the activity of the body that performs the activities of the national services for accreditation is regulated with the Law of Accreditation ⁹.

During professional meetings and workshops on the topic of accreditation that are held and will be held during the year 2012 on the premises of Agency for Quality and Accreditation in Health and Social Welfare, the attendants will discuss and define the way of data collecting, acquire knowledge and skills on how to implement internal evaluation, recognize discrepancies from the standard demands, draft

⁶ Medical Health Institutions will have to inform patients in advance about their rights during the health services and to provide them with the list of all their rights and ways of achieving them.

⁷ The quality plan is a part of quality management aimed at the determination of the aims of the quality and determination of the necessary implementation processes as well as the suitable resources with the aim of accomplishing quality. (a 2 Pravilnik o standardima kvalitete zdravstvene zaštite i načinu njihove primjene, Narodne novine 79/2011)

⁸ The improvement of quality is a part of quality management aimed at the increase of abilities for the meeting of the quality standards. (Pravilnik o standardima kvalitete zdravstvene zaštite i načinu njihove primjene, Narodne Novine 79/2011)

⁹ As for the Law on Accreditation, terms that are used imply the following: evaluation of the compliance is every activity that is used to evaluate, directly or indirectly, whether the certain standards have been met; certificate of accreditation is a document based on which one confirms the ability for performing certain activities in the area of compliance evaluation; technical supervision is a review of technical documentation on a product, product testing, process or installation and determination of its compliance with the special demands or based on the professional judgement, with the general demands. (a.3, Zakon o akreditaciji, Narodne novine 158/2003)

documents of the quality system as well as other activities that are necessary in order to fulfill the standard demands.

The accreditation procedure will last for approximately twelve months. In that period one will evaluate and monitor the work of medical health institutions and their employees. For every medical health institution it is necessary to draft a qualitative Manual of quality based on the accreditation standards and guidelines of the implementation of the above mentioned measures and the importance of security, improvement and evaluation of the quality of medical protection.

Agency for Quality and Accreditation in Health and Social Welfare monitors all the indicators of the quality of the medical protection that are determined by a plan and programme for measures¹⁰ for those who have the right for health care in the Republic of Croatia.

4. CONCLUSION

Since the accreditation demands active and effective participation of all medical workers in the improvement, security, promoting and monitoring of the quality, one needs knowledge, attitudes and skills in order to develop the capacity for a manager of individual or organizational improvement.

The aim for the accreditation of health institutions is a more qualitative health service based on the global and European standards, i.e. a more qualitative providing of medical health care that will make patients more satisfied and safer. After the conducted public tender for the financing of the expenses for the accreditation procedure, medical health institutions in the Republic of Croatia that have met the demands are: two (2) clinical medical centers, three (3) clinical hospitals, one (1) clinic and fifteen (15) general hospitals.

The medical health institution that implements the procedure of accreditation must have an efficient management that bears the responsibility for the its work and function according to legal regulations that are valid not only for the institution but also for the care giving and patients' security.

¹⁰ Priorities for the improvement of the quality of the health protection as well as the priorities for the improvement of the quality of the health protection and the measures for the implementation of a unique system of the quality standard for the health protection and clinical indicators of quality are determined by the plan and programme for the security, improvement, promoting and monitoring of the quality of the health protection. (Zakon o kvaliteti zdravstvene zaštite i socijalne skrbi, Narodne novine 124/2011)

With the accreditation of medical health institutions as significant, powerful and transparent instrument for the improvement of the health system, there are clearly defined responsibilities, clearly defined action plans that are necessary to be implemented during the year 2012 in order to get a transparent evaluation of the implementation and the significance of the accreditation itself.

Although the same is still valid, we can conclude with certainty that significant changes in the health quality are to be implemented because a medical health institution will use its resources more efficiently in order to emphasize the emanating of health and patients' security.

REFERENCES

Zakon o akreditaciji, Narodne novine 158/2003

Zakon o izmjenama i dopunama Zakona o akreditaciji, Narodne novine 75/2009

Zakon o kvaliteti zdravstvene zaštite, Narodne novine 107/2007

Zakon o kvaliteti zdravstvene zaštite i socijalne skrbi , Narodne novine 124/2011

Pravilnik o standardima kvalitete zdravstvene zaštite i načinu njihove primjene , Narodne novine 79/2011

Pravilnik o uvjetima za razvrstavanje bolničkih zdravstvenih ustanova u kategorije, Narodne novine 95/2010

Pravilnik o akreditacijskim standardima za bolničke zdravstvene ustanove, Narodne novine 31/2011

http://www.mzss.hr/novosti/priopćenja/akreditacija_bolnica, accessed 7.January, 2012.

<http://www.aaz.hr/aktualno.php?AktualnoID=127>, accessed 7.January,2012.

<http://narodne-novine.nn.hr/clanci/oglasi/2185464.html>, accessed 7.January,2012.

<http://narodne-novine.nn.hr/clanci/oglasi/2245531.html>, accessed 7.January,2012.

<http://www.aaz.hr/aktualno.php?AktualnoID=121>, accessed 9.January,2012.

<http://www.aaz.hr/aktualno.php?AktualnoID=108>, accessed 10.January,2012.

http://www.aaz.hr/4_Organizacija_sustava_kvalitete_u_bolničkoj_zdravstvenoj_ustanovi.pdf, accessed 9.February, 2012.

<http://www.poslovni.hr/vijesti/akreditacija-bolnica-ce-vratiti-povjerenje-pacijenta-184812.aspx>, accessed 30. January 2012.

HEALTH TOURISM: AN OPPORTUNITY FOR CROATIAN HEALTHCARE AND CROATIAN TOURISM

Nevenka Kovac, MD, MA Economics¹

¹PhD Studies Management

ABSTRACT

Medical tourism is the most expansive tourism industry in the world today. The reasons are manifold: the aging population, resulting in an increasing number of chronic and degenerative diseases, the increasing availability of information and new technologies, as well as the rising costs of health care. All of this leads to a demand for quality and timely medical services outside patients' local countries with expensive and/or inaccessible health care system. All of this has led to the development of health facilities in countries that can provide the same services at preferential rates, and consistently high standards of health care demands. Countries of the Far East (Thailand, the Philippines, India) are the world's leading countries in medical tourism and they have linked their tourist destinations with a new offer - health. Croatia has a great development potential in this new tourist industry, which would prolong its tourist season, and fill the existing capacity of health facilities (spas). Furthermore, medical tourism is a powerful incentive for entrepreneurship in health care, because the highly qualified and professional medical staff in private health care institutions could successfully compete in positioning Croatia on the market as a desirable destination for health and medical tourism. An example for this is a health tourism project in Stubičke Toplice, which offers catering and recreational facilities with excellent medical services at St. Catherine Specialist Hospital, which aims to become a European center of excellence for sports medicine and a spine center for implementing the latest technology of tissue engineering and regenerative orthopedic procedures.

JEL Classification: I11, L83

Key words: health tourism, medical tourism, specialist hospital, center of excellence, private health institutions, EU directive on cross-border treatment

1. HEALTH AND MEDICAL TOURISM “INDUSTRY”

In recent years there has been a development of a new trend in healthcare industry - medical tourism, which is especially popular in industrialized countries, mostly in the U.S. Medical tourism is an umbrella term used for a full range of activities - from wellness and spa treatments to all types of cosmetic and complex health care operations, including, for example, heart transplantation procedures. Lately there has been a tendency to separate the concept of Health Tourism (used mainly by healthy people, including wellness, spa and a variety of check-up preventive programs) and Medical Tourism (used by patients for the treatment of a specific health problem).

In 2010 Medical Tourism market totaled around 80 billion USD and is expected to reach around 100 billion USD this year. It is considered to be one of the fastest growing tourism industries, with an annual growth of 20-25% and a large impact on the global healthcare industry.

Such a staggering growth in the market demand for these services is expected due to the increased costs of medical care in developed countries and long waiting lists for surgery, decreasing number of skilled staff, which led to a reduced standard of care, as well as the increased pressure on current healthcare system due to the aging of the population (it has been estimated that by 2050 more than 30% of the population will be over the age of 65). At the same time, globalization and increased levels of communication technologies have been accelerating the almost exponential growth of this new branch, because the potential users of these services can almost immediately get all relevant information about medical tourism services, directly consulting doctors and experts abroad through the new media, especially the Internet (Google search offers 3.26 million web sites containing articles on “medical tourism”). Although it the cost of health services was considered to be the most important reason why people seek medical care abroad, a study conducted in 2008 by McKinsey (USA) showed that only 9% of “medical tourists” stated it as the most important reason, while 40% of the respondents think advanced technology and better treatment/surgery are the most important factor, 32% of them seek better medical care, and 15% seek to receive faster medical services. One of the most common factors for all “medical tourists” is the lack of any kind of health insurance, so when they have to pay for health services, they required a better, faster and cheaper service than the one they can get in their home country (savings ranging from 25% -75%, depending on the type of procedure and the country in which it is performed).

Thus the structure of the current total volume of medical tourism is: 41% dental services, 40% orthopedics, cardiology, cardiac surgery and neurosurgery, and 19% cosmetic surgery.

The main providers of medical tourism are Asian countries: Thailand, India, Singapore, Malaysia and the Philippines, with an annual income of \$3.4 billion in 2007, and a market share of 12.7%. In Central America they include: Mexico, Panama and Costa Rica, in South America: Brazil, Venezuela, Argentina and Colombia, in Africa: South Africa and Egypt, in the Middle East: Israel, Jordan and Lebanon, and in Europe: Hungary, Poland, Spain, Belgium, Germany and Turkey, with Hungary as the leader in tourism development around its thermal springs. There have been two new players - Korea and China. These countries offer their patients complete medical services for optimal prices and most comfortable packages. Apart from medical services, almost all hospitals provide transportation, accommodation and accompaniment for their patients, even obtaining a visa and insurance.

The benefits of treatment in these countries are low prices of health services (25% -80% lower than in developed Western countries), high-quality health care services provided in modern hospitals with highly qualified medical staff who speak foreign languages and hold licenses and certificates of professional education and training in Western countries. Both the health professionals and the hospitals have international certificates and licenses (JCI, ISO). Some countries have highly developed tourism infrastructure (e.g. Thailand) and are known tourist destinations, so they have added a new segment to their offers - health. Some states are very active in the development of medical tourism (e.g. Lebanon and Turkey), through a series of coordinated activities at the state level: incentives for founding specific travel agencies that are associated with airlines and receive different benefits for the implementation of tourism and health care packages, diplomatic efforts for creating safe journeys and abolishing visa requirements, a number of activities to reduce crime rates etc. These countries have defined the medical tourism industry as the industry of the future.

The main disadvantages evident in countries with developed medical tourism is an insufficient number of accredited hospitals (JCI, ISO, TEMOS), which would offer standardized health services (e.g. India and Hungary), health care professionals' insufficient foreign language skills (e.g. Poland and Turkey), a lack of travel agencies that would connect medical tourists with health care institutions (in the

vast majority of countries, except Turkey and the Middle East), as well as traces of terrorism and crime in some countries (Malaysia, Egypt, Tunisia).

Medical tourism is accompanied by a parallel series of dynamic processes, such as the linking of official medicine with traditional techniques and methods of treatment, a further strengthening and development of multinational hospitals (corporations) as service providers, which, driven by cost effectiveness, invest in the development of services in third world countries, and the increasing number of users from new rich markets, such as Russia and Arab countries, where price is not a limiting factor, which inevitably leads to the specialization in the “exclusiveness”. Since there is a possibility that even state governments spend a share of their health budget in third countries, a more intensive involvement of insurance companies in medical tourism can be expected, noting that the limiting factors include the risk of continuous care and the risk of liability for unprofessional treatment.

Some U.S. insurance companies (e.g. BasicPlus Health Insurance) have begun offering the so-called “offshore” medical services through their health insurance policies. Such medical services are provided in health institutions with U.S. certificates (Joint Commission International) and guarantee their clients that they will receive high-quality health services according to American standards, but at much lower costs. Some U.S. companies (Hannaford Bros. Co.) report they saved up to 70% of medical expenses for their employees by using offshore medical services.

2. HEALTH AND MEDICAL TOURISM IN CROATIA

Despite theoretical statements that medical tourism is an opportunity for Croatian tourism, in reality it all ended with a few sporadic initiatives. Key factors in choosing a destination for medical tourism, besides the price, primarily include the standard of medical services, highly trained and equipped hospitals that provide such services, as well as the attractiveness of locations in terms of tourism. The attractiveness of Croatia, particularly its coastal area, is unquestionable, and what is also indisputable is that Croatian Health Care has excellent medical staff, which is the basis for Croatia’s competitive advantage in medical tourism, and thus the basis for the development of medical tourism in Croatia. The potential of Croatia is also the “seasonality”, i.e. the currently low utilization of accommodation capacities, which are full only 132 days a year. What might also help the development of medical tourism are certainly good transport/road connections and good climate.

In the recession that marked this period, and while looking for market niches which would lead it out of crisis oscillations in tourism, Croatia has an excellent opportunity to start its own more systematic, more organized and more dynamic initiative to become active in the worldwide medical tourism. Compared to many existing and potential competitors, Croatia has unquestionable advantages, such as excellent medical staff and the attractiveness of the destination. However, significant development is impossible without a lasting and target-oriented support of relevant institutions, particularly the Ministry of Health and the Ministry of Tourism, whose involvement is necessary in order to remove a series of normative barriers and facilitate investments of this kind. The key factor for bringing this selective type of tourism from a stage of improvisation and spontaneity to the level of specific industry is to develop and maintain an efficient and systematic cooperation with specialized international agencies for medical tourism and to develop targeted communication strategies to potential user niches. If Croatia succeeds in this bold effort, there is room for increasing the utilization of receptive tourist capacity all year round, as well as the overall income in tourism in certain areas of Croatia, since medical tourism does not depend on the season, i.e. the services can be provided all year round.

It is considered that the revenue from medical tourism could grow to approximately two billion U.S. dollars annually in the next ten years, and that medical tourism as an innovation which includes a multidisciplinary service might be a new and innovative branch of Croatian economy. It is necessary to combine the attractiveness of tourist destinations with the existing high-quality medical services, and present them to the world as a new option in Croatian tourism industry, taking into consideration that medical tourism services can be provided 365 days a year, since health is the oldest and the strongest motive in tourist developments. These data show that there is a truly great potential for the development of medical tourism industry both globally and locally.

Croatian health tourism has a great potential particularly in existing health facilities, i.e. in the capacity of its spas. All of them have the status of specialist hospitals in accordance with the existing legislation. Today there are 39 specialist hospitals in Croatia, of which 17 hospitals also provide medical rehabilitation services and are equipped with 6,100 beds. This is a great potential for taking part in Croatian tourism and the development of continental tourism. In most countries, private hospitals are the main drivers of the development of medical tourism industry, which is usually available only in private hospitals. Most private hospitals in

the leading medical tourism countries (Thailand, India) provide an “end-to-end” service: from individual, personalized approach in getting health services, to organizing recovery in luxury hotels. In Croatia there are very few private hospitals and treatment centers, most private health institutions include different specialist clinics and polyclinics (a number of specialist clinics on one location with a minimum of two different health care services), while general/family medicine practices have been privatized using concessions and do not operate on market principles.

Table 1.: Healthcare institutions in Croatia by ownership

	HEALTHCARE INSTITUTIONS	total	state/ public/ concession	private
	General Hospital	22	22	0
	Clinic, Clinic hospital, CHC	10	10	0
	Specialist Hospital (SH)	39	30	11
1.	Total Hospital	71	62	11
	% private (SH)			28
2.	polyclinic	352	116	236
	% private			67
3.	ambulance (MD)	2.641	2.323	318
	% private			12
	TOTAL 1+2+3	3.064	2.501	565
	% private			18

Source: the author and Croatian Institute of Public Health

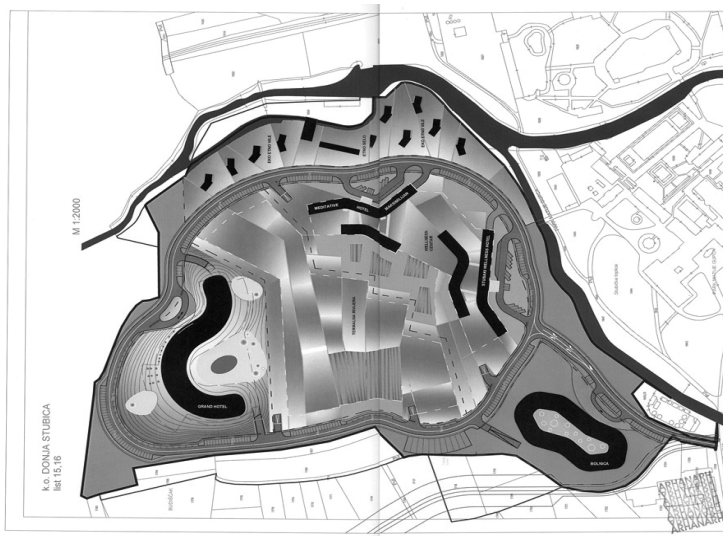
Apart from the existing capacity, Croatia has a great potential to become active in the medical tourism trends because of its highly educated and competent medical staff. Therefore, we have a great chance on demanding surgery markets, e.g. the orthopedic market - installation of artificial hips, knees and shoulders, for which there is an increasing demand in the whole world due to longer life expectancy and changes in lifestyle (e.g. in the U.S. about 300,000 artificial hips and 500,000 artificial knees are installed every year). The demand for these two surgical procedures is rapidly increasing, so the orthopedic branch will not be able to keep up with such growth. Croatia might become a desirable destination for such operations due to lower prices of medical procedures (hip and knee prostheses are 3-5 times cheaper in Croatia than in the U.S.).

3. ST. CATHERINE SPECIALIST HOSPITAL

3.1. St. Catherine Specialist Hospital in Stubičke Toplice

In accordance with the shown trends in the health and medical tourism market, construction of a large tourist complex is in preparation in Stubičke Toplice. It will have 200,000 m² and was designed for health and medical tourism (3 hotels, thermal area, hospital). The design stage of the project ends this year, and construction work begins in spring 2013. Project completion is expected in 2015.

Figure 1: Project in Stubičke Toplice (layout)



Health tourism project in Stubičke Toplice and its programs and facilities were designed as a driver of a broader economic development of Stubičke Toplice municipality and the whole of Krapina-Zagorje County. The planning of health facilities and tourist destination was designed in two conceptually separated facility areas:

- a) Tourism and hospitality area with additional facilities:
 - Spa & Conference Hotel 5*
 - Apartment Complex 5*
 - Spa & Wellness Hotel 5*

- Ethno-Eco Village 4*
- Mixed-Use & Entertainment Hotel 4*
- Thermal Riviera
- Sports and recreation facilities

b) Health and Rehabilitation Zone with additional services:

- St. Catherine Specialist Hospital

The separation of these two functional areas makes room for further development of differentiated programs and services specifically tailored for guests with different reasons for coming to Stubičke Toplice centre (treatment and rehabilitation, medicine, leisure, conferences, sports and recreation, spa & wellness, thermal area). The basic economic features of the project:

- total cost of the project - 110 million euros (of which 35 million euros for the investment in the specialist hospital)
- expected annual number of overnight stays - 230,000
- indirect income - employment: 1,025 new jobs
- The project will be implemented through a model of public-private partnership. The County, as a representative of the public sector, and a selected private partner will join the current situation in the project area and financial resources necessary for the realization of the project.

3.2. Basic characteristics of the investment project

In cooperation with the Municipality of Stubičke Toplice and using a PPP model (public-private-partnership), Krapina-Zagorje County will build a health spa/tourist complex in an area of approximately 22 ha, located near the center of Stubičke Toplice. The fundamental starting point for the development of health tourism complexes are natural resources (especially thermal water), cultural and historical heritage of the micro-location, human resources, centuries-old tradition of health and tourist destination, as well as the immediate vicinity of market demand. The idea for the development of health-tourist complex has its strongholds in the health tourism industry. Specifically, the World Tourism Organization (WTO) estimates that medical tourism will be the main “business” of the 21st century. The investment project will involve the construction of a 4 to 5-star tourist complex with several forms of accommodation units (hotels, apartments), sports/recreational courses (outdoor sports facilities, recreational facilities used for leisure, a so-called

thermal riviera), tourist-shopping-catering facilities and St. Catherine Specialist Hospital. The investment project enables an organized use of natural resources and the possibility for economic development of the whole area, which will lead to general improvement in the living standard of the area in all aspects, economic, social and cultural. The investment project with a concept based on health preventive, curative and spa & wellness program, and providing entertainment, sports and recreational facilities and conference services is surely the backbone of future development of health tourism in Croatia. It will be based on a new dimension - health care according to wishes and needs of each individual, which will be experienced and presented through a new tourist product.

3.3. St. Catherine Specialist Hospital in Zabok

A part of this project in Stubičke Toplice is St. Catherine Specialist Hospital, named after the chapel of St. Catherine located near the future complex. Since the founders' intention was to turn St. Catherine Specialist Hospital into a European center of excellence for advanced imaging, pain management and sports medicine with the most advanced diagnostic, therapeutic and rehabilitation infrastructure, there was a need to found the hospital even sooner than the Stubičke Toplice project was completed.

St. Catherine Specialist Hospital was established in a part of Zabok General Hospital, on an area of 2,254 m². On 2 May 2011 it obtained a work permit from the Ministry of Health and currently has 36 employees. It was registered for 6 activities: orthopedics, surgery, neurology, radiology, anesthesiology and physical medicine and rehabilitation. The ground floor with 750 m² accommodates a polyclinic with 3 practices, radiology with the currently most modern MRI in Croatia, and the hospital administration. The in-patient part of the hospital with orthopedics (6 rooms with 14 beds), a laboratory for medical and biochemical diagnostics, a medication depot, one-day hospital (5 beds) and 5 operating rooms, sterilization and postoperative recovery (4 beds) is located on the first floor. The intention is to apply the latest technology and treatment procedures, in cooperation with leading European and American experts. The priority is to introduce the latest techniques and methods in the field of molecular and cellular regeneration of different types of tissues (particularly cartilage and bone), as well as tissue engineering. This hospital in Zabok is the first phase of the large tourist and health project in Stubičke Toplice. The intention of the founders is to prepare staffing and organizational pre-

conditions for a faster launch of the second phase of the project, which is currently the largest health investment in the region.

The hospital has a professional and experienced management, high-quality staff (most doctors have teaching and academic degrees), medical equipment supplied by the world's most famous producers (Siemens, Philips, MAQUET, Berchtold, Getting) some of which is unique on Croatian market (MRI, digital C-arm). What makes St. Catherine Hospital special is the private health insurance Izvor. The hospital is a teaching base for the Faculty of Medicine, University of Split and Osijek, and for health studies of those universities. Its day hospital concept, i.e. a one-day surgery, is in line with the latest strategic guidelines of the Ministry of Health. A multidisciplinary approach that ensures top diagnostics, the best therapy and surgery procedures, selection of the most modern techniques of anesthesia and pain therapy with individually prepared rehabilitation (which guarantees the fastest and the painless return to normal life with a quality solution to health problems) are recognizable on the Croatian market, and provide a good competitive position on the global medical tourism market.

St. Catherine Specialist Hospital cooperates with leading European, American and Israeli experts. In the field of radiology it cooperates with one of Austria's largest diagnostic clinics "Diagnostikum" (Vienna, Graz). Employees of the Department of Anesthesiology actively cooperate with European (ESA, European Society of Anesthesiology) and American (IARS; International Anesthesia Research Society), associations. There is special cooperation in the treatment of acute and chronic pain and regional anesthesia and analgesia (European, and American Society of Regional Anesthesia and Pain Therapy, ESRA, ASRA). For minimally invasive spine surgery there is collaboration with experts from the U.S. (Caroline's Pain Institute).

All of this indicates that St. Catherine Specialist Hospital is conducting serious preparations in order to be able to welcome "medical tourists" from the most demanding markets upon the implementation of EU Directive on cross-border treatment. The Directive will enter into force on 25 October 2013 and will enable all EU citizens to be treated according to their choice in any EU country, in accordance with their health insurance policy. Since certification and accreditation that guarantee standardized care is of extreme importance, St. Catherine Hospital is starting accreditation procedure with the Agency for Quality at the Ministry of Health, and has met all the prerequisites for launching JCI accreditation (the world's most recognized certification for hospitals, the only one valid on the U.S.

market). Furthermore, it has started the procedure for obtaining the initial accreditation for performing scientific work (a positive report was obtained by the Agency for Science and Higher Education, the Ministry of Science, Education and Sport) which is the first step towards obtaining the status of a clinic. All of this are good grounds which enable St. Catherine Hospital to enter the demanding market of medical tourism, especially after the completion of Stubičke Toplice project, when St. Catherine Hospital will provide even more services (larger specialist-advisory activities, center for treatment of eating disorders, spine centre, center for aesthetic surgery, center for dental medicine, a large teaching-training center, etc.).

4. CONCLUSION

St. Catherine Specialist Hospital's vision in the next five years is to become a European center of excellence for orthopedics (with an emphasis on sports medicine) and minimally invasive spine surgery (with an emphasis on pain treatment). The intention is to achieve the same positioning on domestic, regional and European market, by building a strong brand, which guarantees high quality service, diagnostics, treatment and rehabilitation using the latest technology. In the next five years St. Catherine Specialist Hospital will be a destination for patients from the regional and other markets, primarily markets with which there is already a business connection, which have a founding connection with the hospital (e.g. the Russian market, associated through Bluesunhotels), and markets in which there are health institutions Catherine Hospital will cooperate with (e.g. the Israeli market). Winning the European market is planned upon the completion of Stubičke Toplice project. St. Catherine Specialist Hospital intends to become a relevant factor in the medical tourism market. Croatia has all predispositions for the development of this new "industry": the climate, the geographical position (proximity to all European, Russian, Middle Eastern destinations), tourist resources, the existing health facilities and trained health personnel. These are the reasons which require a more systematic support for the development of health and medical tourism, which could be a new market opportunity for both Croatian health care and Croatian tourism. We hope that relevant Croatian institutions will recognize this activity as "the business of the 21st century".

Figure 2. St. Catherine Specialist Hospital in Stubičke Toplice



REFERENCES:

Horowitz, MD, Rosensweig, JA, Jones, CA: Medical tourism: globalization of the healthcare marketplace, *MedGenMed*, PMID: PMC2234298, 2007 Nov 13; 9 (4): 33

Hopkins L, Labonté R, Runnels H, Packer C: Medical tourism today: what is the state of existing knowledge? *J Public Health Policy*. 2010 Jul 31 (2) :185-98.

www.companionglobalhealthcare.com

www.umt.hr

www.treatmentabroad.com

International Joint Commission Accredited Organizations, <http://www.jointcommissioninternational.org/10241/> Accessed June, 2011.

Hosting Int., Feasibility study of health-tourism project, Stubičke Toplice, 2007

Kovac, N. (2012) St. Catherine Specialist Hospital Programme

ROLE OF HUMAN RESOURCES IN INCREASING THE NATIONAL COMPETITIVENESS

Zoran Pandža, univ.spec.oec.¹

¹ Ph.D. Candidate, zoran.pandza11@gmail.com

ABSTRACT

In today's modern business society, care for human resources (people are considered as basic value - capital) and investing in their quality, creativity and other capabilities are the most important factors for the development and competitiveness of a company. People and human resources are the foundation on which successful companies build their competitive advantages and companies which recognized that value with the willingness to invest into search, education and employment of a quality staff can cope substantially better with the competition. Technology and products competitors can easily copy, whereas human resources are the only element which the competition cannot copy. Intellectual capital (knowledge of the employees) is a crucial prerequisite of competitiveness and perhaps even the very survival of today's companies. Companies can keep their competitive edge in the modern business society only if they constantly develop their knowledge base and, at the same time, quickly capture new knowledge. Upgrading the knowledge base and skills which are demanded by the labor market, ability to analyze and process data, team work, innovation and creativity are some of the more important guidelines for the competitiveness of the labor force, but also the economy at large. The goal of this paper is to determine which is the role of human resources in increasing the national competitiveness on the basis of chosen indicators connected with education, lifelong learning, activity of the population and the human development index. Competitiveness of human resources is analyzed by comparing Croatia with selected countries of the European Union, as well as some, so called, countries in transition.

JEL Classification: J01, O15

Keywords: human resources, competitiveness, intellectual capital, labor market

INTRODUCTION

Before, the value of individual companies was based on material and financial indicators, or profit, whereas today the value of companies is based on the quality and motivation of its employees, in addition to the previously mentioned indicators. In the economy of the 21st century, people are considered as basic value and investment in their quality, creativity and other capabilities are the most important factors of development and competitiveness of national economies. Some authors claim that competitiveness is the ability of achieving success on markets which enable a highly productive economy and the improvement of life standards of the overall population (Bejaković, 2004., p. 1). If we start from the fact that at the beginning of the 21st century all information was quickly and easily accessible to everyone and that the durability of what we learn is quickly shortening, we will come to a conclusion that companies which do not invest into education of their employees will have a hard time keeping their competitive edge on the market. In the business world of the 21st century people or human resources are the foundation on which successful companies build their competitive edge. Technology and products competitors can easily copy, whereas human resources are the only element which the competition cannot copy. Because of that, many successful companies create special departments within whose task is to manage human resources. On the head of these departments managers are placed who know and can make a selection of employees, motivate them and reward when necessary, enable them to advance, increase their knowledge and skills, unleashing their creativity. Societies and economies which have highly educated experts, or in other words, which have a higher population education index and know to use their intellectual capital will certainly remain competitive and develop faster. Over time, a proposition which has been growing in acceptance states that economies which are richer in knowledge property and national intellectual capital achieve a higher level of growth and development (Malhotra; 2003., p. 1).

IMPORTANCE OF EDUCATION WITHIN COMPANIES

The most productive companies direct a large portion of their activities towards education and increasing proficiency of their employees. Societies and companies which had realized that they can remain competitive by investing in human resources passed through the world economy crisis of 2008. with minimal damage. Because of the crisis and expense cuts a majority of companies reduced their investments in business education, team building, seminars and training of their em-

ployees. It is necessary to point out that Japan and a few other countries which had continued investing in their employees (despite the crisis) managed to increase their share on many markets because of their continued investment in employees. According to some researches, in the US investments per-employee come around 2500,00 USD for some form of education whilst in Japan 6000 USD are invested for the same purposes (Bahtijarević-Šiber, 1999:717). That is one of the reasons why it was easier to pass through the crisis for Japanese companies and why they are more easily adapted to the demands of the market. Croatian companies, like many other companies within countries in transition, recognized the need for investment in the development of human resources. Companies which want to hold or gain a competitive edge invest between 3% and 5% of their income in education or training of their employees (Bahtijarević-Šiber, 1999: p. 718). Today's companies and their employees are aware that one part of their work time must be used for education. That includes all employees, from the low-end workers to managers who run companies. Of course, time which one worker sets apart for educational processes is substantially smaller than the time invested for the same purposes by the manager. Although, there are companies which "save" on that kind of investment because it's the easiest to cut expenses. This kind of "saving" does not reflect itself on the business within the current year, but there exists a high probability that it will reflect itself on future business endeavours of the company. The lack of investment in education of employees often leaves a mark on their productivity. Only consolation to the companies which reduce investments in education of employees is the probability that their competitors will save on the same or similar things. Besides the fact education of employees implies material expenses (scholarships, fees etc.), the time spent on education of employees must not be forgotten. Because of that many international and even Croatian companies form personal educational centres for their employees, where various programs are conducted to expand their skillset (computer literacy, communication and presentation skills, foreign languages, theme seminars, lecture etc.).

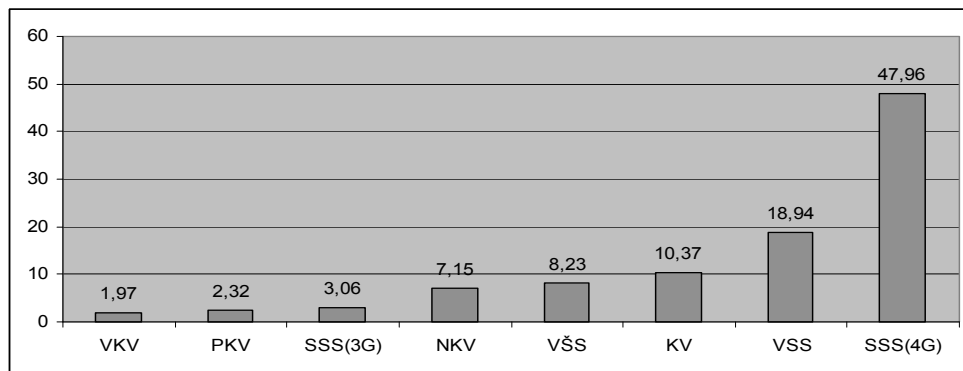
In the previously mentioned programs of education are not necessarily centered around individual employees, they can educate groups of workers at the same job (merchants, accountants, employees on the assembly line, employees of specific specialized departments, managers etc.) Therefore, education of employees can be individual, group (team) or on a company-wide scale.

GOALS AND NEEDS OF EMPLOYEE EDUCATION

Education of employees has many advantages, for the company and for the individual undergoing the process. The global challenge and influence of the financial crisis required companies to expand their business on other markets, whilst at the same time forcing them to defend the acquired positions on the local market from international companies which want their share of the market. This largely affects companies from Croatia because as of 2013., with Croatia's formal entrance into the EU, a market with over 500 million consumers is opening. It is worth noting that other members of EU will have access to the Croatian market. It is hard to expect a big expansion of our companies onto the markets of the EU because most companies doesn't have enough quality products and services with which they could compete against companies on that market. That doesn't mean that Croatian companies shouldn't start with preparations for defending the acquired positions on our market (quite the contrary) which will certainly be endangered from companies from the EU when RH becomes its full-fledged member. A majority of foreign companies sees their chance on the markets of ex-communist countries, so called, countries in transition because the markets of these countries are still in the phase of development and local companies which should compete against them are far from being competitive. Most customers in these countries perceive products of world-renowned companies as of much higher quality than products of local companies, not to mention the quality of their marketing. That combined gives them an open invitation to the undeveloped markets. If the local companies want any chance of competing with the world-renowned companies, they will have to invest a lot more in the development of human resources (selection, education, motivation, rewards, searching and keeping the best employees). In order for companies in the Republic of Croatia to withstand competitors who are coming from developed international markets, they have to rely more on talents, knowledge and capabilities of their employees and also to adapt to the challenges of the market by quickly embracing new technologies. One of the limiting factors of competitiveness of the Croatian economy is the demographic structure of the population (same applies to the European Union), where we have a constant ratio of more dead than born for several years. Furthermore, a lot of young and capable people leave to work internationally. Already today in the Republic of Croatia there is a lot of international workers (mostly countries of ex-Yugoslavia), it is certain that the future need for the international labor force will only grow larger. Unfortunately for the Croatian economy, most of the international workers who work in the Republic of

Croatia lack qualification and usually do less complicated work, while those from Croatia leave to work outside with finished higher educations, never even getting a chance to prove their worth in Croatian companies. One of the most important guidelines of competitiveness of human resources for an individual country is the educational prowess of the population, however, our educational program does not induce creativity or self-initiative of pupils, and later, of students. These programs are not flexible and do not adapt to the economy of the 21st century. Because of that, companies are forced to invest additional money into development and education of their employees. Companies can educate their employees as they see fit, according to programs they've developed over the course of their existence and they can use specialized facilities for education which include the following in their program of education of employees: consultant companies, various business schools, educational centers, public colleges, universities (for highly educated employees). Before initiating the education of employees, it is necessary to determine what are the needs of the company, which specific knowledge and skills are needed in an employee. Also, it is necessary to take into account how many employees actually need the additional education and whether or not will they prove to be an asset to the company in the future. However, the basic prerequisite for further study and advancement is the existence of previously acquired knowledge attained through formal education. In order for the Croatian labor force to remain competitive, constant education is necessary, whether at work or at home, and that includes all tiers of occupation, from receptionists to managers. Today, explicit methods of proving whether the labor force is sufficiently educated for the challenges of the economy of the 21st century does not exist. However, further investment in programs of education of employees at work or at home, along with the alignment of the educational system to the needs of the labor market, innovation and creativity will surely bring positive results in the future. Most of today's managers considers education as a key towards transforming the employees into experts. (Partlett&Ghoshal; 1994, p. 87).

Chart number 1: Educational structure of the employed population, as of 31.03.2011.



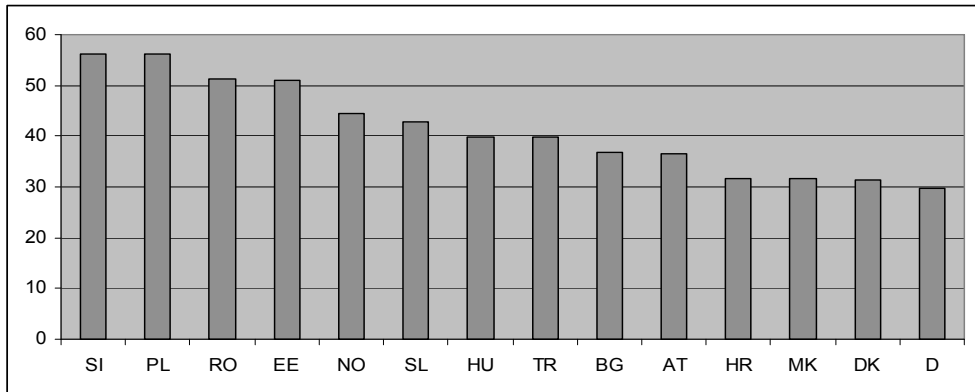
Source: Autor's calculations, based on data from Statistički ljetopis Republike Hrvatske 2011., p.139

The educational structure of the employed in Croatia shows that almost half of the employed finished high school which lasts for a period of four years, and if we add KV, VKV and workers with a three-year formal education, we can see that more than 60% of all workers finished high school. If we remember that the most wanted jobs in the year of 2011. were exactly those which required finished high school, it shouldn't surprise us that 2/3 of the Croatian population only have high school education. As we are aware of the fact that modern economy requires from employees to have, among others, computer literacy, innovation, creativity, knowledge of foreign languages, a varied skillset, it is hard to believe that these capabilities are in possession of those who only have high school education. Also, we know that if we are to remain competitive, especially now as we are entering the EU, we have to invest a lot more in education of employees.

STATISTICAL INDICATORS OF HUMAN RESOURCE COMPETITIVENESS

In order to properly evaluate what is the role of human resources in improving competitiveness, we will create a comparison of Croatia with developed west European countries (Germany, Denmark, Finland, Norway) and countries in development (Slovenia, Slovakia, Czech Republic, Poland etc.) linked to education and development of human resources.

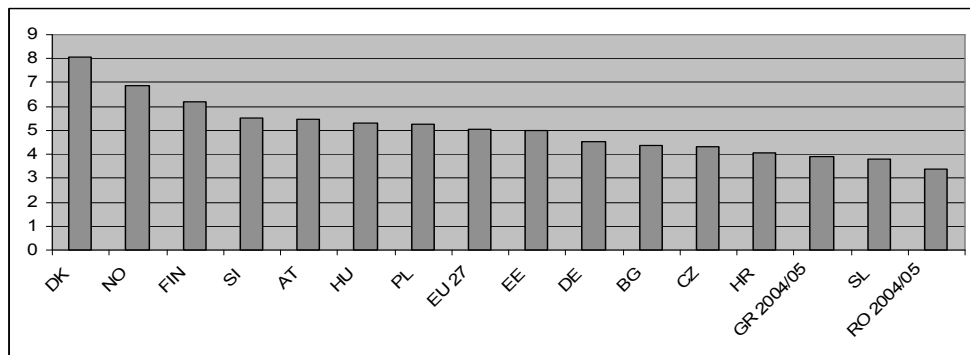
Chart number 2: Number of students per 1000 citizens in 2009. in selected countries



Source: Autor's calculations, based on data from <http://epp.eurostat.ec.europa.eu> for number of students and <http://hdr.undp.org/en/> for population

It's a bit surprising that, according to the number of students per 1000 citizens in 2009., the first spot is taken by Slovenija (56,22), then Poland (56,14) and Romania (51,23) taking the third place. While we can say that Romania and Slovenia are a surprise, Poland was the fastest to adapt to the updated terms of the market. In addition, they received the most funding from the European Union as a candidate in preparation. Croatia is located at the very bottom of the selected countries with 31,65 students on 1000 citizens. Below Croatia, places were taken by Macedonia, Denmark and Germany. Macedonia's placement is not surprising, but Denmark's and Germany's placement is. Both are considered to be part of the most developed countries of the world, with a highly developed economy. Judging by the statistics, it seems that the number of students is not the limiting factor for growth and development. Investing in the development of tertiary education should add to the competitiveness of the labor force considering that the number of students enrolled in universities in the Republic of Croatia is considerably less than in other developed countries of the European Union. At the same time, it is very important to adapt the system of tertiary education to the needs of the modern economy, in other words, university programs need to be adapted to the needs of the market.

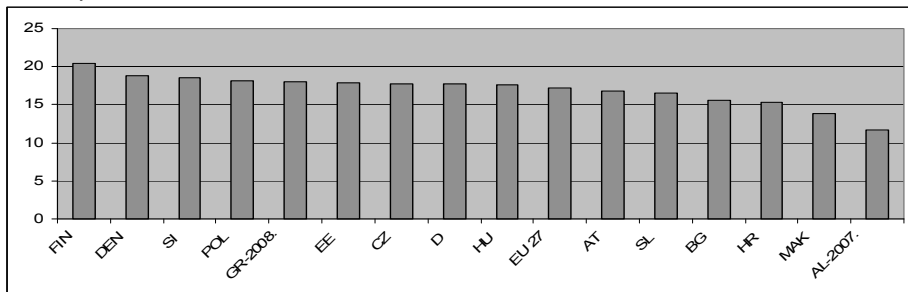
Chart 3: Investment in education expressed in percentages of GDP in the time frame 2004.-2009.



Source: Autor's calculations, based on data from <http://epp.eurostat.ec.europa.eu>

As we can see from the chart, northeuropean countries Denmark, Norway and Finland invest the most in education while Croatia is located between countries which invest the very least in education: Greece, Slovakia, Romania. It should be noted that while developed european countries invest in science and education from 6% to 8.5% of the GDP, whereas the average investment for EU 27 is 5.04, Croatia is located far from the average with only 4,07%. We know that every government of the Republic of Croatia thus far has claimed that "investment in education and science, as well as getting a confirmation of Croatia's integration in the European community" is a major priority. However, reality is obviously different. That is one of the reasons why the world economic forum issued a report which states that Croatia's key problems include the lack of labor force improvement, low quality of the educational system and management (available at <http://ceahrivatska.wordpress.com/2011/02/06/svjetsko-izvjesce-o-konkurentnosti/>).

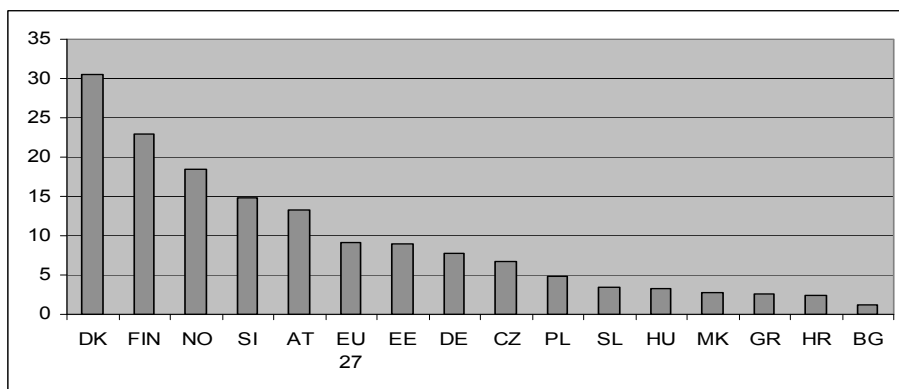
Chart 4: Expected duration of education for enrolled five-year old pupils in the year of 2009.



Source: <http://epp.eurostat.ec.europa.eu>

The expected duration of education for the enrolled pupils (five year olds) shows how much the Croatian educational system is falling behind countries of the European Union. According to the data from Eurostat for the year of 2009., the expected duration of education of five year olds is 15,3 years. As we can see from Chart number 5, in developed westeuropean countries the expected duration of education of five year olds is considerably longer than in Croatia, from 16,8 in Austria to 20,4 years in Finland. From observed countries, only Albania’s and Macedonia’s education lasts less, while Bulgaria with 15,6 years approximately the same as Croatia. Given that we like to compare ourselves with Slovenia, it is worth mentioning that there education lasts for 18,5 years, something that will remain unattainable for many years to come.

Chart 5: Participation of the population between 25-64 years of age in some form of lifelong education in the period from 2006. to 2010.



Source: Autor’s calculations, based on data from <http://appsso.eurostat.ec.europa.eu>

Countries with the greatest percentage of population which participates in some form of lifelong learning are Denmark, Finland and Norway. Croatia is just above the last place which is occupied by Bulgaria. If we know that the basic value of today's society rests on the knowledge of its population and that knowledge needs to be constantly updated and upgraded, then we in Croatia have a lot of reasons to worry. It is not strange that the northeastern countries (DK, FIN, NO) belong to the circle of economically most developed countries, just because a big part of their population is enrolled in some form of lifelong education.

FINAL OBSERVATIONS

Human resources are one of the most important factors of economic growth and development and their role in the increase of national competitiveness in most countries is vital. If we compare the data which we analyzed, we can see that developed northeuropean countries (Norway, Denmark, Finland) have the most people enrolled in some form of lifelong education, as long as with the longest period of education of five year olds. Also, they invest the most in education, as we saw earlier in percentages of GDP. Because of that, they are part of the most developed countries of the world. Croatia is located at the very bottom, as the analyzed categories show, along with Macedonia, Bulgaria, Romania. This allows us to conclude that the quality of human resources in Croatia does not answer the demands of the 21st century economy because knowledge which is required today is very different from the knowledge of most citizens of Croatia. By the end of the 20th century, we witnessed a huge spike in the development of sophisticated technology, especially ICT, which forced a lot of employees to acquire new knowledge in order to remain competitive. Companies which recognized that value and are ready to invest in education and employment of a qualified staff, as well as finding them, have a much easier time coping with competitors. Even Croatian companies are aware of that, which made Pliva to invest 5,35 million HRK in the year of 2010. strictly for the education of their employees, bringing 2910 HRK per employee. Croatian Telecom (T-HT) enveloped in some form of education around 3000 employees in 2010. etc. Beside the mentioned companies, there are others like INA, Agrokor, Ericsson Nikola Tesla, most banks (etc.) which continue to invest in education and training of employees because they consider employees as development starters. Although today everyone is talking about lifelong education in Croatia, there are a lot of companies which didn't afford their employees even a hour of education in the last year, even though they are aware of the fact that employees are guaranteed of establishing a competitive edge. An upgrade of basic skills which are demanded

by the labor market, ability to analyze and process data, team work, innovation and creativity are some of the more important guidelines for the competitiveness of the labor force, but also of the encompassing economy. Companies which recognized the potential of human resources as one of the most important factors of competitiveness will easily maintain and increase development on the today's demanding global market. Investment in the development of human resources represents one of the basic requirements for maintaining the acquired competitive edge as well as readiness to respond to unforeseen and unexpected changes which can occur on the global market. Given that today's technology is rapidly developing, education of employees and continued improvement of their skills and knowledge is the foundation for their survival on the increasingly demanding market.

REFERENCES

Bahtijarević-Šiber, F. (1999.), *Management ljudskih potencijala*, Golden marketing, Zagreb

Bejaković, P., (2004), *Konkurentnost radne snage u Hrvatskoj: stanje i problemi*, u Lowther, J. i Bejaković P., ured., *Konkurentnost hrvatske radne snage*, Zagreb: Institut za javne finacije

Malhotra, Y. (2003.). «Measuring Knowledge Assets of a Nation: Knowledge System for Development» U: United Nations, Advisory Meeting of the Department of Economic and Social Affairs, New York City, 1-47

Partlett, C.A., Ghoshal, S., *Changing the Role of Top Management: Beyond Strategy to Purpose*, Harvard Business Review, 72 (5), 1994, 78-88, 87.

Porter, M. E. (1990.) , *The Competitive Advantage of Nations*, Free Press, New York.

Sundać, D., Krmpotić I.F.,(2009.), *Vrijednost ljudskog kapitala u Hrvatskoj-usporodba sa odabranim europskim zemljama*, *Ekonomski pregled*,60(7-8), 2009.

Statistički ljetopis Republike Hrvatske 2010., DZS, Zagreb ,2011.

<http://ceahrhvska.wordpress.com/2011/02/06/svjetsko-izvjesce-o-konkurentnosti/> (11.01.2012.)

<http://appsso.eurostat.ec.europa.eu> (23.01.2012.)

<http://epp.eurostat.ec.europa.eu> (14.02.2012.)

<http://hdr.undp.org/en/> (24.02.2012.)

HEALTH POLICY IN EUROPEAN UNION COUNTRIES

Velma (Tahmaz) Pijalović, PhD

School of Economics and Business, Bosnia and Herzegovina, velma.tahmaz@efsa.unsa.ba

ABSTRACT

The main goal of this paper is to analyze the influence of European integrations on formation and conduction of health policy in European Union countries. Defining the health policy, financing and also organization of health system, comes within the competence of the government of EU member states. Legislative on the level of EU, in different fields and in the health system too, is introduced only if it's estimated that the problem cannot be effectively solved on national, regional and local level. However, analyzing health policy in a wider context, we concluded in this work that European integrations influence health policy of European Union countries and European Union candidates too. So in this process the influence of European integrations on health policy is a complex phenomenon, which takes place on different levels, in different forms and with different effects.

JEL Classification: H51, 118

Key words: Common policy, health policy, health strategy

1. INTRODUCTION

The concept of health policy refers to policies that focus on the development of health care, access to health services and institutional organizations of the health care system. On the other hand, medical care policy defines the way in which patients are provided for in terms of diagnosis, treatment and overall patient care. Broader concept puts the health care system in the focus of the health policy. In this framework, the basic issues are about the parties that participate in the coverage of the health care costs and absence from work due to illness.

Health policies can also be seen from the perspective of health determinants such as labor and working conditions, environmental factors, traffic safety, nutrition, smoking and physical activity, health education, vaccinations, etc., factors

which are often outside the traditional health policy portfolio. The analysis of these determinants is carried out with the aim of implementing measures for the prevention of diseases and health promotion. The term “public health” refers to the general policy in relation to these determinants, taking into account that the integral part of public health policy are also epidemiological surveillance, measuring of the performance of different health systems, discussion about the current and future health needs and priorities, and the institutionalization of competence of all systems.

2. THE INFLUENCE OF EU INTEGRATIONS ON HEALTH POLICIES

Common EU policies can be divided into two groups: macroeconomic and microeconomic. Macroeconomic policies of the European Union include: the EU budget, the European Monetary Union, trade policies and cohesion and redistribution, while microeconomic policies refer to the common agricultural policy, tax harmonization, industrial and competition policy, transport policy, energy and environmental policy and social and labor market policy (Hadžiahmetović, 2005, 127-203). The EU, therefore, does not have a separately defined common health policy.

Definition of health policy, financing and organization of health systems is within the jurisdiction of the governments of EU member states and, as in other areas, health care legislation on the EU level is only brought if it is assessed that the problem can not be effectively resolved at the national, regional or local level. The EU policy in the field of health is envisioned, therefore, as a complement to national policies, plus the achievement of additional benefits that can only be reached at the supranational, European level, for example: control and monitoring of epidemic outbreaks that affect more countries, free movement of patients and medical staff and monitoring and reduction of health inequalities between countries. However, if we analyze the health policy in a broader framework, we can conclude that European integrations affect the characteristics of the health sector in both EU member states and candidate countries.

2.1. Levels of impact of European integrations on the health policies

Impact of European integrations on health policies is a complex phenomenon that unfolds on different levels, in different forms and with different effects. In

principle, there are at least four main levels of influence of European integrations on health policies and these are (Steffen, 2005,6):

- The level of member state, where each state has its own specific health policy regimes, functional requirements, and political / cultural priorities which the government regulates independently (national sovereignty);
- Among the member states, where governments find strategic responses to actual or predict future policies of other governments, but the politics is still adjusted on the national level (mutual adjustment);
- Between member states and the EU in the framework of more or less fragmented systems (inter-governmental negotiations);
- Within the EU itself-between its various institutions, on the basis of legal jurisdictions (supranational sovereignty).

2.1.1. The development of institutions on the supranational level

The most common concept in which the impact of European integration is considered is the *development of institutions at the supranational level* and the development of collectively binding European policies. Compared with other policies, this perspective is not much related to health policy. Namely, the process of European integration achieves different effects on the public health on the one hand (control of common health risks) and on health in the narrow sense (treating a disease) on the other. Lamping and Steffen (2005) found the confirmation of establishing and strengthening public health policy and the institutionalization of the mandate of the EU institutions in the regulation of important issues related to food safety, human tissue and blood, and issues related to biotechnical and pharmaceutical sector. In order to monitor health issues at EU level, a special department of the European Commission for Health and Consumers was founded under the name DG (Directorate-General)- SANCO. Activities in the health sector conducted by this department include the preparation of strategic documents and legislative proposals and coordination of public health programs. Department of Public Health within DG SANCO has got one hundred employees dealing with public health issues and they are mostly located in Luxembourg. This is a small but important body of the European Union dealing with public health legislation, primarily with the safety of blood and blood products, human tissues and cells. This department also deals with regulations related to the consumption and advertising of tobacco products. The

Department is focused on sharing knowledge and models of good practice in the field of health policy, and the strengthening of cooperation among member states is becoming an increasingly important activity. (Uhernik et al, 2007).

In its work, DG SANCO co-operates with other EU institutions, national governments and agencies, various groups connected with health and health care, business institutions, scientists and experts. Legislative proposals are adopted by the European Commission, which sends them for consideration to the Council and European Parliament.

Issues related to health policy in the narrow sense are politically more sensitive than public health issues. Because of these issues, among other things, elections are won or lost. However, given the differences in health insurance coverage, it is to be expected that in the near future these issues will be institutionally regulated at EU level.

2.1.2.Changes that come about as a consequence of the European integrations

Another aspect of the impact of European integration can be defined as *a process of change in national policies and institutional practices that occur as a result of European integration processes*. This approach analyzes the changes that can be attributed to the membership in the EU or the impact of European integrations, being the changes which influence the states on the internal level. While some authors like Börzel (2003), focus their observations on the direct institutional impact of European integration, others, such as Radaelli (2003), pay more attention to the indirect ways in which European integrations affect national politics. Seen in this context, the European integrations influence the health sector through the implementation of various regulations that have the ultimate goal of establishing a “eurocompatible” health care system.

2.1.3 The process of mutual adjustment

From the third perspective, the process of European integration is seen as *a process of mutual adaptation, negotiation and influence on both supranational and national levels*. This process is the result of complex and dynamic mixture of top-down and bottom-up processes in the implementation of various policies. The activities and initiatives at the EU level strongly influence domestic policies (top-down). On the other hand there is a tendency to discuss domestic issues at the supranational level and there are attempts to have the processes unfolding at European level in

accordance with the economic interests and political traditions of individual countries (bottom-up), where the process is cyclical, not linear (Putnam, 1988, 427-460). In terms of impact on health policy this influence is most obvious in the case of the struggle against public health problems such as the problem of AIDS, where there are parallel activities taking place at the national level and policy development at the supranational level.

2.1.4. The influence of European values on the development of state policies

The fourth impact of European integration is seen in *the influence of European values* on the development of state policies. This concept can be understood as the creation of a common frame of reference for common sets of beliefs and ideas. The influence of European values can be traced through the impact of EU knowledge relevant to adjustment and implementation of state welfare reform policies. In the area of health policy, the problem-solving abilities are influenced by establishing networks of problem-oriented associations and groups. The most important and also the most effective tools used to spread common values are: creation of a European Health Observatory, creation of a comprehensive database and comparative information systems and dissemination of best practices.

2.1.5. The impact of integrations on the distribution of power and resources within the state

Regulatory Policy of the European Union as well as integration processes have an impact on *the distribution of power and resources within the state*. Lamping and Steffen (2005) argue in their paper that this could, in a positive way, shake up the rigid structure of healthcare, improve the situation and establish a cost-effective provision of social care services. In this sense, European integrations give countries with fragmented political institutions and a number of powerful interest groups that dominate the creation of sector policies a chance to increase the political feasibility of health reform. In these countries, European integrations offer new possibilities to circumvent political barriers, bureaucratic obstacles and habits that make the health policy reform a difficult task. Further influence of the integration is reflected in the "liberalization" of health care market and the development of competition among health care workers, which, if followed by development of new forms of contractual relationships, may result in the purchase of health services in other countries. Besides, the European integrations give the opportunity to the power

players at the national level to play the “European card” that is, to transfer problematic issues and the blame on the European level (Lamping and Steffen, 2005,8). Minogiannis (2003) argues that, even though Brussels does not conduct an active policy of harmonization of health systems in the European Union, there are three mechanisms that are the driving force for their adjustment. First mechanism is seen in the action of positive integrations that directly target the issue of equal access to health care. Secondly, there is the imposition of common criteria for the Court of Justice which represents negative integration. The third type of integration refers to the ideological convergence between the European elite that call for rationalization of the use of limited health care resources and maintaining of the universal access to health care and social solidarity. Brussels is still keeping its distance when it comes to the issues of health care financing and delivery of health services. (Minogiannis, 2003, 5). Nevertheless, what has already been implemented in other areas, particularly in creating a common market, common currency, the new employment strategy, and joint microeconomic and macroeconomic policies greatly affects the decisions regarding the health sector.

The Health Protection of the EU population is one of the central issues of EU policy and in this sense the EU has the legal right to incorporate health protection into all policies and activities it implements. According to Article 152 in the EU Treaty “any joint activity and EU policy must ensure a high level of public health.” In addition, health is the focus of other documents such as the Lisbon strategy for growth and work, which emphasizes the connection between health and economic prosperity and the Civic agenda which emphasizes the right of people to be trained in accordance with their health.

2.1.6. The influence of other policies on the development of health policy

Many activities that the EU conducts outside the EU health sector, affect the health and health systems of some countries. Multidimensionality of factors that affect it, which is one of the most important characteristics of the health sector, has been recognized in the EU as a very important determinant of health systems of member countries. To improve coordination and integration of health protection in all activities of the European Commission, an inter-departmental group for health has been established, including representatives from most departments of the European Commission, headed by a representative of DG SANCO.

This group discusses the issues related to all activities conducted by the European Commission which could affect health, with particular attention paid to the policy of consumer protection, health and safety at work, environmental policy, policy for science and technology and regional and local development. The protection of consumers through the pursuit of the safety of products and services - including safety of food and fast food has a direct impact on health. Activities under the common name of “health and safety at work” aim at ensuring protection against the risk of workplace accidents and occupational diseases.

In order to achieve a high level of health care it is necessary to include issues concerning environmental protection in the health policies. Technological development is another important matter when it comes to the establishment of effective health systems and well-functioning public health. The importance of activities related to the policies of regional and local development is reflected in the fact that regional spending on health is supported by the structural funds, all with the aim of reducing health inequalities between and within member states, which in turn encourages social and economic cohesion in Europe. In order to provide scientific support for health challenges, several specific research projects have been designed.

3. EU STRATEGY IN THE FIELD OF HEALTH CARE

Based on the documents of the World Health Organization “Health for All - Policy for the 21st century”, in which the new individual goals and policy directions for their implementation have been defined, the document called “21 goal for the 21st century” has been created, and in this document the WHO defines the basic goals for the European countries, and in turn many European countries based their policies and strategies on these goals.

However, a coherent and coordinated approach to health policy in the EU was first formed in the Health Strategy of the European Commission in 2000, which singled out three main issues:

1. *health services* - some issues transcend the national level, such as cross-border healthcare or the mobility of health professionals and patients. In order to solve these problems, a group of high-level professionals working on the practical aspects of cooperation between national health systems in the EU was formed.

2. *response to health threats* - the European Union shares responsibility with the member states in prevention of the spreading and recurrence of the pathogens through epidemiological surveillance and training for quick and coordinated response to such threats.
3. *health in all aspects of politics* - This includes new partnerships between different sectors on the EU level and on national levels, as well as the application of methods that allow systematic assessment of impact of certain strategies, plans and programs in different areas of health policy. (Uhernik et al, 2007)

EU health strategy is mainly focused on strengthening the coordination and cooperation, supporting the exchange of experiences and assisting decision makers at the national level. To this end, the EU is developing a comprehensive system of provision of health care information that allows access to reliable and up-to-date information on key health issues, which establishes the foundation for a joint analysis of the factors that affect public health. Secondly, the EU wants to improve the ability of quick response to health threats, which is the reason for strengthening the epidemiological surveillance and control of contagious diseases. Further objectives are to ensure patients' safety and quality of health care in order to facilitate the cross-border provision of health care, as well as the mobility of health professionals and patients.

The main tool for achieving the goals outlined in the Health Strategy in 2000 was the Public Health Programme 2003-08. In the meantime the new Program for the area of health 2007-13 has been prepared, and it contains following objectives: to improvement the safety of public health, health promotion for the progress and safety and collection and dissemination of knowledge about health Like its predecessor, the new program for the area of health serves as a framework for project funding.

4. CONCLUSION

Unique EU health policy doesn't exist so we can conclude that the impact of European integrations on the health policies is a complex phenomenon that unfolds on different levels, in different forms and with different effects.

European integrations have the effect on the development of state policies by mutual adaptation, negotiations within government, and also supranational sovereignty and with the fact that specificities of health policies are defined on the national level of the member country. The most common concept in which the impact of European integration is considered is the development of institutions at the

supranational level, we can conclude that, in the case of health policy, this impact can be seen only in development of institutions connected to public health policy. European integrations influence the health sector through the implementation of various regulations that have the ultimate goal of establishing a “eurocompatible” health care system and by a process of mutual adaptation.

Indirectly, taking up the mutual European values and goals connected to social policy and affects the health policies of the EU member states, with particular attention paid to the policy of consumer protection, health and safety at work, environmental policy, policy for science and technology and regional and local development.

Besides that, European integrations give countries with fragmented political institutions and a number of powerful interest groups that dominate the creation of sector policies a chance to increase the political feasibility of health reform.

At the end it is important to mention the argument showing that European integrations directly affect the health policies of EU member states and it is shown with the existence of Health Strategy that is accepted at the EU level.

REFERENCES

- Börzel (2003) *How the European Union Interacts with its Member States*, Institute for Advanced Studies, Political Science Series, Vienna,
- Hadžiahmetović A.(2005) *Ekonomija Evrope*, Ekonomski fakultet u Sarajevu
- Lamping W, Steffen M (2005) *The European Union and Health Policy The Dynamics of Integration*, University of Hannover. Diskussionspapiere und Materialien No. 19
- Minogiannis P.(2003) *European Integration and Health Policy- The Artful Dance of Economics and History*, Transaction Publishers
- Putnam, R. (1988) *Diplomacy and Domestic Politics: the Logic of Two-level Games*, in: *International Organization* 42 No.3, pp. 427-460.
- Radaelli, Claudio M. (2003) ‘The Europeanization of Public Policy’, in: Featherstone, K./Radaelli, C. (ed.): *The Politics of Europeanization*, Oxford: Oxford University Press
- Steffen M. (2005) *Health Governance in Europe- issues, challenges and theories*, Routledge, London

STUDENTS' VIEWS ON THE RELATIONSHIP BETWEEN HIGHER EDUCATION AND LABOR MARKET

Helena Štimac, Ph.D.¹

¹Faculty of Economics in Osijek, Croatia, shelena@efos.hr

ABSTRACT

It is very difficult to predict which skills will be needed in the next ten years. In accordance with the new social and economic changes, as well as the labor market, it is important to organize and coordinate an educational system that will provide required workforce profile. Education has a significant impact on employment opportunities. Stronger contacts between educational institutions and labor market are necessary because they provide better use of all available possibilities and labor market needs. Also, it reduces the number of unemployed persons, develops society and returns invest funds in education in a shorter period. Moreover, increasing the education service quality should result in better competitiveness of higher education institutions.

The aim of this paper is to identify the relationship between students' expectations of possibilities of employment at time of enrollment at higher education institution and their perception of different aspects of educational service quality received. Students demand more and choose institutions with a higher educational service quality, where the emphasis is on knowledge. At the same time, labor market requirements are also increasing in terms of labor competencies, skills and knowledge. It brings into question the compatibility of higher education with the labor market. The results are presented in this paper.

JEL Classification: I21

Keywords: knowledge, service quality, higher education, labor market

1. INTRODUCTION

Nowadays, it is harder than ever to predict which skills will be needed in the next ten years. It is necessary to pay more attention to informal form of education during employment and to developing cooperation with the labor market in order

to respond better to market needs. Dynamic and diverse changes in the early 21st century, which significantly influence the development of society, services sector and planning strategies for education, can be viewed through the following behaviors (Gajić;2010,16):

- Society and economy become more complex
- The nature of work is changing radically
- More and more jobs disappear or modify due to technological changes
- Continuous evaluation is the key for the future

The economic crisis has affected labor market in more than one way: part-time work has increased, average actual hours worked by the full-time employed have decreased and the number of employees with temporary contracts has increased in European countries (Hijman;2009).

A good connection between the labor market, higher education and research sectors is leading to a successful operation and is meeting the needs of users and society as a whole. There are many variations on how they should be consistent. Still it is very important to know how the exclusion of one of the factors actually results in losing the current and prospective customers, and what is even worse, losing the market.

2. RELATIONSHIP BETWEEN HIGHER EDUCATION AND LABOR MARKET

Given the current situation of global economic development, human resources represent a key element of competition at national and international levels. Human resources quality is becoming one of the key factors for the recognition and differentiation among countries. Because of this, the connection between higher education and the labor market is very important, as well as additional investments in higher education which contribute to resolving unemployment, which is still high Croatia. Long term employability in terms of globalization can be achieved only by continuous education and training throughout working life. Also, in the years to come it will be important to connect higher education with the needs of the economy. It is necessary to clearly define which occupations, skills and knowledge are required for faster development in economic and other sectors of society. Based on these indicators, higher education institutions should define their own policies of enrollment and financing the study.

Other than investing in higher education, it is also very significant to keep investing in human resources which facilitate economic restructuring, reduce the

problems of poorness, unemployment and social exclusion. Also, the OECD¹ in its document Jobs Strategy (Šošić;2003,439,441) specifies the failure of education and training reorganization as one of the important reasons for growing unemployment and social polarization in the EU member states. There is a need for development of all forms of formal and informal education.

On average, 85% of the population with tertiary education is employed. In Iceland, Norway and Switzerland the share is above 90% (OECD;2010,100). Also in all countries, persons with secondary education are much more likely to be employed than those with less education. In Belgium, the Czech Republic, Hungary, Poland, the Slovak Republic, Turkey and Israel, more than half of those with less than upper secondary education are not employed. Overall employment rates are more than 25 points higher for those with tertiary education than for those who have not completed an upper secondary education. This indicates the magnitude of the economic benefits that flow from additional schooling. Moreover, in Hungary, Portugal and Brazil, 40% or more of those who have completed tertiary education earn twice as much as the median worker (OECD;2010,116,117). In the period from 1997 to 2008 unemployment rates of those with tertiary-level attainment have stayed at or below 4%, secondary unemployment rates have stayed below 7%, while unemployment rates for those with less than secondary education have breached 10% several times since 1997 (OECD;2010a). As a result of the economic crisis, labor market is becoming more selective and the lack of appropriate skills and experience gains higher risk of unemployment.

3. HIGHER EDUCATION

The main purpose of higher education is the personal development of young people, allowing them to obtain specific skills and thus compete in the domestic and in the international markets. Accordingly, higher education tends to improve the quality of its programs, be competitive and synchronize with the upcoming changes. Educational institutions are faced with two aspects: on one hand, with the growing influence of the changing environment where the goals are to attract as many targeted adopters, and on the other hand with the requirements of the ministries, governments, local communities, public and wider environment (Arambašić;2009,4). All this requires market orientation of higher education institutions, as well as additional investments in marketing. It is estimated that public universities earmark about 5% of revenues for marketing, and private schools over 20% of revenues (Maringe &

¹ Organisation for Economic Co-operation and Development

Gibbs;2009,44). The adoption of marketing philosophy in higher education institutions requires the institutions to think in terms of marketing concept and market performance. Key terms to focus on are: consumers' (users') needs, market segmentation, competitors and their market positioning and developing new products or services in accordance with market trends (Leko Šimić & Čarapić;2008).

3.1. COMPARISON BETWEEN HIGHER EDUCATION IN CROATIA, HUNGARY AND SLOVENIA

Slovenia and Hungary are members of the EU and they enjoy certain privileges in the higher education sector: European market of higher education is open, mobility of students, teaching and non-teaching staff is easier, alignment of ECTS grades and recognition of diploma are simplified, development of higher education is facilitated through structural funds, etc. Although Croatia as a candidate for the EU does not deviate too much from the standards of higher education in other countries in the region, it is still faced with major problems which must be solved before entering the EU, such as the lack of university autonomy, lack of mobility, dubious dual system (universities and polytechnics), poor cooperation with economy, etc. Nevertheless, Croatia has the potential to compete at the European market of higher education.

Education policies of responsibility in all three countries are mainly established by the Ministry of Higher Education, which operates on a national level. Slovenia doesn't have established regions and all the responsibility is on the state level, since the new regional law is in the development stage. In Hungary, more responsibility is placed on the regional level, although it still lacks a strong regional structure of administration.

Croatia and Slovenia have begun to harmonize the Bologna program in 2005, and one year later Hungary began the same process. The structure of higher education in all three countries is divided into three levels: undergraduate, graduate and doctoral studies. The problem in Croatia and Hungary is unfavorable ratio of teaching staff and students, which prevents effective maintenance of teaching. This is inconsistent with the standards of the Bologna process, where the emphasis is on smaller groups of students and individual approach. Slovenia does not have these kinds of problems. All three countries are involved in the *Erasmus* program, but Croatia has used the least of the program's advantages.

Since all the countries faced the economic crisis in last years, governments have created action plans for economic recovery, which also included plans for educa-

tion. The crisis has weakened the state funding, but also contributed to the increase of unemployment rate. Young people in Croatia are aware of excess graduate students which are unemployed, so this reduces their motivation for enrollment in higher education. This is the result of insufficient compliance of higher education programs with the labor market. In Hungary, universities play a major role in the period of crisis. They take care of their graduate students, and try to do everything to assist them in employment or starting their own careers. In Hungary, the lack of interest in graduate studies is a problem, because the labor market equates Bachelors and Masters. In Croatia there is a different problem: the labor market does not recognize the Bachelors and considers them like „uncompleted students“. In Slovenia the rate of employment is 85% (Statistical Office of the Republic of Slovenia;2009,8). This favors the higher education market and increases the possibility of entering the labor market.

Croatia, Slovenia and Hungary are faced with the increasing competition at the higher education market in Europe, which imposes the need of continuous invest efforts in achieving and developing models of a knowledge society to the domestic economy. In Croatia and Hungary more than half higher education institutions are private, while in Slovenia the ratio between private and public higher education institution is equal. Croatia, Slovenia and Hungary tend to improve quality in higher education. The quality program is the first and most important item on all levels of the education system. Higher education institutions have mainly created a program for development quality.

The most common problems in all three countries are: complicated system of shared responsibility, competition, inefficiency and rigidity of the system, a very weak connection between education and labor market which is reflected through inadequate adjustment of education programs and the actual needs for the future economic development of the state, etc.

Faculty of Economics in Osijek, Faculty of Economics in Ljubljana and the Faculty of Economics and Business Administration in Szeged are equipped with the latest equipment, they have a professional teaching staff, student organizations, a large number of scientific - research projects and they collaborate with other universities inside and outside the country. Evidence of the quality of these faculties is recognition of individual institutions which conducted the evaluation and assessment of higher education institutions in the world. The Faculty of Economics in Osijek has about 5000 active students and over 80 faculty members, Faculty of Economics in Ljubljana has over 8000 students and 250 employees and the Faculty

of Economics and Business Administration in Szeged has 2300 active students and about 60 faculty members.

4. RESEARCH

The study was conducted at the Faculty of Economics in Osijek (EFO) (Croatia) on a sample of 310 students, the Faculty of Economics in Ljubljana (FELU) (Slovenia) on a sample of 250 students (March 2009) and the Faculty of Economics and Business Administration in Szeged (GTK) (Hungary) on a sample of 130 students (April 2008), which represents 8-12% of active students from each faculty. Research was based on SERVQUAL model.

Table 1 shows the characteristics of the undergraduate students sample from the three Faculties. It analyses the difference between the quality criteria and checks the evaluation with regard to the students' characteristics sample (year of study, different student status (fully-paying, partly-paying and non-paying) and study success (average grade)).

Table 1 Sample description

	N	EFO		FELU		GTK	
		F	%	F	%	F	%
Year of study	1 st	116	37,4	88	35,2	45	34,6
	2 nd	73	23,5	56	22,4	47	36,2
	3 rd	59	19,0	68	27,2	7	5,4
	4 th	62	20,0	37	14,8	31	23,8
Student status	Non-paying	115	37,1	200	80,0	74	56,9
	Fully-paying	128	41,3	-	-	33	25,4
	Partly-paying	67	21,6	49	19,6	23	17,7
Study success (average grade)	2.0 – 3.0	94	30,3	129	51,6	16	12,3
	3.1 – 4.0	177	57,1	101	40,4	79	60,8
	over 4.1	39	12,6	15	6,0	35	26,9

Source: author's research

4.1. RESULTS AND DISCUSSION

The aim of the research was to find out the views of respondents on certain aspects of education service quality and to see a comparison between the three Faculties (table 2). Alongside the statistical analysis, Likert scale measurements (1 – totally disagree, 5 - totally agree) were used. Values which are darker show the high-

est value of each aspect of educational service quality at the three Faculties. Faculty of Economics and Business Administration in Szeged has the best rated aspects of educational service quality (9), Faculty of Economics in Ljubljana has 7 best rated aspects, while the Faculty of Economics in Osijek has only one aspect which is best rated (High level of applicability of acquired knowledge). Considering the overall average score of all aspects it can be concluded that the values are almost equal, but still the highest overall score is at the Faculty of Economics in Ljubljana (3.79), then at the Faculty of Economics and Business Administration in Szeged (3.66), and Faculty of Economics in Osijek (3.5).

Table 2 A comparison of education service quality evaluation between three Faculties

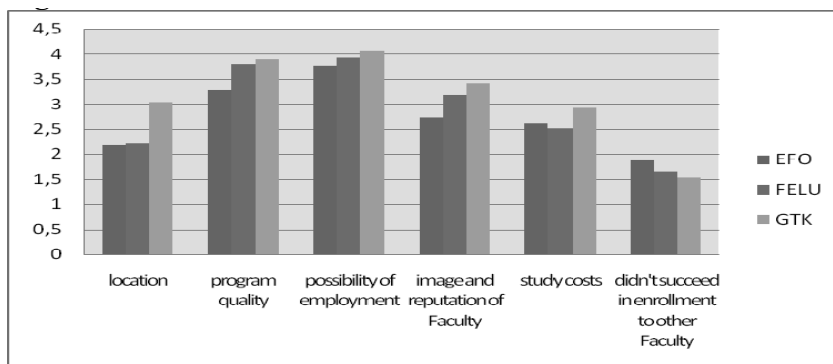
	EFO	FELU	GTK
Good organization of studying	3,17	3,62	3,78
Acquired knowledge responds to my expectations	3,33	3,60	3,86
High level of applicability of acquired knowledge	3,77	3,61	3,28
Acquired knowledge is socially necessary	3,84	3,89	3,66
High program quality	3,49	3,77	3,81
Acquired knowledge enables my personal development	4,13	3,72	3,93
Adequate resources (library, PCs, classrooms, presentation equipment, and similar)	3,47	4,14	4,55
High quality of work by professors	3,53	3,8	3,88
High quality of work by non-teaching staff	3,47	3,72	3,1
Good knowledge and capabilities of professors	4,1	4,15	4,12
Good knowledge and capabilities of non-teaching staff	3,72	3,88	3,25
Politeness of professors	3,49	3,77	3,84
Politeness of non-teaching staff	3,29	3,84	3,33
Credibility of professors	3,58	3,92	4,0
Good organization of schedule	2,71	3,45	3,22
Good organization of opening hours	2,87	3,37	2,29
Good reputation of Faculty	3,55	4,22	4,3
Total	3,5	3,79	3,66

Source: author's research

Figure 1 shows the reasons for entering the given Faculties. The reasons that were uppermost assessed in all three Faculties are the possibility of employment and the program (curriculum) quality. This shows that during the enrolment in the faculty, potential students had a positive opinion about those two reasons. Considering the location and the image and reputation of the Faculty, there are major dif-

ferences when it comes to the opinions of the students at the Faculty of Economics in Osijek and the Faculty of Economics and Business Administration in Szeged. The location is more valued at the Faculty of Economics and Business Administration in Szeged, possibly because geographically it is the only one in the area, while the students at the Faculty of Economics in Osijek do not consider the location as one of the important criterion for the selection. The aspect of the lowest value at all three Faculties (that they did not succeed in enrolling to some other faculty) proves that the majority of students chose these Faculties in the first place.

Figure 1 Reasons / motives for students' choice of institution



Source: author's research

Reason „possibility of employment“ is the most important reason for entering the given Faculties. The question is how the mentioned motive can be associated with the factor “acquired knowledge”. This problem will be shown through an IP analysis which was set by Joseph et al (2005). Academic researchers have long advocated the use of importance-performance analysis (I-P analysis) as a managerially effective method of translating customer perceptions of service quality into analysis where the focus is on organizational attentions and resources. It identifies strengths and weaknesses by comparing two criteria used in the process of selection. One of the criteria is the relative importance of variables while the other is user's evaluation of offers in terms of these variables. The goal is to find out how expectations and perceptions of current students match i.e. do they vary before enrollment and during their studies. The research compared the reasons of entry seen as the importance of enrollment (possibility of employment) and following related aspects: „acquired knowledge responds to my expectations“, „high level of applicability of acquired knowledge“, „acquired knowledge is socially necessary“ and „acquired knowledge enables my personal development“ observed as expected variables.

Table 3 IP analysis of the examined faculties

	EFO			FELU			GTK		
	I	P	I-P	I	P	I-P	I	P	I-P
Possibility of employment	3.7720	3.7632	0.0088	3.9224	3.7020	0.2204	4.0714	3.6827	0.3887

Source: author's research

Students at all three Faculties had higher expectations about possibility of employment at the time of enrollment at higher education institution, than at the time of study when they expressed their current perceptions of the acquired knowledge. The reason „possibility of employment „ was ranked as the most important reason for choosing the institution and the expectations in this field were the highest. Students believe that the acquired knowledge is socially useful and necessary, but yet insufficient because the perception is below the expectations. The limitation in this research was the fact that students can not competently evaluate the applicability of knowledge, since they have not met with the labor market. They lack sufficient practical experience to know more about the actual state of the economy. Therefore, the aspect of the acquired knowledge is questionable and it is very difficult to estimate its validity. However, given that the research included part-time students who are mostly employed and individuals who work through the student services and have regular status, it can be concluded that some of respondents can make conclusions about the aspect of „acquired knowledge“. However, the weakness at all three Faculties is too much theoretical over practical knowledge, and so „acquired knowledge“ must be adapt at Faculties.

5. CONCLUSIONS

Higher education plays an increasingly important role in contemporary society. The demand for highly educated citizens is increasing. Technological changes, competition and market demand for labor have major impact on higher education. It is necessary that the institutions are exclusively driven by the market in order to successfully meet the market, consumers on one side and labor market on the other. During the present crisis it is necessary to put the emphasis on lifelong learning and better connection between formal and informal learning and education.

Problem which occurs at all three Faculties is insufficient harmonization between educational programs and labor market requirements as a result of insufficient communication between the two. This is more pronounced at the Faculty of Economics

in Osijek and Faculty of Economics and Business Administration in Szeged, because in the last year the unemployment rate rose conditioned by the economic and financial crisis. There are a large number of unemployed young people which reduces the motivation for higher education. The problem can be solved by establishing new products and educational programs to meet labor market requirements. They should also improve the coordination between the theory and practice in the curriculum. It is important to educate the labor market about the levels of education established by the Bologna process. This raises another problem - insufficient compliance with the Bologna process. At the Faculty of Economics in Ljubljana, this problem is less pronounced since there is a better cooperation between universities and economy, and the employment rate is at a high level. The problem of compliance with the labor market seeks a solution through intensive direct communication with customers (existing and potential students) and with the economy as a secondary user of these services. It is necessary to create a joint collaboration with the business environment. One way is to create a database (*alumni* network of former students), which would allow further additional education at higher levels and create contacts for connecting students with entrepreneurs – „alumni”. In addition, connecting with the economy can be achieved by establishing the Career development center or the establishment of mandatory student practices that will bring students closer to labor market.

REFERENCES

- Arambašić, S. (2009). Marketing u obrazovanju, magistarski rad, Ekonomski fakultet u Osijeku, Osijek
- Gajić, J. (2010). Marketing strategija u visokom obrazovanju, doktorska disertacija, Ekonomski fakultet u Beogradu, Beograd
- Hijman, R. (2009). The Impact of the Crisis on Employment, Statistics in Focus 79, Eurostat
- Joseph, M. et al (2005). An educational institution's quest for service quality: customers' perspective, *Quality Assurance in Education*, 13(1):66-82
- Leko Šimić, M. & Čarapić, H. (2008). Znanje marketinga u funkciji marketinga znanja, Zbornik radova Marketing u društvu znanja, Grbac, B. & Meler, M. (ur), str. 1-10, ISBN 978-953-6148-72-1, Rijeka, 25-27. listopad 2007, CROMAR, Rijeka

Maringe, F. & Gibbs, P. (2009), *Marketing Higher Education, Theory and Practice*, McGraw Hill, England

OECD (2010). *Education at a glance*, OECD Publishing

OECD (2010a). *OECD Employment Outlook 2010*, OECD Publishing

Statistical Office of the Republic of Slovenia (2009). *Slovenia and OECD member countries*, Ljubljana

Šošić, V. (2003). Premija za obrazovanje i ulaganje u ljudski kapital u Hrvatskoj, *Financijska teorija i praksa*, Zagreb, 27(4):439-455

CODIFICATION NECESSITIES IN ANIMAL LEGISLATION FOR EFFICIENT MANAGEMENT

Vladimir Srb, Ph.D.¹, Iris Broman, M.Sc., DMV²

¹Professor emeritus, Josip Juraj Strossmayer University of Osijek, Croatia

²Head of animal facility, Faculty of Medicine Osijek, Croatia, iris.broman@mefos.hr

ABSTRACT

Animal legislation is of contemporary date. Consequently, there is the inflation of norms that are issued on various levels, from legal authorities to various codex, international bilateral and multilateral agreements, interventions of legislative bodies, profession regulations, legal norms that are related to non animal topics and influence animal regulations, regional costumes, regional legislation etc.

Therefore, the conclusion that arises is a necessity to establish a certain order, or to codify the legal issue. Codification suggested in this paper is of multiple uses. Being a researcher within a doctoral study in Management I underline the necessity of codification process for efficient management.

JEL Classification: I19

Keywords: Codification, animal legislation, systematization, categorization of norms, management.

The first serious attempt in doctrinaire codification is done by English philosopher Jeremy Bentham, who published his “Plan of International Codex” in 1798. That very first attempt of codification includes the animal legislation codex.

Jeremy Bentham was an English author, jurist, philosopher, and legal and social reformer.¹ He became a leading theorist in Anglo-American philosophy of law, and a political radical whose ideas influenced the development of welfarism.³ That was a benchmark for today’s animal welfare law, worldwide, as well in Croatia. Every country adjusted the idea to it`s own legislation.

Most prominent Bentham's work relates to the fields of utilitarianism, animal legislation and the idea of panopticon. There is seldom, even today, published paper, lecture, or another educative form that relates to the field of ethics, especially ethics concerning animal issues, that wouldn't mention his name.

Based on that fact, he became the scientific founder of codification necessity in animal legislation.

His influence reflected today's codification data and views on the mode by which those data get applied in legislation with animal topics, associations for animal protection, ratification of American and European guidelines and Great Britain legislation.

On Croatian homelands Alfons Domin Petruševčki published "The proposal for International Law codex" in 1861. There is a very thick line of separate attempts in codification field, but they mostly expressed personal theories and attitudes of certain theoreticians, that are insufficient for quality in codification.

Successful partial codifications have been accepted some years later, as follows:

1. 1815, Vienna Congress, Codification of diplomatic representatives, international river traffic, slavery ban,
2. 1856, Paris congress, codification of Maritime legislation,
3. 1864, Geneve, Convention on destiny of war victims in continental battles,
4. 1949, Geneve, the most complete codification on the field of war legislation

Between two wars, work on codification became a responsibility of League of Nations, by Versai treaty.

The official codification in law can be done only by sovereign states.

Mechanism of that procedure is done by bilateral and multilateral contracts.

So, for instance, UN produced a committee for codification of International Law. Committee has surveillance over the entire scope of work of International Law, in form of assistance. If there is an interest for the certain area or subject, committee offers the recommendation to the General Committee of UN, so there is a hope that soon the subject will be codification of animal legislation, maybe as a segment of "Universal Declaration on Animal Welfare" (UDAW)¹⁵

Tendencies and possibilities of codification are implementing more and more in national rights of members of General Assembly, as a part of numerous legal

norms, especially administrative law, for purposes of transparency and efficient applicability.

The whole scope of codification activities is not necessarily completely bind to International Law Committee. That flexible part is partially within frames of General Assembly, specific, situation related boards and multilateral contracts that are initiated, or are within frames of UN.

Codification can be reduced, by certain definition, to the formal method of legal technique that can be taken separately to legal authorities. On the other hand, there is no purpose to gather data and regulations, if they are not classified and if they don't complete each other with purpose. (If codification applies in premeditated order, it makes a hallmark of quality management).

In that case, codification presents a method of further progressive development that needs management as a hallmark. In legal terms, codification and progressive development are separate terms. We find that at this point the situation has matured for international community to start the animal legislation codification procedure.

We also share an opinion that codification should be understood as gathering and systemize of legal, customary and other norms, adjusted to professional regulation and legal opinion in the function of development.

This professional and scientific approach, regarding necessities for codification, opens new space for management, accepted by international multilateral, bilateral and nationally accepted Constitution affirmations. Codification became a necessity for the presence of multitude of norms, and has a background in international law and Constitutional approaches.

Every country that developed practice and doctrine in the certain area, should be using the term codification whenever there is a system formulation of regulations of various branches of law. Codification is managed through contracts. Contract makes codification a literary affirmation of the category of international law.

Codification of international law can be general. As such, it can present a part of international law, then it is referred to as partial codification, or, it can become a part of international law in the scope it own.

Today's international communities, so all the states, are working on the idea of codifying the entire legal system, that accepts only the codifying issues of the ques-

tions that have transparency and that are matured to be applied within the same international community.

The contemporary division of codification is the following

1. Doctrinaire codification

Doctrinaire codification presents information gathered, systemized and presented by theoreticians

2. Semi-official codification

Semi-official codification presents gathered codification

Semi-official codification presents information gathered and processed that are presented by a certain professional organization and

3. Official codification

For the official codification, one state has gathered, processed systematically ordered and proclaimed as official data⁴

Today, there are two relevant institutions that are producing and changing codification of the international law. Those are International Law Institute (ILI) and American Society of International Law (ASIL). ILI is a nonprofit, self standing, nonpolitical, educational institute in service of global constitution serves as an expert body for nations in development, by constituting their legislative bodies, economical organization, political government and efficient guidance through law and ASIL.

The purpose of American society for International Law Is a surveillance of study of International Law, establishment promotion and maintenance of international relationships based on law and legislation. Before we name the laws that concern animal legislation in any way, we will mention that there are authorities that have far more severe and precise defined influence on working practice with animals and whose influence doesn't allow a free ride for individual interpretations of law and legal measures.

Necessity of codification of animal legislation in our legislative system is almost an imperative and, as we pointed out, there are no legal limitations to approach the transparency of the system, especially concerning Administrative law.

As of national law and necessity for codification, the international community did put in the effort to build the umbrella authorities that, during own creation and

implementation of new norms base their decisions on legal regulations and norms in one legal unity in all segments of law, so that the same one cannot be, in any state, be separated from legislative authorities, including animal legislation.

Special place and tasks on the area are appointed to international societies for assessment and accreditation, society for institutional care of animals, whose starting point is animal welfare. Those are often private, nonprofit organizations that promote professional and humane approach to animals. Their activities are done through voluntary accreditations and assessment programs.

Their offices for animal welfare often get, according to necessities, a direct order from legal authorities, to assemble professional operative procedures for practice with animals, their rights and rights and obligations of people who work with them.

In law, the present state is expressed through the legal norm known in the expression “*de lege lata*”, but in the thick forest of norms, doesn't give any space to management. On the other hand, management requires concentration of thoughts expressed in one expression, which might be called “*de lege ferenda*”, that will clearly, by the strength of norm accept the simple principles, declarations, conventions and codex's, guidelines of international authoritative bodies etc., enable the development of certain activity.

That would, according to us, be the guideline of necessity for codification.

It is necessary to preserve the refined approach of international community and these activities that came to force, but it didn't find a fertile ground in our region, leaving its messages categorized in narrow, formal frames that is still placed in the frames of Administrative law exclusively.

Undergraduate study programs that contain this topic have a very narrow orientation for the student, future expert into rigid, fast changing and time to time idea and executively incompatible requests, under the norm of Administrative law, that do not satisfy contemporary conditions of the animals position.

There are some gaps in such a system. Looking at the educational program of Veterinary University in Zagreb, that relied exclusively on norms of Administrative law, that are per se completely correct and do not miss a detail, on the other hand they didn't combine and use valuable norms of other branches of law that describe the issue and were written by ratification of suggestions of international community and its law.

The world has created, as civilization advancement, the term of animal sovereignty.

International community offered implementation of new norms based on international legal regulation and norms in one legal unit in all segments of law, so that the same cannot be separated from legal authorities.

Croatia brought, based on that, a line of laws and regulations that follow that world, or narrower, European offer.

The cosmopolitan approach brought, for instance, the Law on animal welfare, "Narodne Novine"; 19/1999¹², „Law on animal protection “Narodne Novine“135/06,¹³ „Law on environment protection“, „Narodne Novine110/07“¹⁴ and the whole line of other laws that, in the frame of their execution, obtain this subject on the direct or indirect manner.

Insufficiencies are fast changes within the law. Laws and regulations are changing and getting invaluable while they did not have even the opportunity to prove themselves in practice.

That makes it difficult both for the science and profession and makes the profession uncertain and unexpected to the person that starts to practice. Such a thorn rhythm demands firm management that would, by implementation of codification explain, among other, how to practice this profile of profession, as also codification, that would, being applied, bring back the trust, as to profession, as well to all who participate in these implementations.

The term of animal sovereignty, its link and place in the environment, the Constitution implements in its problematic by its norms in following articles:

Article 3

Freedom, equality, national equality and gender equality, peacemaking, social justice, respect of the man's rights, social justice, respect of human rights, nature maintenance, legal regulation and democratic multiparty system are the highest values of constitutional establishment of Republic of Croatia and ground for Constitution interpretation.

Constitution of Republic of Croatia establishes certain ecologic norms

1. The right to a healthy life;
2. State commitment to enshure civil rights to the healthy enviroment;

3. Commitment of all social subjects to for special care to nature protection and human environment;
4. Provide a special care to all things and goods of special ecologic meaning that are of interest to Republic of Croatia;
5. Possibilities of limitation of antroponor freedom and private possessions for purposes of nature protection in order to protect the nature, human environment and public health;

Regulation of article 69 of Constitution section 1 contains the constitutional definition that everybody in Republic of Croatia has the right to a healthy life. Section 2 of the same article prescribes the state commitment to enshure the conditions to the healthy environment

that from the side of legal methodology, demands application of codification, in order for the guideline to be understood the right way, define new problematic and rafine its solutions.

Deffinition of the section 3 of the same article perscribed that everybodys duty is that in the frame of own abilities and activities, places a special care to protection of health protection, nature and human environment.

The constitution provider doesnt define the content of the phrase healthy life, so the entire segment undegoes different interpretations. One can conclude that the healthy life right means a special legal expression of wider legislation and means the right to a healthy environment.

The right to the healthy environment was contained in the article 69 paragraph 2 of Constitution of Republic of Croatia

In timeframe 1990 to 2001 that paragraph proclaimed that the Republic enures the citizens right to the healthy environment. The changes in regulations of the article 69 paragraph 2 of Constitution came to force in 2001, proclaiming the regulation according to which the state secures the conditions for the healthy environment.

In the political sense, the “right to the healthy environment” represents the victory of European intellectuals over dogmatic ideologies and the expression of multiculturalists and human right representatives. Intellectual postmodernists saw in multiculturalism a certain antidote for the modern thought (unlimited material

advancement, market capitalism, state socialism, ideology of a national state) and the way to confront the doctrine of single mindedness by variety of perspectives.

By placing the gravity on human right issue, they confronted single mindedness more forcefully. By introducing general human rights and rights to the healthy environment became clear that the story of every individual counts and how valuable the Earth is.

The idea of European Union means a striving to create a new historical frame that could release the individual of outgrown western ideologies and combine humanity in a new story, clothed in the garment of universal human rights and undisputable rights to the healthy environment, together being a global enlightenment. Those ideas or dreams are taking us into the global age. The European idea is strong because it dares to offer a new history which provides significance of life quality, sustenance, peace and harmony.

In a sustainable civilization that is based on life quality instead of unlimited accumulation of capital in single hands the whole material base of the development would be overcome.

Stable global economy is a radical suggestion, not only because it brings into question the conventional way we are accustomed to by using natural resources but also therefore for it stops the historical image as a curve of material progress in unstoppable growth.

The aim of sustainable global economy is to repeatedly and constantly maintain the state of quality, by coordinating human production with, as closest to nature as possible recycle and renew the resources.

Sustainable, stabile economy marks the real ending of history defined by unlimited material progress. If the European dream means the end of one history, it points at the same time on the beginning of other history. In a new European vision of future the personal transformation gets a special significance, replacing single person's material accumulation.

That new dream is not material wealth piling oriented, but to human spirit upgrading.

European dream is now focused on overall human understanding, as opposed to territorial focus. The humanity is now to come out of material frames, that pre-

sented the wall of limitation from early 18 century and lights up the new idealism future (Jeremy Rifkin, „European dream“)

The most famous legal act of international law where the human right is naturally interpolated in the right to the healthy environment is the “African treaty on human and nation rights” that established the principle of political and legal equality between people’s rights and classic human rights.

That defined the two legal categories concerning humanity, but left the wide area under definition of healthy environment protection, the subject that are presenting that healthy environment and which are the norms of conduct and responsibilities to the undefined subjects, if we observe the environment as a symbiosis of its segments, as opposed to the single legal category.

Their wide interpretation of the “right to the healthy environment” that comes from the Constitutional point, involves the healthy animal and its sovereignty.

Every animal has a right to fulfill her species based physiological behavior.

That right includes natural movements, socialization and environmental factors suitable to one’s own needs.

Human task is responsibility and care, so there is a necessity of regulating animal legislation /animal rights.

Confusion in legislation, controversies in solutions, failures in negligence and overnorming are doing damage to the animal, environment and, consecutively, to the mankind.

Therefore we have to build a contemporary management that sees a solution in codification. The specifics of this approach will be elaborated in my further works on the example laboratory animals.

LITERATURA:

Berman, Harold J. (1983). *Law and Revolution: The Formation of the Western Legal Tradition*. Harvard University Press. ISBN 0-674-51774-1. OCLC 185405865.

Madison to Schaeffer, 1821

NABR Animal Law Section — Research Animal Protection Section

Pravni fakultet u BG, dio skripte iz Međunarodnog prava, web stranica www.mojopravo.com.

Institutional Animal Care and Use Committee Guidebook 2nd Edition 2002, provided by the OLAW office of NIH

Cathedra for international law on faculty of law in Osijek, program 2012

Environmental law (right for environmental protection) law branch and interdisciplinary study course, manual «Pravo okoliša» O. Lončarić-Horvat, L. Cvitanovića, I. Glihe, T. Josipović, D. Medvedovića, J. Omejec i M. Seršić, 2011

CONSTITUTION RH, NN 113/00., article. 2., 9. 11. 2000 article 3

CONSTITUTION RH, from 1990. To 2001. g., article 69.

Vukas, Budislav, Zbornik Pravnog fakulteta u Zagrebu (2011)

„Zakon o dobrobiti životinja“, „Narodne novine“; 19/1999

„Zakon o zaštiti životinja“ Narodne Novine“ 135/06,

„Zakon o zaštiti okoliša“, „Narodne Novine“ 110/07“

„Povelja UN o zaštiti životinja“

LAW
AND
ECONOMICS

ABOUT THE INTERFERENCE OF THE JUDICIAL ORDINARY PROCEEDINGS WITH THE INSOLVENCY PROCEEDINGS IN DEBT RECOVERY

Rodica Diana Apan Ph.D¹

¹Department of Economical Studies, Faculty of Sciences, Tehnical University Cluj Napoca, Romania, Lawyer, avocatdr.apan@yahoo.com, cab-apan@yahoo.com

ABSTRACT

Starting from the jurisprudence of the courts in Romania, as well as from the ECHR jurisprudence, the present study intends to identify and analyse the impact of the ordinary proceedings regulated by the Civil Procedure Code and the insolvency proceedings employed to recover the same debt.

The interest in the subject of this study lies in the general concern of businesses, respectively creditors to recover their debts. What sets aside this research from others in the field is the circumscription to the situation of the creditor who filed claims against the debtor to recover the debt previous to the opening of the insolvency proceedings, and aims at recovering the debt through this proceedings.

Consequently, are brought under analysis the legal means made available by the ordinary proceedings and by the regulations on insolvency proceedings, which ensure the protection of the creditor found in the specified position.

The research also studies the situation of the creditor who although having initiated its debt recovery within the ordinary proceedings, he pursues it in each stage of the insolvency proceedings and determines the adequate character of the legal means of protection of creditors instituted in the framework of these latter proceedings.

JEL Classification: K2, K23

Key words: insolvency proceedings, bankruptcy, stay of trial, creditor protection, debt recovery

INTRODUCTION

The approach of a research theme concerning the regulation of the insolvency proceedings in Romania is based on the time positioning of the enforcement of insolvency regulations: at this date, we have been applying Insolvency Law 85 of 2006¹ for 6 years; we have acquired 11 years of experience in the field by enforcing the provisions of Law 64 of 1995 on the Judicial reorganization and bankruptcy proceedings², another interesting experience having been offered by the enforcement of the Commercial Law in the bankruptcy field between 1990-1995 and 1887-1945. It is also the beginning moment of the drawing-up of the Insolvency Code³ which intends to systematize and correlate the normative acts in the field of insolvency, therefore mainly now it is necessary to bring in the clarifications resulted from the experience acquired through the enforcement of the regulations in the field.

Jurisprudence revealed that the creditor who filed claims against the debtor to recover the debt previous to the opening of the insolvency proceedings, and aims at recovering the debt through the insolvency proceedings is in a special situation, as this is an aspect found at the intersection of the insolvency proceedings and the ordinary proceedings regulated by the Civil Procedure Code. The researched proposed by the present study will be circumscribed to this theme by referring it to the relevant jurisprudence at level of national courts as well as the Court of Justice of the European Union.

In this case, legal claims were filed in 2009, before the Cluj Commercial Tribunal⁴, by a company, beneficiary of hotel building works, acting as claimant, against the contractor as defendant. The claims filed by the claimant represented: the equivalent value of the additional payments made by the claimant to other contractors for remedying the qualitative deficiencies of the improperly carried out works done

¹ Published in the Official Gazette of Romania, no.359 of 21.04.2006, consolidated version of 07.10.2010, hereinafter called Law 85 of 2006;

² Published in the Official Gazette of Romania, no.130 of 29.06.1995, repealed by Law 85 of 2006;

³ <http://www.juridice.ro/172515/insolventa-va-fi-reglementata-de-codul-insolventei.html>; See the Report of the Romanian Superior Council of Magistracy on the situation of the insolvency proceedings that are older than year and the vulnerabilities of the system in relation to the administration of such proceedings, of October 2011, <http://www.juridice.ro/179902/raportul-inspectiei-judiciare-ref-dosarele-de-insolventa.html>;

⁴ In the case of forwarding the summon of payment or payment order previous to the opening of the bankruptcy proceedings, the interference of these two proceedings with the bankruptcy proceedings shall have the consequences indicated in this study.

by the defendant; the equivalent value of the delay penalties owed by the defendant for not complying with the delivery date of construction works.⁵ As evidence for the claims it was ordered the carrying out of a judicial expertise for building works, that was to be lodged on the court date set for september 2011.

The stage of the interference of the ordinary proceedings regulated by the Civil Procedure Code with the insolvency proceedings; The stay of the legal claims as follow up of the opening of the debtor's insolvency proceedings;

On 23 May 2011, the claimant in the ordinary proceedings regulated by Civil Procedure Code applied for the opening of the insolvency proceedings before the Maramures Tribunal, under art.26 of Law 85 of 2006, and the application was approved.⁶

Art. 36 of Law 85 of 2006 provides the incidental legal means applicable to the interference of the two categories of proceedings, the ordinary proceedings provided by the Civil Procedure Code and the insolvency proceedings – the legal stay of the trial of judicial actions, extrajudicial actions and forced execution measures, in order to meet the claims against the debtor or his assets.⁷ Hereby, the concurrent, collective, egalitarian and unique insolvency proceedings for the liquidation of the debtor's assets to cover the estate prevail over the individual ordinary proceedings.⁸ The measure provided by art.36 is “imperative, of public order, acts within the scope of concentrating all the disputes relating to the debtor's assets, under the exclusive competence of the syndic-judge assigned for the debtor's insolvency pro-

⁵ In fact, the claimant filed, on different dates, two different actions against the defendant, of which one claiming the equivalent value of the additional payments, and the other the equivalent value of the default penalties. The jurisdiction for the trial of the cases *ratione materiae* was held by the Tribunal. In both cases it was ordered the transfer of jurisdiction from the Cluj Commercial Tribunal to the Maramures Tribunal, in compliance with the *ratione loci* rules, in relation to the place of conclusion and performance of the building contract. Maramures Tribunal ordered the unification of cases. However, we shall take notice that they led to the lengthening of the duration of the trial;

⁶ Through Judgment no.3435 of 2 june 2011, unpublished, delivered in file no. 5232/100/2011; unprecedented;

⁷ Are not suspended pursuant to art.36 the claims filed by the creditors against the assets of the sureties and mortgagees who guaranteed the fulfilment of the obligations for the debtor against whom the insolvency proceedings was opened.

⁸ Law 85 of 2006 does not distinguish the provisions of art. 36, between the situation of the opening of the insolvency proceedings at the debtor's request and the opening at a creditor's request, in both cases the provisions of art. 36 are applicable;

ceedings”⁹ and “has the purpose of maintaining the debtor’s assets in the state in which they were at the opening of the proceedings.”¹⁰

We observe the concomitance of the date of the opening of the insolvency proceedings with the date of the legal stay of judicial actions, extrajudicial actions and forced execution measures, as effect of the enforceable character of the syndic-judge’s judgments as of their delivery moment.”¹¹ The stay provided by art. 36 legally *ope legis* operates from the date of the opening of the insolvency proceedings and the lawcourt or enforcing body only ascertains it *de facto* in each case.¹² The effect of the stay of the ordinary proceedings, according to art.36 is that during the insolvency proceedings, no procedural acts take place and the file is sent for preservation to the archives of the court.

Pursuant to art. 37 of Law 85 of 2006, regarding the enforcement of the provisions of art.36 concerning the stay, through the judgment opening the proceedings the syndic-judge will also dispose its communication to the courts having jurisdiction where the debtor has its registered office¹³ and to all the banks where the debtor holds bank accounts. The provisions of art. 36 are rendered efficient through the communication of the judgment opening the proceedings to the court that has jurisdiction to trial the claims against the debtor undergoing insolvency, court that will pursue to the ascertainment of the stay of the trial.

⁹ Turcu Ion, The Insolvency Law. Commentary. 3rd edition, C.H. Beck Publishing House, Bucharest, 2009, page 305 and Turcu Ion, Treatise on Insolvency, C.H. Beck Publishing House, Bucharest, 2006, p.382-383;

¹⁰ Judgment no. 134 of 22 March 1999, BJ 1999, Lumina Lex publishing house, 2000, page 391, in The Manual for good practice in insolvency, 2002, page 84, http://www.inm-ex.ro/fisiere/pag_34/det_55/1288.pdf;

¹¹including in what concerns the effect provided by art. 36 “Turcu Ion, The Insolvency Law. Commentary. 3rd edition, C.H. Beck Publishing House, Bucharest, 2009, page 306 and in Turcu Ion, Treatise on Insolvency, C.H. Beck Publishing House, Bucharest, 2006, p.382-383

¹² The provision of art. 36 of Law 85 of 2006 is considered non constitutional, one of the arguments of the Constitutional Court is that “ the existence of actions parallel with the concurrent proceedings provided by the law would cause uncertainty in regard with the statement of assets and liabilities, and that would render impossible the evaluation of the debtor’s assets and estate, in order to distribute the proceeds of the winding-up”, in Judgment no. 1075/2007 published in the Official Gazette no.8 of 07.01.2008 and reiterated in Judgment no. 584/2011 published in the Official Gazette no. 606 of 29/08/2011 ;

¹³ Considering the provisions of art. 5 of the Civil Procedure Code according to which “ the application shall be filed to the court that has jurisdiction where the defendant resides”;

Furthermore, according to the provisions of art. 40 of the same law, the opening of the proceedings suspends any status of limitation of actions laid down by art. 36, thus completing the measure of the legal stay of the trial of judicial actions with that of the suspension of any status of limitation of actions.

In the milder landscape offered by the general jurisprudence and by that of the Constitutional Court the stay of the trial of claims made by the claimant, as follow-up of the opening of the debtor's insolvency proceedings and the realisation of the claimant-creditor's rights within the insolvency proceedings creates seemingly perfect coherence.

Beyond the appearances, we shall take a special look at the following aspects:

(a) who, under what terms and means shall carry out the communication of the judgment opening the proceedings provided by art. 37;

In the practice of tribunals, the communication provided by art. 37 does not represent a constant. Even more, except for the dispositions of art.37 no other provision or administrative procedure gives details with regard to this communication, a gap that we consider it needs to be filled.¹⁴ As long as the syndic-judge judgments are enforceable as of their delivery moment according to the provisions of art. 12 of Law 85 of 2006, and through the judgment opening the the proceedings the syndic-judge disposes the communication of the judgment, the breach of the provisions of art. 37 equals the noncompliance with the dispositions of the judicial judgment.

However, there may exist situations in which the communication does not produce the expected effect, such as the legal claims that were lodged at another court and not the court where the defendant, that is the debtor against whom the insolvency proceedings were lodged, has its registered office, in relation to the rules on alternative jurisdiction. At the same time, the communication in the case where extrajudicial actions or forced execution measures were filed remains uncovered by the rule provided at art. 37. Thus, it is obvious that in order to apply the provisions of art. 36, the communication of the judgment opening the proceedings provided

¹⁴ The need for specific administrative proceedings is motivated by the fact that if the communication to the courts having jurisdiction where the debtor has its registered office, by the clerk of the court, would seem simple, the destiny of this communication after arriving to the respective court is not indifferent. We claim this as this communication contains the name and office of the debtor, without identifying the number of the files on the docket of those courts in which the debtor acts as defendant, therefore the material operation of identifying the files is necessary previous to the communication of the judgment in each case;

by art. 37 is not enough to establish the stay of all judicial and extrajudicial actions or of the enforced execution measures and it needs to be completed.

(b) who shall file the application for stay within ordinary proceedings regulated by the Commercial Code, pursuant to art. 36;

The judicial administrator and/or the judicial liquidator shall apply for the stay of the actions that exist on the docket of the ordinary courts and which have as object claims against the debtor's assets¹⁵, this being a well-anchored practice.¹⁶ But in order for the judicial administrator and/or the judicial liquidator to apply for the stay, the debtor must provide him with the documents that prove the existence of the litigious claim.¹⁷ The same condition needs to be fulfilled in order for the judicial administrator and/or the judicial liquidator to be able to apply for stay in an extrajudicial or forced execution litigation. As a consequence, without the documents from the debtor, the judicial administrator and/or the judicial liquidator will be unable to apply for the stay, aspect that will be developed at point 3.a

(c) the perfidious effect of the suspension of the status of limitation of the actions provided by art. 36;

As an effect of the opening of the insolvency proceedings, the status of limitation of actions provided by art. 36 is suspended as indicated above.¹⁸ We find out that the stay of the ordinary proceedings as provided by art. 36 is concomitant with the suspension of the status of limitation of action, both representing effects of the opening of the proceedings. Subsequent to the suspension of status of limitations of the action during the proceedings, a new status of limitation begins when the proceedings are closed. Thus, at the latter date the creditor should file an application to restore the case to the docket, in order to recover his debt.¹⁹ However, after the closure of the

¹⁵ In this regard The Manual for good practice in insolvency, 2002, page 84, http://www.inm-ex.ro/fisiere/pag_34/det_55/1288.pdf;

¹⁶ The statutory administrator of the debtor who was waived the right to administrate through the judgment opening the proceedings can in our opinion also file the application for stay.

¹⁷ The same condition is required to be fulfilled for the judicial administrator/ liquidator to be able to file the application to stay an extrajudicial litigation or a forced execution measure.

¹⁸ The Constitutional Court sustains that the creditors's right to take legal action when suspended is not lost but preserved through art. 40 in Judgment no. 1075/2007 and reiterated in Judgment no.584/2011;

¹⁹ If it remains idle the writ of summons filed against the debtor, the trial of which was suspended pursuant to art. 36, shall be sanctioned with extinction, according to the provisions of the Civil Pro-

proceedings the creditor may find himself in the situation of not being able to recover his debt, especially that the judgment to close the proceedings orders the the deregistration of the debtor, pursuant to art. 132 and 133 of Law 85 of 2006. Hence, although the status of limitations of the action is suspended, in fact the creditor has no option but the realisation of his right within the collective insolvency proceedings.

In this case, pursuant to the provisions of art. 36 of Law 85 of 2006, within the trial of claims, on the court date of 14 september 2011, the defendant through the special administrator applied for the stay of the ordinary proceedings by invoking the opening of the insolvency proceedings. The application was approved and thus the syncope of the trial of claims was completed.

The stage of the realisation of the rights of the creditor whose ordinary proceedings were suspended, within the debtor's insolvency proceedings;

As the court invested with the trial of the ordinary proceedings established their stay, it is however necessary to provide the creditor with a procedural framework for the realisation of his rights against the debtor's assets.

The doctrine²⁰ and the constitutional jurisprudence²¹ undoubtedly reveal that this procedural framework is offered by the insolvency proceedings opened against the debtor's assets; the creditors whose forced execution measures or actions were suspended can lodge their claims in the insolvency proceedings in order to recover their debts.

In consequence, it is necessary to cast our eyes on the judicial means provided for the creditors by Law 85 of 2006, especially for those creditors who, for the realisation of their rights, filed for claims before the opening of the debtor's insolvency proceedings.

(i) Notification of the creditor under the provisions of the Civil Procedure Code;

cedure Code. See Deleanu Ion, *Treatise on Civil Procedure*, C.H. Beck Publishing House, Bucharest, 2005, p. 637-646;

²⁰ Turcu Ion, *The Insolvency Law. Commentary*. 3rd edition, C. H. Beck Publishing House, Bucharest, 2009, page 305-306 and Turcu Ion, *Treatise on Insolvency*, C. H. Beck Publishing House, Bucharest, 2006, p.382-383;

²¹ The judgments of the Constitutional Court make reference directly to the fact that "within the insolvency proceedings, the creditors may make use of all procedural means provided by the law for the realisation of their rights" in judgment no.1075/2007 and reiterated in judgment no.584/2011;

In accordance to the provisions of art. 28, paragraph (1), letter (c) of Law 85 of 2006, the debtor's application to open the insolvency proceedings shall be accompanied by a list containing the creditors' names and addresses, *regardless of the character of their debts*: firm or conditioned, liquid or not, due or not, challenged for cancellation or not, mentioning their amount, cause and ranking rights.²²

For the realisation of their rights within the insolvency proceedings, the creditors are left to the debtor's judgment as far as their including on the list is concerned, as Law 85 of 2006 does not provide any penalty for the debtor who did not lodge the list of all the creditors "regardless of the character of their debts".

Lacking legal force is also the provision of art. 28, paragraph (2) which counteracts through the following, the debtor's possible intention of not lodging all the requested documents: if the debtor does not own all the necessary information, including the list of debtors, at the moment he lodges the application, he will be permitted to lodge that information within 5 days at the tribunal or he will lose the right to propose a restructuring plan.

The major importance of determining all the creditors through the list is given by the fact that the judicial administrator and/or judicial liquidator to comply with the provisions of art.61 will send a notification to all the creditors *on the list lodged by the debtor*.

Therefore, the creditor included on the list provided under art. 28, paragraph (1), letter (c) will be notified according to the provisions of the Civil Procedure Code, meaning that he will be informed of the judgment opening the insolvency proceedings against the debtor and the time limit of the lodgement of claims²³, by sending the notification with receipt to his headquarters. Paraphrasing Descartes, the creditor may conclude that "I'm on the list therefore I exist", because if a creditor is not on the list provided in article. 28, paragraph (1), letter (c), it relates to the domain of registration that he will not be notified as indicated above.

²² The list provided by art. 28, letter (c) of Law 85 of 2006 is also enclosed to the documents that shall be lodged by the debtor and in the situation where the insolvency proceedings is opened due to application filed by a creditor, therefore our observations on the registration on the list are maintained in this situation as well;

²³ Jurisprudence established the approval of the applications for reinstating within the time limits the declaration of debt of the creditors who were identified through the list lodged by the creditor but the notification procedure was not carried out legally to their headquarters by the judicial administrator, in the commercial Judgment of 2.12.2010, delivered in case 5627/1285/2009 of the Cluj Commercial Tribunal, unprecedented;

The mentioned legal gap needs to be remedied in the New Insolvency Code and *de lege ferenda*, our proposal is that the list of creditors should have enclosed the debtor administrator's affidavit on the complete contents of the list. This would at least make him liable of the criminal sanctions for false declarations, in the case of not comprising all the creditors.

Being on the list is even more important for the creditor who filed claims previous to the opening of the debtor's insolvency proceedings. This creditor initiated legal action to recover his debts within the ordinary proceedings and is situated within this legal framework on the date of the opening of the debtor's insolvency proceedings. Taking legal actions to recover the debt implied additional costs to the debt such as: judicial stamp duty, lawyer's fee and expert's fee, which this creditor already underwent.

Moreover, by not being included on the list, the creditor may find out about the opening of the insolvency proceedings of the debtor with whom he already undergoes legal action, through additional, constant measures of getting informed carried out simultaneously with the ordinary proceedings already initiated and which are no longer justified and consequently not even employed by the creditors.

The notification of the opening of the insolvency proceedings shall be published in a widely circulated newspaper and in the Bulletin of insolvency proceedings.²⁴ The publishing of the notification of the opening of the bankruptcy proceedings in the Bulletin of Insolvency Proceedings, according to the provisions of art. 7, paragraph (3), has the effect of considering fulfilled the procedure of notification provided by art. 61, paragraph (1), in the case of the creditors who could not be identified on the list.

At level of principles, we embrace the necessity to summon the parties, as well as to communicate any procedural acts, summons and notifications through the BIP, in relation to the specificity of these proceedings that entails a great number of parties and a great diversity of procedural acts which can hinder the development of the proceedings. We consider this to be a special measure that ensures a rapid solutioning of the insolvency cases, but we insist on the accuracy of the list lodged by the debtors, completed, according to the provisions of the Civil Procedure Code, by summoning the creditor who filed claims previous to the opening of the debtor's insolvency proceedings. Otherwise, there would be discrimination between the

²⁴ Hereinafter called BIP, instituted in 01.08.2006;

creditors and would be disadvantaged precisely the creditors who took legal action, who made efforts and bore costs to recover their debts.

Actually, the huge risk undertaken by the creditor who filed claims before the opening of the debtor's insolvency proceedings is that of not being permitted to lodge claims²⁵ because of the simultaneity of the two proceedings: the ordinary proceedings regulated by the Civil Procedure Code and the insolvency proceedings.

For the realisation of the creditor's rights within the insolvency proceedings, all creditors, except for the employees, whose debts are previous to the date of the opening of the proceedings, shall lodge claims, in accordance with the provisions of art. 64, paragraph (1) of Law 85 of 2006, within the time limits set through the decision to open the proceedings.²⁶ Lodging the claims within the time limits, eliminates, in relation to the respective debts, the sanction of not being registered on the creditors' list provided by art. 76, paragraph (1) of Law 85 of 2006.

In the analysed case, the creditor was not on the list provided by art. 76, paragraph (1) of Law 85 of 2006, therefore he was not notified about the opening of the debtor's insolvency proceedings, by the liquidator. The notification on the opening of the proceedings was published in the BIP no 7.042 of 20.06.2011, thus after constant undertakings, additional to the already filed action, the creditor found out that the insolvency proceedings was opened against the debtor as well as the time limits for the lodgement of claims.

(ii) The creditor's lodgement of claims within the insolvency proceedings

In the specified case, within the time limit for the lodgement of the claims, the creditor brought claims to the debtor's statement of assets and liabilities, and applied for registration on the list of debts. Pursuant to the specific responsibilities provided by art. 76, of Law 85 of 2006 and with the creditor having lodged its claims, the judicial administrator/judicial liquidator is bound to "*immediately proceed to verifying each claim and enclosed document*" and "carry out an elaborate examination to establish the lawfulness, exact value and priority of each debt".

²⁵ National jurisprudence abounds in this kind of solutions, which can be consulted on jurisprudenta.org

²⁶ The time limits for lodging the claims against the debtors' assets shall be of maximum 45 days as of the opening of the proceedings;

The creditor and its litigious debt were not registered on the preliminary list of debts that contains the debts against the debtor's assets, published in the BIP no 9287 of 29.08.2011.²⁷

(iii) The debtor's appeal against the preliminary list of debts;

Found in the situation indicated above, the creditor filed appeal against the preliminary list of debts on the debtor's assets. According to the provisions of art. 3, pt. 16, "the preliminary list of debts contains all the debts arisen previously to the date of the opening of the proceedings, that are current, due, conditioned or under litigation, accepted by the judicial administrator after their examination."

In accordance with the provisions of art. 73, paragraph 3 of law 85 of 2006, the syndic-judge shall settle simultaneously, through a single judgment all the appeals, and if the settlement of certain appeals may require bringing evidence, he can admit the temporary registration of the debt on the final list of creditors against the debtor's assets.²⁸

In this case, the debtor requested the temporary registration of the debt on the list and taking the evidence that could not be taken in the ordinary proceedings due to the stay of the trial of the case. The creditor's request to render efficient the provisions of art. 73, paragraph 3, thesis II and to temporarily register the debt in the final list of debts was considered well-grounded by the syndic-judge. It follows that this temporary character of the registration to become final after the taking within the insolvency proceedings the evidence that could no longer be taken in the ordinary proceedings, an aspect that constitutes a new feature generated by the fact that this debt originates in a litigation regulated by the Commercial Code. Through the judgment given on 28.12.2011, the tribunal approved the appeal against the list of debts filed by the creditor and passed on to evidence taking in order to determine the amount of the debt.²⁹

²⁷ The motivation for non registration was the following: the debt was not certain, liquid and claimable and would not have been accepted for payment by the legal representatives of the insolvent debtor; There exist already solutioned actions having as object amounts that represent debts and default penalties, filed under the same building contract. Both arguments were considered ungrounded and combated by the creditor;

²⁸ In this regard see the judgment no. 1292 of 04/10/2011 of the Constitutional Court, published in the Official Gazette no.824 of 22/11/2011;

²⁹ Through the Judgment no.7332 delivered on 28.12.2011, in file no.5232/100/2011, unprecedented;

(4) CONCLUSIONS

The present study is desired to be a plea for the determination of the specific *status quo* of the creditor who filed claims previous to the opening of the debtor's insolvency proceedings and who pursues the realisation of the same debt within this proceedings. The plea is also grounded on the jurisprudence of the European Court of Human Rights, having in view the breach of the provisions of art.6, paragraph 1 of the Convention for the Protection of Human Rights and Fundamental Freedoms on access to the court and duration of the proceedings, in situations of interference of the ordinary proceedings regulated by the Civil Procedure Code and the insolvency proceedings provided by Law 85 of 2006.³⁰

Art.36 of Law 85 of 2006 regulates the legal stay of the judicial, extrajudicial actions or of the forced execution measures for the realisation of the debts against the debtor or its assets and offers prevalence to the concurrent, collective, egalitarian and unique insolvency proceedings in relation to the individual ordinary proceedings regulated by the Code of Commerce. However, the rights of the parties of the legal action cannot be transgressed, as the role of the law is to facilitate the use of the different categories of proceedings and not to overlap and multiply them, the coherence and interference of the proceedings being a defining aspect for the effective course of legal actions.

BIBLIOGRAPHY

Turcu Ion, *The Insolvency Law. Commentary*. 3rd edition, C.H. Beck Publishing House, Bucharest, 2009;

Turcu Ion, *Treatise on Insolvency*, C.H. Beck Publishing House, Bucharest, 2006;

Deleanu Ion, *Treatise on Civil Procedure*, C.H. Beck Publishing House, Bucharest, 2005;

Law 85 of 2006 on Insolvency, published in the Official Gazette no. 359 of 21.04.2006, version consolidated in 07.10.2010;

Judgment no. 1075/2007 of The Constitutional Court, published in The Official Gazette no. 8 of 07.01.2008;

Judgment no. 584/2011 of The Constitutional Court, published in The Official Gazette no. 606 of 29.08.2011;

³⁰ The case of SC Concept Ltd SRL and manole against Romania, application 42.907/02, published in the Official Gazette no. 470 of 05/07/2011; Case of SC Aprond Dynamics SRL against Romania, application 21.199/03, published in the Official Gazette no.567 of 10/08/2011;

THE ECONOMIC ANALYSIS OF TORT LAW

Nataša Lucić, LL.B.¹, Katarina Marošević, univ.spec.oec.¹

¹J.J. Strossmayer University of Osijek, Faculty of Law in Osijek, Croatia

nlucic@pravos.hr, kmarosev@pravos.hr

Abstract

The paper deals with the economic analysis of tort law. Particular emphasis is given to the analysis of tort law solutions in Croatian civil law system. The main aim of the paper is to demonstrate the economic analysis of fault liability and strict liability. Calling upon several influential scientific concepts and criteria such as Pareto efficiency and Kaldor–Hicks criterion, the paper presents a brief overview and analysis of different solutions that economic analysis of tort law provides. Using the normative approach of the analysis, which should give an answer to the question *how legal rules ought to be*, the paper analyzes a preventive function of tort law based on abatement of responsibility of each individual. In addition, by offering selected examples of economic analysis, the paper will examine the tort law in function of welfare economics, morality and usefulness of the individual that affects the social welfare in general.

JEL Classification: K13

Keywords: tort law, economic analysis, liability, normative approach, prevention, social welfare

1. Introduction

From both the legal and economic point of view, tort law includes two fundamental goals - the compensation and prevention. The former refers to the condition that everyone should be compensated for damage by application of damage compensation regulations while the latter entails legal regulations aimed at prevention of harmful action which might generate harmful consequences. However, there are number of situations in which law and economics differ in the rating of these goals in a way that law is often focused on compensation for harmful consequences

whereas economics is primarily concentrated on prevention of damage causing action and on the liability for such action. The question is how to formulate tort law regulations as to accomplish both of these goals? Furthermore, what are the current solutions of the Croatian tort law system and is there a possibility of achieving better results in this area? Economic analysis of tort law, particularly the normative approach thereto, provides at least for a partial answer to these questions. Seeing tort law through the prism of economic efficiency, one must think about decisive social, legal and economic factors of social welfare other than appropriate legal regulations. These regulations only represent a prerequisite for adequate solutions of tort law relations and are not a guarantee for achieving a higher level of social welfare.

2. General Conditions of Liability in Croatian Tort Law Legal System

Croatian Civil Obligation Act in its Article 1045 (Official Gazette, No. 35/05, 41/08) determinates that a person who has caused damage to another person shall compensate for this damage, unless he has proven that the damage has not occurred as a result of his own fault. Based upon this article it is possible to conclude that conditions of liability include following: injurer and injured person, harmful act of the injurer, damage, causation and unlawfulness.

Injurer is a person that is liable for damage and injured person is person that can demand compensation. Damage shall imply a loss of a person's assets (pure economic loss), halting of assets increase (loss of profit) and violation of privacy rights (non-material damage) (Article 1046 of the Civil Obligation Act, Official Gazette, No. 35/05, 41/08). Causation is a link between harmful act and the damage. Liability depends on showing that a specific action or event has caused specific harm or loss to another. General conditions of liability in Croatian tort law legal system does not differ much from majority of other European legal systems¹ but there are some specific solutions concerning application of fault and strict liability rules and exoneration of liability.

¹ See analogy between Croatian and other tort law legal systems in Klarić (2003).

3. Fault Liability and Strict Liability

When discussing the foundations of tort liability, “strict liability” is generally opposed to “liability for fault”². The dichotomy between these two forms of liability is usually emphasized at a theoretical level, especially when their merits are discussed in terms morality or in terms of economic efficiency (Werro & Palmer, 2004: 5). It is difficult to establish a clear border line between the fault and strict liability. Many legal theorists said that strict liability and fault liability are alternatives in terms of convenient classification and exposition, but closer examination suggests that in terms of substance there is really a continuum rather than two categories. Undoubtedly, there are many cases in which it is possible to see “grey areas” between these two liabilities. Under the Croatian tort law system, as a general rule, liability will be based on fault. Fault shall exist where a defendant has caused damage intentionally or by acting carelessly. Liability for damage caused by dangerous things or dangerous activity and liability for defective product³ are regulated by the strict liability rules. Damage caused in relation with a dangerous thing or dangerous activity⁴ shall be considered as resulting from that thing or activity, unless it has been proved that they have not caused the damage. The owner shall be liable for damage resulting from a dangerous thing, and the person engaged in the respective activity shall be liable for damage resulting from a dangerous activity. A producer who has placed a product on the market shall be liable for damage caused by defectiveness of that product.

² Traditional economic analysis of tort law makes a clear distinction between on the one hand a fault liability, which is in the American economic legal doctrine usually referred to as negligence on the one hand and strict liability on the other hand. In the literature strict liability is usually relatively simply defined as a legal rule which forces the injurer to compensate the total losses of the victim irrespective of the behavior of the injurer. More about alternatives or “grey area” in between strict liability and fault liability under the European legal systems see Koch & Koziol (2004).

³ Nowadays, the field of liability for defective products is featured by the greatest achievements in terms of unification of strict liability in European law. To a great extent, these achievements have resulted from the 1985 Directive of the EC Council 85/374/EEZ stipulating equalization of the right of member states with respect to liability for defective products.

⁴ According to the Croatian judicial practice, dangerous things can be cars in motion, wild animals, explosive devices, devastated buildings, weapons, industrial machinery etc. while dangerous activities may refer to railroad and tram-related activities, activities leading to harmful emission, mining, hunting and fireworks activities etc.

3.1. How does Levels of Care, Levels of Activity and Exoneration Reasons Affects Social Efficiency

It is rather often that level of care and level of activity depend on each other in the way that one determines the other because of the possibility of higher expected losses that might be caused because of the (strong) duty of care that, on the other hand, determines liability of injurer. It is more probable that person will attempt activity that will not cause losses because very high duty of care might make him responsible for all the losses of the expected accident.

Table 1 shows how duty of care affects the level of activity in the fault liability cases but similar conclusions might be taken from cases of the strict liability too, because of the fact that under the strict liability the same regulations apply like in the cases of very high level of care that could exonerate injurer of his liability in fault liability cases. Very high duty of care put injurer in the same situation like he is liable under the strict liability rules (full and completely liable).

Table 1 How does level of care affect the level of activity?

Level of care	Level of activity	Benefit from the 1 activity	Probability of the accident	Expected accident losses	Expected injurer accident losses	Total costs	Total benefit
Dolus	10	100	3	150	50	150	850
Culpa lata	10	100	3	150	100	300	700
Culpa levis	10	100	3	150	150	450	550

Source: Authors' calculation

As we can see from the example in the Table 1, injurer accident losses will relate to his duty of care. If the legal rule obligate someone on high level of care, his liability for accident cost will grow with the decrease of level of care that he used. In other words, costs of the injurer will grow depending on his duty of care. That bring us to conclusion that there will be much more activities that bring more benefits, and that are undoubtedly those activities that do not obligate us to high duty of care. The question is, what is more socially efficient: to form legal rule that will encourage undertaking more activities or adversely - to form legal rule that will avert it. Of course, it is not possible to offer general answer to this question. Answer depends on social desirability of each activity that is subject of legal regulation. This means that if the activity brings social utility, legal rule will be considered efficient if it incites that kind of activity.

Table 2 Level of activity and social utility

Level of care	Level of activity	Costs		Benefit from the 1 activity	Probability of the accident	Expected accident losses	Total social costs	Total social utility
		of care	of 1 activity					
Dolus	100	0	20	80	3	200	2600	5400
Culpa lata	70	400	20	80	3	200	2400	3200
Culpa levis	30	800	20	80	3	200	2000	400

Source: Authors' calculation

In the Table 1 we have showed that level of care undoubtedly affects level of activity. Considering that, the Table 2 shows different levels of activity. Probability of accident is the same in all three cases since it is affected by the level of care and by the level of activity as well. The greater the level of care is, the probability of the accident lowers, the greater the level of activity is, the probability of the accident grows. That is why the same probability of the accident value (3) has been in all three levels of care (*dolus*; *culpa lata*; *culpa levis*) and levels of activity (100; 70; 30). Total costs of the 3 accidents will always be the same (600), and the sum of these expenses with costs of care the one that executes the activity (0; 400; 800) and the whole costs of activity - which is the sum of the level of activity and the costs of one activity ($100 \times 20 = 2000$; $70 \times 20 = 1400$; $30 \times 20 = 600$) is equal the total social costs ($600 + 0 + 2000 = 2600$; $600 + 400 + 1400 = 2400$; $600 + 800 + 600 = 2000$). Total social utility equals the benefit from one activity multiplied with level of activity ($80 \times 100 = 8000$; $80 \times 70 = 5600$; $80 \times 30 = 2400$) minus total social costs ($8000 - 2600 = 5400$; $5600 - 2400 = 3200$; $2400 - 2000 = 400$). Table 2 is showing us that efficient legal rule will be the one that incites the greatest number of socially usefully activities, and that is always the one that does not demand high level of care, so activity will be performed more often, which will increase total social utility. Contrary, when the legal rule needs to avert activities that are socially undesirable and create social losses, efficient legal rule will be the one that forces high level of care to deter from these kinds of activities⁵.

Considering that, it is absolutely reasonable that the liability of the dangerous things and dangerous activities is regulated by the strict liability rules. However, the

⁵ For another insight into assessing some tort law legal rules and policies in terms of their efficiency see Polinsky (2003).

deference between Croatian tort law legal system and most European legal systems, and which judging by the authors is an inadequate solution, is the fact that the reason to exonerate strict liability is act of the victim, and not **fault** of the victim. According to the Article 1067 of the Croatian Civil Obligations Act (Official Gazette, No. 35/05, 41/08), the owner shall be released from liability if he proves that the damage has occurred exclusively due to an action of the injured party or a third party, which the former could not foresee and the consequences of which could not be avoided or eliminated. The owner shall be partly released from liability if the injured party has partly contributed to the occurrence of damage.

Let us take railway as an example for dangerous activity. If person that is liable for damage (person engaged in the respective activity) presumes that an accident of train falling off the tracks might happen he won't expect exoneration from liability on behalf of the act of the victim because injured person would prevent accident from happening if he could, for sure. Only possible reason of exoneration from liability could be *vis maior* (under certain circumstances it is possible that it could be act of the third person but only in a meaning of unpredictable, unavoidable, external event that is again *vis maior*). When there is no possibility that injurer will be fully or partially exonerated from strict liability, he is obligated to compensate damage in full, economically speaking, he must pay for all the losses. In that case, total costs of the injurer equals total social costs. Injurer will, for sure, try to minimize his expenses, as much as possible. That makes his goal identical with the goal of the society, which is to minimize social costs. It is logical that injurer will do all the precautions to avoid potential losses i.e. he will invest more on safety that would most likely mean avoiding far greater losses that potential accident could bring.

If we indicate total social costs with XT , and total injurers costs with zt , formula will look like this:

$$XT=zt$$

Examining example from Croatian judicial practice, in a case of partial liability where injured person was partially liable for the damage because he was jumping on the train that has just left the station, while the conductor let the train leave although he saw that passenger was running and that he will probably try to board the train in motion, we can conclude that total social costs in this case are not just costs of strict liable person of dangerous activity, it is the sum of the costs of the persons that share losses (injurer and injured person). In other words, when the act of the injured person is a reason for partial exoneration from strict liability, than

total social costs are not equal with the total costs of the person strictly liable, it is the *sum of the costs of care of injurer and the injured person, and total accident losses.*

Social goal would be again to minimize social costs, but in this case it is only possible by influencing both sides.⁶ If we indicate total social costs with XT , and total injurers costs with zt (that is the sum of the injurers costs of care zs and costs of the accident zy), and total costs of the injured person with nt (that is the sum of the injured person costs of care ns and costs of the accident ny), formula will look like this:

$$XT=zt+nt$$

(if we know that $zt=zs+zy$, and $nt=ns+ny$)

Why it is important that law determines that **fault** of the victim affects the possibility of exoneration from strict liability? According to *normative approach* of the economic analysis, it is possible to prove that this legal institute will encourage potential strictly liable injurers and potential injured persons to conduct more carefully that will result in lowering total social costs in the end. A person liable for extra hazardous activities (potential injurer), despite the fact that his own fault does not affect the possibility of exoneration from liability, “calculating” with the potential fault of the injured person will invest more in safety because if percentage of guilt of the injured persons raises his own liability decreases. The higher the investments in safety and damage avoidance are, it is logical that fault of the victim will determine possibility of the accident. On the other hand, injured person will be motivated on safer conduct considering the fact that depending on percentage of his fault he will be forced to face with consequences of his own harmful act.

⁶ Law and economics explains tort law as that body of rules designed to minimize costs of accidents, defined as the sum of prevention, accident, and administrative costs. By holding out the possibility of imposing liability on party for the costs of accidents, tort law seeks to get both potential injurers and potential victims to internalize the costs that their actions or failures to act may impose others (Ulen, 2003: 9)

Table 3 *Fault of injured person cannot be reason to exonerate strict liability*

PROBABILITY OF THE ACCIDENT (vd)	COST OF CARE OF THE INJURER (zs)	COST OF CARE OF THE INJURED PERSON (ns)	(EXPECTED) ACCIDENT LOSSES (y)	TOTAL COSTS OF THE INJURER (zt)	TOTAL COSTS OF THE INJURED PERSON (nt)	TOTAL SOCIAL COSTS (XT = zt)
10	100	0	150	$250 \times 10 = 2.500$	0	2.500
7	70	0	150	$220 \times 7 = 1.540$	0	1.540
3	30	0	150	$180 \times 3 = 540$	0	540

Source: Authors' calculation

Table 3 shows us that injured person will not invest in the costs of care because of the fact that in the cases of strict liability in which his fault does not affect the injurers exoneration of liability (whether there is no fault of the injured person or even cannot be any, e.g. train falls off from the tracks or because law deterrent that fault of the injured person is irrelevant) he gets fully compensated for the damage, whether or not the accident occurs so he will not sustain any loss. On the other hand, potential injurer will invest in cost of care depending on probability that accident will occur. The greater the probability that accident in which under the strict liability rules there is no possibility to exonerate liability will occur, he will, of course, invest more in costs of care.

Table 4 *Fault of injured person can be reason to exonerate strict liability*

FAULT OF THE INJURED PERSON	COST OF CARE OF INJURER (zs)	COST OF CARE OF INJURED PERSON (ns)	TOTAL COST OF CARE (ts = zs + ns)	PROBABILITY OF THE ACCIDENT (vd)	((EXPECTED) ACCIDENT LOSSES (y)	TOTAL SOCIAL COSTS $XT = (ts + y) \times vd$
30%	90	20	110	9	150	2.340
60%	60	40	100	4.5	150	1.125
90%	20	60	80	1.2	150	276

Source: Authors' calculation

The Table 4 shows us that when injured person contributes to damage, that can be measured only by the level of his fault and is the reason to exonerate injurer from liability, both injurer and injured person invest in costs of care that gradually increase total costs of care. Table shows us as well that costs of care of the injured person will increase depending on possibility of injurer exoneration of liability, so

costs of care for both of them are in the state of reciprocity, which means that cost of care of the injurer will be higher when cost of care of injured person are lower and vice versa. However, it is important to remember that under the strict liability rules injurer will always take higher level of care comparing to injured person, injurer will always invest more to avoid the accident.

4. Pareto efficiency and Kaldor-Hicks criterion

An outcome is said to be *Pareto efficiency*, if we cannot make one person better off without making another person worse off. Change is Pareto improvement if it means that at least one participant would favor the effect of change (be “better off”) and no participant would oppose the effects (be “worse off”).⁷ This criterion of efficiency is thought to impose a very strict standard, since there are very few situations in the real world in which there will not be at least one person who would be adversely affected by the change. Any change usually makes some people better off while making others worse off. It is almost impossible to take any change in economic policy, without making at least one person worse off. Pareto efficient outcome may be very inequitable, especially because of its absolute notion: an allocation is either Pareto efficient or it is not. The *Kaldor-Hicks criterion* imposes less stringent conditions and can be applied to many practical situations. Using Kaldor-Hicks efficiency, an outcome is more efficient if those that are made better off could compensate those that are made worse off. Kaldor-Hicks does not require compensation actually be paid, merely that the possibility for compensation exist, and thus does not necessarily make each party better off. In other words, while the Pareto efficiency requires that no party is actually made worse off, the Kaldor-Hicks efficiency only requires the possibility of compensation to exist. Speaking in the tort law contest, it is obvious that Kaldor-Hicks criterion is likely to be applied to form efficient legal rules that aim to make as much as possible equitable situation between injurer and injured person. However, it is hard to say that any of these criterions can be used to serve social welfare sufficiently. Pareto efficiency would imply the situation in which damage compensation would be unnecessary because neither side would be made worse off because of the better off the other side that would require damage compensation. That would mean that it would be all right that I have all the goods in the world since there is no way to make someone bet-

⁷ *Palda* is among many economic scholars who thinks that Pareto efficiency is the only feasible route to peace and prosperity. See more in Palda (2012).

ter off without making me worse off. In tort law contest, that kind of situation is unthinkable under any of liability rules. On the other hand, we can say that in questions of tort law Kaldor-Hicks criterion is much more applicable because of compensation of losses. But the problem is that compensation does not need to be actually paid, compensation is given in principle but not in fact. However, without possibility of compensation of the injured person made worse off, regardless of the situation, it is impossible to conceive proper functioning of the tort law *per se*.

5. Social welfare

Social welfare undoubtedly depends on a number of factors that determine or influence its level within a society on a daily basis. It is hard to set out general and precisely shaped rules which could, regardless of a situation, raise this level. Existence of well-formulated tort law rules that regulate tort law relations as justly as possible would certainly facilitate social welfare. Economic analysis of tort law is surely convenient when it comes to elaboration of these legal rules since it always comprises situations in which one party is the winner and the other is the loser, so it is vital to equalize their legal and economic position to the greatest possible level. Such positions of a group of people whose relations are regulated by the law influence their (dis)satisfaction and definitely determine the level of social welfare in general. Because, the social evaluation of situations is assumed to be based on individual well-being. In particular, it is presumed that the social evaluation, labeled social welfare, depends positively on each and every individual's utility-social welfare is raised when any individual's utility increases-and does not depend on factors apart from their utilities.(Shavell, 2004: 597). A decision made by the courts affects the welfare of the both the plaintiff and defendant and, more generally, that of the other members of society. What, then, is the relationship between the social welfare as whole and that of its individual members? As suggested by the aforementioned, tort law should always strive for full compensation of damage to the sufferers. An ideal world would include legal regulation which would completely meet this requirement. On the other hand, the prevention defined by tort law, which is rather popular amongst economic analysts of law, is achieved by preventing people from harmful action and by creating conditions in which people would avoid undertaking harmful action as much as possible as such action would decrease the level of social efficiency in its entirety. Therefore, this kind of prevention is an extremely im-

portant task of law.⁸ However, if one takes the social circumstances surrounding us into consideration only superficially both at a national or at an international level,⁹ the inevitable conclusion will be that the current social order does not match the basic goals of tort law at all. Vast differences in the economic power of those who govern social quantity and quality often result from situations in which, regarding tort law relations, one party is preferred over the other. Why is that so despite the fact that European legal systems cater for well-elaborated legal rules assuring the equal position of both parties in a tort relation, accompanied with various rules for liability depending on the type, structure and manner of emergence of this kind of relation?¹⁰ One might say that what is implied here is the general conclusion that an appropriate legal structure ensuring a just solution of tort relations is not sufficient for achieving social equality but we also need strong will of the entire social structure to interpret and apply these legal rules or in one word, to strive for true economic equality within a society which will be more than a fact in law.

6. Conclusion

Perceiving tort law through its two basic goals, compensation and prevention, though putting an emphasis on the question *how legal rules ought to be*, to the greatest possible extent, stimulating for the morality and usefulness of an individual affecting social welfare in general, economic analysis has lead us to the conclusion that the Croatian tort law system contains a fair number of solid solutions which put Croatia in the position of a full member of the advanced European tort law family. On the other hand, this system is not perfect and needs improvement, par-

⁸ *Landes* and *Posner* propose that tort law is best understood as a system for achieving an efficient allocation of resources to safety, rules and doctrines of tort law encourage the optimal investment in safety by potential injurers and potential victims. See more in *Lands & Posner* (1987).

⁹ Faced with an increase in technical and industrial risks, many European legal systems have since the end of the 19th century introduced liability rules that provide for some form of strict liability. Contemporary requirements in terms of technical and technological advancement, globalization of industry, modern traffic, and free movement of goods, services and capital generate complicated legal relations concerning damage compensation which cannot always be resolved by applying the liability criteria based on fault.

¹⁰ See more detailed explanation of the relation between equity and efficiency in European Union in *Pestieau* (2006). See more detailed research on the relation between justice and equity, maximization of economic efficiency and social wealth in *Mathis* (2009).

ticularly with respect to the rules for fault and strict liability which would make our system comparable with some other prosperous legal systems.

The level of care and activity of an individual undoubtedly has effect on the level of social efficiency and therefore, it is vital to harmonize these levels in a way that legal regulations encourage undertaking action which individuals and the society as a whole can benefit from. Due attention should also be paid to prevent action which has the opposite effect. Tort law becomes more efficient if it prevents individuals from causing, both on a group and individual basis, harmful action by their conduct. In fact, the main notion of morality that bears on tort law appears to be that of classical corrective justice – the injurer must make their victim whole. Still, except on solid legal regulations, social efficiency measured by the satisfaction of all people constituting a society, depends also on those factors which can make solid legal regulations even better by applying them in practice. It means that the link between law and moral, which is an indubitable requisite for social righteousness and welfare of individuals, is not only encompassed by a well-shaped legal system creating favourable conditions for full compensation for all damages to the sufferers but also by the need for development of awareness affecting all people whose conduct is subject to legal regulations in a way that total social efficiency should not be measured by subtracting losses of one group of people from the total gains of another group of people but by the average economic power of all the individuals constituting a society, efficiency of which is the scope of economic analysis. It suggests that law is not always satisfied by the bare fact that individuals have been compensated for the damage done to them, i.e. that economic welfare has not been achieved by bare compensation for individual damages, but that accomplishment of these goals require the conditions that individual damage compensations are not aimed at deepening of the differences in the economic structure of the population. More simply, social efficiency should be generally supported, but only under the condition that it satisfies the needs of every individual and not only certain groups of people who, disguised by tort law rules, compensate others for losses that are much smaller than their gains achieved by harmful activities undertaken chiefly for their benefit.

Literature

- Klarić, P. (2003). *Odštetno pravo (eng. The Tort Law)*, Narodne novine, Zagreb
- Koch, B.A. & Koziol, H. (2002). *Unification of Tort Law: Strict Liability*, Kluwer Law International, Hague
- Lanes, W.M. & Posner, R.A. (1987). *The Economic Structure of Tort Law*, Harvard University Press.
- Mathis, K. (2009). *Efficiency Instead of Justice?: Searching for the Philosophical Foundations of the Economic Analysis of Law*, Springer.
- Palda, F. (2012). *Pareto's Republic and the New Science of Peace*, Cooper-Wolfing.
- Pestieau, (2006). *The Welfare State in the European Union: Economic and Social Perspectives*, Oxford University Press.
- Polinsky, M. (2003). *An Introduction to Law and Economics*, Aspen Publisher, New York
- Shäfer, H. & Ott, C. (2004). *The Economic Analysis of Civil Law*, Edward Elgar Publishing Limited, Cheltenham, Northampton
- Shavell, S. (2004). *Foundations of Economic Analysis of Law*, The Belknap Press of Harvard University Press.
- Ulen, TH.S. (2003)., *Firmly Grounded: Economic in the Future of the Law*, Published in Legal Ordering and Economic Institutions, Routledge, ISBN: 0-203-39132-2, London
- Werro, F. & Palmer, V. (2004). *The Boundaries of Strict Liability in European Tort Law*, Carolina Academic Press.
- Civil Obligation Act, Official Gazette, No. 35/05, 41/08

COUNCIL REGULATION 4/2009¹: MAINTENANCE RIGHT IN THE TERRITORY OF THE EUROPEAN UNION

Josipa Živić, LL.M., Vjekoslav Puljko, Ph.D.¹

¹Faculty of Law of Osijek, Croatia, vpuljko@pravos.hr

ABSTRACT

The adoption of the Regulation 4/2009 regulating maintenance obligations marked the beginning of a new era in European international private family law and new approach to the maintenance issue. This discipline of law is a particularly dynamic area which still leaves wide open areas of freedom and search for new solutions, but it is also specific by the visible unification of areas and tendencies towards creating international private family law. In terms of its solutions, the long-awaited Regulation has kept a traditional approach that arguably almost makes it a codification of substantive maintenance rules. From the introduction and establishing of new institutes such as central authorities and the rules of cooperation between them, as well as legal aid rules, a tendency can be observed to create an integral administrative system, primarily aimed to protect weaker parties, to enable them to exercise their rights in the easiest way possible and to proclaim guaranteed human rights, as well as those rights which make the European Union what it is: a territory where free movement of people, goods and capital is guaranteed whereby in the absence of such system the rules of the Regulation would remain nothing but dead letter. A full analysis of the Regulation's rules provided by this paper constitutes a basis for certain conclusions and for the harmonization of the national legislation with the *acquis communautaire* of the Community, a member of which our country is to become in 2013.

JEL Classification: K10, K20, K30, K40

¹ Regulation 4/2009, fully titled Council Regulation (EC) No. 4/2009 of 18 December 2008 on jurisdiction, applicable law, recognition and enforcement of decisions and cooperation in matters relating to maintenance obligations, published in the Official Journal of the European Union, L 7/1 of 10 January 2009 (hereinafter: Regulation 4/2009)

Key words: Regulation 4/2009, European international private family law, maintenance, applicable law, central authorities, recognition, enforceability and enforcement of decisions

COUNCIL REGULATION 4/2009² – NEW SOLUTIONS FOR MAINTENANCE OBLIGATIONS

I. INTRODUCTION

Despite the fact that the work on the harmonisation of the family law rules has intensified in the last ten years, it still appears that the legislation in this area is insufficient. The EU's open market, free movement of goods and capital, mobility and human migrations have created new relations and fundamentally changed family itself. Matrimonies between nationals of different states create marriages with an international component. Complications arise even at the moment of entering into such marriages. When these are divorced - and the divorce rates are growing³ - the resolving of personal and property legal consequences (thereby also maintenance obligations, whether toward a former spouse or a child) of such marriages is very complex due to the inequality of the substantive norms of the family law in the first place, and existing court decisions entail the issue of their enforceability⁴.

The reason for this is that family law, more so than other law branches, reflects traditions, moral, religious convictions that prevail in a society and it was thought for a long time that this branch of law would be difficult to harmonize. However, the globalization and the European integration processes have done their work, so

² The Regulation was published in the Official Journal of European Union, L 7/1 of 10 January 2009 under the name Council Regulation (EC) No. 4/2009 of 18 December 2008 on jurisdiction, applicable law, recognition and enforcement of decisions and cooperation in matters relating to maintenance obligations, hereinafter Regulation 4/2009.

³ Divorce statistics available at: epp.eurostat.ec.europa.eu

⁴ In Spain, for instance, the maintenance decision is adopted in 80% of divorce cases, however, it is carried out in 50% of cases; in 2001, there were 21,000 maintenance debtors in Sweden who lived outside of the state boundaries, and whose maintenance debt amounts to 7 million euro per year. This data is part of a research conducted by the European Commission. See detailed information at: http://ec.europa.eu/justice_home/doc_centre/civil/studies/doc/_civil_studies_en.htm

that what seemed to be unachievable 50 years ago has become a reality today, to such extent that even an all-European Model Family Code has been published.⁵

Our intention in this narrative is to briefly account and describe the most significant novelties introduced by the Regulation 4/2009 when compared with other instruments to date, point to its insufficiencies and, finally, say something about maintenance obligations from the standpoint of the Croatian international private law.

II. INTERNATIONAL COOPERATION IN CROSS-BORDER FAMILY LAW MATTERS PRIOR TO THE REGULATION 4/2009

The awareness of the necessity of cooperation between states and harmonization of family law rules has been present for a very long time. From as early as 1902, when the Guardianship Convention was adopted within the frame of the Hague Conference on International Private Law⁶, to the significant contribution by the United Nations whose conventions, such as the New York Convention on the Recovery Abroad of Maintenance of 20 June 1956⁷, the Convention on the Rights of the Child of 1989, which explicitly promotes international cooperation between states in the matters, to the recent Regulation 4/2009, which came as the result of the efforts made by the EU, i.e. European Commission, in this area.

A special mention should be made of the work carried out at the Hague Conference on International Private Law, within the frame of which significant cross-border cooperation instruments have been created, taking into account the fact that the EU has been its member since 2007. However, even prior to this the Hague Conventions were the main instrument of cooperation between the EU Member States in family law cases, and following the signing of the Amsterdam Treaty on 2 October 2007, which marked the creation of a framework for establishing a common legal territory within the EU, the Member States have transferred their powers onto the Union on the grounds of which it can independently adopt regulations and directives and thus create a supranational, European law, which is at the same

⁵ The Model Family Code has emerged within the frame of the Commission for European Family Law. The group consisting of 25 experts analyzes family law provisions from various states to find common principles and shapes them into supranational norms acceptable to all.

⁶ Convention du 12 Juin 1902 pour régler la tutelle des mineurs, no longer applied, text available at: www.hcch.net/index_en.php

⁷ In 1990 it was ratified by all the EU Member States, but it never entered into force

time harmonised with the provisions of the Hague Conventions. Some of the most important conventions in terms of maintenance obligations are the Convention of 24 October 1956 on the law applicable to maintenance obligations towards children⁸, Convention of 2 October 1973 on recognition and enforcement of decisions relating to maintenance obligations⁹, Convention of 15 April 1958 concerning the recognition and enforcement of decisions relating to maintenance obligations towards children.¹⁰ The 1973 Hague Convention (on recognition and enforcement of decisions relating to maintenance obligations) was replaced by the Convention of 23 November 2007 on the international recovery of child support and other forms of family maintenance¹¹ (hereinafter: 2007 HC), a signatory of which is the EU. Relevant to the Regulation 4/2009 is also the 2007 Hague Protocol on the law applicable to maintenance obligations. In addition to these, other numerous conventions and resolutions aimed at international cooperation between judicial bodies and not solely related to the legal protection of family have been applied, to mention only one of the most prominent ones, Regulation 44/2001 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters of 22 December 2000.¹² Other than that, strong efforts have been recently made in establishing common standards and harmonizing the rules of family law under the guidance of the Council of Europe, since the current level of protection of family, and children in particular, is still unsatisfactory.

III. REGULATION 4/2009

III. 1 Adopting the Regulation 4/2009

The adoption of the Regulation 4/2009 was preceded by a lengthy discussion and numerous studies of current circumstances. As early as in 1999, the Council, at the proposal of the Commission, invited all stakeholders to contribute, with their

⁸ Convention of 24 October 1956 on the law applicable to maintenance obligations towards children, full text available at www.hchh.net/index_en.php

⁹ Convention of 2 October 1973 on recognition and enforcement of decisions relating to maintenance obligations, full text available at www.hcch.net/index_en.php

¹⁰ Convention of 15 April 1958 concerning the recognition and enforcement of decision relating to maintenance obligations towards children, full text available at: www.hcch.net/index_en.php

¹¹ Convention of 23 November 2007 on the international recovery of child support and other forms of family maintenance, full text available at: www.Hcch.net/indeks_en.php

¹² O. J. L 12 of 22. 12. 2001.

suggestions and comments, to the advancement of cross-border cooperation in procedures of recovery of maintenance obligations because this question “directly concerns the everyday lives of citizens” and [...] guaranteeing effective recovery of claims is essential for the welfare of many people in Europe...”¹³. Goals were set to simplify the procedures of recognition of foreign court decisions and accelerate their enforcement, since this guarantees legal security, trust and the protection of family, primarily of children. Namely, previous studies showed that even though preconditions existed there were very few cross-border maintenance requests. A long lasting, demanding legal procedure generates high costs with uncertain outcomes and, therefore, maintenance request attorneys do not even venture into such disputes¹⁴.

Year of studies, discussions, considerations and coordination of proposals resulted in the adoption of the Regulation 4/2009. The Regulation was adopted on 18 December 2008 under the full title Council Regulation (EC) No. 4/2009 of 18 December 2008. on jurisdiction, applicable law, recognition and enforcement of decisions and cooperation in matters relating to maintenance obligations.¹⁵ The Regulation entered into force on 18 June 2011.

The Regulation supersedes some of the instruments that were applied before it was adopted in the enforcing cross-border maintenance applications to facilitate and streamline the procedure of exercising the said right – Regulation 44/2001,¹⁶ whose scope of application was, *inter alia*, civil responsibility in general, including maintenance obligations and to supplement some of them – Regulation 2201/2003,¹⁷ which excludes maintenance obligations from its scope of application. Additionally, the Regulation explicitly stresses its reliance upon the Hague Protocol and Hague Conventions¹⁸, which constitutes a major step forward in the unification of international family law.

¹³ Green Paper on maintenance obligations, Commission of the European Communities, Brussels, 15 April 2004, text available at: <http://eur-lex.europa.eu>

¹⁴ Study available at: http://ec.europa.eu/justice_home/doc_centre/civil/studies/doc_civil_studies_en.html

¹⁵ O. J. L 7/I of 10 January 2009

¹⁶ Regulation 44/2001, the so-called Regulation Brussels I on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters

¹⁷ Regulation 2201/2003 of 27 November 2003 concerning jurisdiction and the recognition and enforcement of judgments in matrimonial matters and the matters of parental responsibility

¹⁸ Recitals (6), (7) and (8) of the Regulation 4/2009

Before venturing into a more detailed analysis, let us note that the Regulation contains a definition of “maintenance”, provisions on jurisdiction and applicable law and foresees novelties in the procedure of recognition and enforcement of maintenance judgments. It will be applied in all 27 Member States, with several specific adjustments for Denmark and the United Kingdom.

III. 2 Organization and scope of application

The Regulation is comprised of 48 recitals which clarify the context and substance of the Regulation, reasons for its adoption, while individual provisions are also clarified. This is followed by nine chapters – titles. Chapter I contains the scope of application and definitions, Chapter II jurisdiction, Chapter III applicable law, Chapter IV recognition, enforceability and enforcement of decisions, under Chapter V titled “Access to Justice” we can find provisions facilitating access to courts from other Member States, provisions on legal aid, generally guaranteeing a more effective legal protection and security. Chapter VI contains provisions on court settlements and public instruments, the seventh chapter is titled “Cooperation between Central Authorities” and lays down provisions on the organization of an administrative system the goal of which is the implementation of the Regulation. Chapter VIII sets forth provisions on public bodies acting as creditors in maintenance obligations. Chapter IX contains transitional and final provisions.

The Regulation is to be applied on maintenance obligations arising from family relationship, parentage, marriage or affinity¹⁹ - this is how the Regulation itself defines the scope of application of its *ratione materie*. Further, the term “maintenance obligations” should be interpreted autonomously²⁰, therefore, each of the Member States according to its own legal understanding.

The Regulation is applicable in the territories of all the Member States of the EU²¹, with the exception of Denmark, the United Kingdom and Ireland²² where it is to be applied with certain modifications since those countries are not signatories of the Hague Protocol.

¹⁹ Recital (11), Art. 1 para 1 of the Regulation 4/2009

²⁰ Recital (11) of the Regulation 4/2009

²¹ Art. 1 para 2 of the Regulation 4/2009

²² Recitals (47) and (48) of the Regulation 4/2009

As previously mentioned above, the Regulation itself explicitly specifies to be applicable as of 18 June 2011, but it should be noted that Articles 2 paragraphs 2, 47 paragraphs 3, 71, 72 and 73 have entered into force as of 18 September 2010²³.

III. 3 Applicable law

The question of applicable law is essential to the subject matter covered by the Regulation. It is determined under Chapter III, however, only with one article²⁴ because the Regulation fully, as regards the applicable law, refers to the 2007 Hague Protocol.²⁵ This is an expression of the tendency to harmonise rules, but also a form of confirmation of the mutual connectedness and cooperation between European states, as well as of the coordination of instruments by which they regulate the extremely complex legal area of cross-border maintenance.

The Protocol itself was adopted and accepted to update and amend the Hague Conventions of 1956, 1973 and 2007.²⁶

Article 1 paragraph 1 of the Protocol defines its scope of application. The Protocol stipulates the applicable law for maintenance obligations arising from family relationships, parentage, marriage or affinity, including child maintenance obligations regardless of parents' marital status. It is evident, therefore, that special attention is paid to child protection.

The second article of the Protocol immediately prescribes the universality of its application; the Protocol, therefore, is applicable even when the applicable law for maintenance obligations is the law of a non-contracting state.

A general rule foreseen by the Protocol is that the law applicable to maintenance is the law of the state where the maintenance creditor has a habitual residence, save in cases where the Protocol provides otherwise;²⁷ if the habitual residence of the

²³ Ibid Recital (76)

²⁴ Chapter III, Art. 15 of the Regulation 4/2009: "The law applicable to maintenance obligations shall be determined in accordance with the Hague Protocol of 23 November 2007 on the law applicable to maintenance obligations (hereinafter referred to as the 2007 Hague Protocol) in the Member States bound by that instrument."

²⁵ Protocol of 23 November 2007 on the law applicable to maintenance obligations, available at: www.hcch.net/index_en.php

²⁶ Ibid Preamble

²⁷ The Hague Protocol of 23 November 2007 on the law applicable to maintenance obligations, Art. 3., para 1.

creditor changes, the applicable law is that of the state of the creditor's new habitual residence²⁸

In cases where the primary provision of the creditor's habitual residence is not applicable, the Protocol prescribes the application of *lex fori*, i.e. the law of the court which passes the decision.²⁹ In addition to *lex fori*, the Protocol also prescribes the provision of closer connection (Art. 5) for cases of maintenance applications by (former) spouses and those whose marriage is annulled; if they are of different nationalities and their last common habitual residence was in the same state, the law of that state shall apply according to the principle of closer connection. Article 8 paragraph 1 provides for the possibility for the parties to mutually designate the law. This may be the law of any State of which either party is a national at the time of the designation; the law of the State of the habitual residence of either party at the time of designation; the law designated by the parties as applicable, or the law in fact applied, to their property regime; or the law in fact applied, to their divorce or legal separation.

In accordance with the law applicable to the maintenance obligation, it shall also be determined whether a creditor may, and to whom, apply for maintenance, the possibility of retroactive maintenance application, the basis of maintenance calculation, statutes of limitation, and in cases where public bodies give a certain sum to the creditor in place of maintenance, the amount of the maintenance debtor's obligation.

Let us mention in the end the exclusion of the *renvoi* rules and the observance of the public order principle, as contained in the provision that the Protocol shall not apply in cases where its provisions are "manifestly contrary" to the public order of the state of the court where the recognition and enforcement of the decision is requested.

III. 4 Recognition, enforceability and enforcement of decisions

Without a rapid and efficient recognition, enforceability and enforcement of judgments (decisions) there is no legal security or certainty, and thereby no legal protection which is always the main goal of legislation. Therefore, it is safe to say

²⁸ Ibid para 2.

²⁹ Ibid Art. 4., para 1, 2, and 3.

that the provisions of the Regulation's Chapter IV regulating this subject matter are its central part.

This chapter contains a solution which immediately puts the efficiency and speed of recognition, enforceability and enforcement into doubt. Namely, the Regulation prescribes one procedure for states where the Hague Protocol is in force and another procedure for non-signatory states³⁰. However, it should be noted that Article 42, in Chapter III, which lays down common provisions, states that under no circumstances may the substance of a decision be reviewed in a member state in which such decision is to be enforced.

In those states that have signed the Hague Protocol, the *exequatur* procedure, i.e. the procedure of recognising foreign court decisions and judgments, is abolished, meaning it is not possible for such decisions to be refused. Decisions or judgements adopted in states-signatories of the Hague Protocol automatically become enforceable in another Member State, provided that such Member State has signed the Hague Protocol³¹.

A decision may be applied for a review only by a defendant if he was prevented from participating in a maintenance dispute in a state which adopted the decision because he was not served with a document instituting the proceedings within reasonable time limit which rendered him unable to prepare a defence, or due to force majeure or extraordinary circumstances beyond his fault³². Short time limits are foreseen for such procedures – 45 days as of the day when the defendant was acquainted with the contents of the decision (judgment)³³. If the court concludes that the stated reasons do not exist, the decision is enforced promptly.

Under Article 21, the Regulation provides for the possibility of refusal or suspension of enforcement, again on application by the debtor, if the right to enforce the decision of the court of origin is extinguished by the effect of prescription or the limitation of action either under the law of the Member State of origin or under the law of the Member State of enforcement, whichever provides for the longer limitation period. Enforcement may be refused or suspended also if it is contrary to a decision on the same matter, between the same parties, adopted either in the

³⁰ Regulation 4/2009, Art. 16 para 2. and 3.

³¹ *ibid* Art. 17 para 1 and 2

³² Regulation 4/2009., Art.19 para 1

³³ *ibid* Art. 19 para 2.

Member State of enforcement, or with a decision given in another Member State or in a third State which fulfils the conditions necessary for its recognition in the Member State of enforcement. Enforcement is also suspended if the enforcement decision is suspended in the Member State of origin.

When a decision is made by a court of a State which is not bound by the Hague Protocol, the Regulation lists the reasons for not recognising such a decision: if such recognition is manifestly contrary to public policy in the Member State in which recognition is sought; if the defendant was not served with the document which instituted the proceedings or with an equivalent document in sufficient time and in such a way as to enable him to arrange for his defence; if it is irreconcilable with a decision given in a dispute between the same parties in the Member State in which recognition is sought; if it is irreconcilable with an earlier decision given in another Member State or in a third State in a dispute involving the same cause of action and between the same parties, provided that the earlier decision fulfils the conditions necessary for its recognition in the Member State in which recognition is sought³⁴.

III. 5 Cooperation between central authorities

Even though the Regulation addresses the mechanism of “central authorities” to a significant measure, it is not a novelty. As a high-potential instrument for advancing international legal cooperation in family matters, it was foreseen in the UN Convention on the Recovery Abroad of Maintenance as early as in 1956. Both the Council of Europe³⁵ and the Hague Conventions attribute special significance to this system of cross-border cooperation in family matters since it has proven very efficient to date and, therefore, is given precedence over classic cooperation forms arising from international private law.

Chapter VII of the Regulation³⁶ prescribes rules for the designation of central authorities envisioned as special bodies within the Member States that are to designate them and inform the Commission of such designation. These may be

³⁴ Ibid Art. 24

³⁵ The European Convention on recognition and enforcement of decision concerning custody of children and on restoration custody of children, Luxembourg, 20 May 1980, The European Convention on the exercise of children's rights, Strasbourg, 25 June 2006, Convention on contact concerning children, Strasbourg, 15 May 2003, only to mention the most important ones.

³⁶ Regulation 4/2009, Art. 49–63

administrative or other bodies to be established by the Member State with general goals such as the exchange of information about national legislations and court proceedings, cooperation in the implementing the Regulation, facilitating cooperation between courts. Special goals defined by the Regulation are those that concern activities in concrete cases where central authorities have the obligation to deliver and receive maintenance applications, transmit them to the central authority of the Member State in which a maintenance debtor resides, determine the financial circumstances of both parties, foster amicable dispute solving, facilitate enforcements, collect documents and evidence, initiate temporary measures procedure aimed to secure maintenance recovery – simply put, to speed up and improve the procedure of cross-border maintenance recovery.

V. CONCLUSION

The modern way of living, globalization and migrations emphatically affect not only economic trends, but also personal lives of humans which results in the transition of the family, in a manner of speaking. Family life is changing; it is difficult to predict what such transition will entail, and it is especially difficult to regulate these changes by law. A deficit of legal protection in family matters with international component has been present for quite a long time.

In the introduction to this paper, statistics are briefly mentioned concerning the low number of maintenance applications because the lengthy, uncertain and costly procedure does not guarantee success, despite the unquestionable presence of law. Such situation has moved the competent institutions of the EU to intensify efforts in harmonising rules and finding new legal protection principles to ensure a more efficient maintenance obligation recovery which has proven to be decisive in many cases for securing personal livelihood, that of children in particular.

It was crucial to ensure mutual recognition of decisions, harmonise applicable law provisions and improve cross-border judicial cooperation, as well as to designate and legally regulate special administrative bodies with the task to aid parties in order to facilitate faster and more efficient conduct of proceedings.

We can conclude that the Regulation 4/2009 constitutes a good basis for international judicial cooperation since it prescribes streamlined actions, sets forth harmonised rules on applicable law, foresees legal aid and, most importantly, simplifies the procedure of the recognition, enforceability and enforcement of decisions (judgments) in such manner that a maintenance decision by a Member State,

which is a signatory of the Hague Protocol, is automatically enforceable in another Member State. At the same time, this is where we find the most striking deficiency. Namely, the Regulation foresees the possibility to refuse recognition for those States that are not signatories of the Hague Protocol and thereby the enforceability and enforcement of maintenance decisions.

The Regulation entered into force on 18 June 2011, i.e. it has been in use for less than a year. It is still too early to make any conclusions whether the Regulation will fail to achieve its goal due to the aforesaid deficiency and, instead of certainty and legal protection, bring a lack of trust in the work of courts and cross-border cooperation. However, since the Regulation contains a review clause which foresees its re-evaluation and the possibility for amendments in 5 years as of the date of its entry into force, one should hope that this deficiency will, unless it proves to be a too high an obstacle, be corrected and that until such time it will produce harmful effects against maintenance applicants, especially children.

In the end, we deem necessary to mention the situation in Croatia and its international private law. Considering that Croatia is a signatory of the UN Convention on the Rights of the Child (1989), it has undertaken the obligation to protect the rights of the child. Maintenance obligation is often decisive for the child's livelihood and is can be considered as one of the child's rights. By way of this Convention, Croatia has taken the obligation not only to provide all necessary measures so that the child in Croatia could exercise this right, but also enter into international agreements aimed to secure the recovery of maintenance from abroad. In addition, the Constitution and all current legislation reinforce these obligations.

However, in spite of the obligations undertaken and regulations adopted, the realization of this right is unsatisfactory. The lack of legal solutions, inert institutions, lengthy proceedings, inefficient enforcement creates major obstacles in the recovery of maintenance obligations under Croatian proceedings. In addition to all this, taking account of the international component and the related lack of legal solutions (in the Republic of Croatia, the area of international private law is regulated by the Act on resolving conflicts of laws with regulations of other countries in certain relations from 1991, which is actually a law adopted in 1982 for the territory of the former Yugoslavia!), non-harmonized criteria for international court jurisdiction, lack of adequate applicable law provisions, complicated procedures of recognition and enforcement of foreign court decisions and negligible international cooperation in this area, the child maintenance obligation with international component

seems unachievable, not to mention the maintenance obligation among other applicants (former spouses, relatives) addressed by the recent Regulation.

REFERENCES

Green Paper on maintenance obligations, available at:

http://eur-lex.europa.eu/LexUriServ/site/en/com/2004/com2004_0254en01.pdf

Comparative study on the recovery of maintenance claims is available at:

http://ec.europa.eu/justice_home/doc_centre/civil/studies/doc_civil_studies_en.htm

COUNCIL REGULATION (EC) No 4/2009 of 18 December 2008 on jurisdiction, applicable law, recognition and enforcement of decisions and cooperation in matters relating to maintenance obligations, available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJL2009:007:0001:0079:EN:PDF>

COUNCIL REGULATION (EC) No 2201/2003 of 27 November 2003 concerning jurisdiction and the recognition and enforcement of judgments in matrimonial matters and the matters of parental responsibility, available at:

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L2003:338:0001:0029:EN:PDF>

Convention of 2 October 1973 on the Recognition and Enforcement of Decisions Relating to Maintenance Obligations, available at:

http://www.hcch.net/index_en.php?act=conventions.text&cid=85

Convention of 15 April 1958 concerning the recognition and enforcement of decisions relating to maintenance obligations towards children, available at:

http://www.hcch.net/index_en.php?act=conventions.text&cid=38

The Hague Protocol of 23 November 2007 on the Law Applicable to Maintenance Obligations, available at:

http://www.hcch.net/index_en.php?act=conventions.text&cid=133

ECONOMIC SYSTEMS

PERFORMANCE ANALYSIS OF THE BANKING INDUSTRY IN THE REPUBLIC OF CROATIA FROM 2001 TO 2010

Ivan Kristek,
Faculty of Economics in Osijek, Croatia, ikristek@efos.hr

ABSTRACT

In ten years, from 2001 to 2010, the number of banks in Croatia decreased by ten, which affected the concentration of banks measured by the concentration index of the four largest banks, which increased from 60 to 65. According to the SCP paradigm (structure-conduct-performance paradigm) outlined by Mason (1949) and Bain (1951) the industry structure affects conduct of firms in the industry, which affects their performance. According to Mason the paradigm is consistent with the Neoclassical Theory of the Firm which assumes that there is a direct link between the industry structure, entrepreneurial conduct and performance. The basic principle of this paradigm might be the ability of entrepreneurs to exercise market power in a concentrated industry. High industry concentration is correlated with high profits, especially if the concentration level exceeds a certain critical level under the condition that there are some barriers to entry of new entrepreneurs in the industry. It is expected that there has been growth performance of banking industry, so we will work to analyze their changes. We will investigate whether the size of banks, measured by its assets, has an impact on their level of success. For research purposes the bank will be divided, with respect to the value of their assets into four categories.

JEL Classification: L25, P17

Keywords: banking industry, measures of performance, level of success, level of concentration

1 INTRODUCTION

Number of banks in the banking industry in study period decreased by ten, but despite of that interest rates and interest margins have shown a decreasing trend. Accordingly, the number of available products and services offered by banks in the market has increased. The growth of concentration, reduction of prices for products and services and expanded range of products and services had to affect the performance of bank industry in the Republic of Croatia. Therefore, in this paper we investigate the performance of bank industry, but the focus will be on the level of success with respect to the size of the bank. The aim is to determine whether bank size affects its performance, or whether the big banks effectively use economies of scale.

Analysis of bank branches in this ten year period is based largely on data from Bank Bulletin released by the Croatian National Bank, and on the aggregated statistical form based on RDG-1 (NN 57/99, 3/01 i 158/02) and BS-2 (NN 57/99, 3/01 i 158/02) available on the website of the Croatian National Bank.

For research purposes, we divide banks into four categories according to the size of their asset. In the first category are the largest banks in bank industry witch asset is over the five billion kuna. In the second category are banks whose asset is less than five billion, but bigger than one billion kuna. The third category refers to the banks whose asset is between one billion and 500 million kuna, while the fourth category includes banks with asset less than half a billion kuna. The purpose of the research is to establish a consistent difference between the performances of banks with regard to their size which is measured by their total assets. Therefore, it is necessary to determine whether there is a difference between the performances of banks with regard to their size.

For the analysis of performance indicators we use the four basic benchmarks: return of asset (ROA), return on equity (ROE), profitability of sale and net interest margin (NIM). Research results are presented on an annual basis, in the ten-year period for each year separately. Detailed analytical results that are structured by years for each category are not shown because of technical limitations that are placed before the authors. The author of this paper is willing to provide any detailed results on interested parties upon their request. In this paper results are presented using a graphical display, and then every graph in this paper is analyzed and explained.

2 GENERAL CHARACTERISTICS OF THE BANKING INDUSTRY

At the end of 2001, in the banking industry was 43 banks present. Throughout the ten-year period the number of banks fell by ten, and in the end of 2010 in the banking industry were 33 banks present. Number of banks with majority domestic ownership fell by one bank, although during the period the number varied and reached its peak in 2002 when a total of 23 banks were under majority domestic ownership. Significantly larger changes we have in banks with majority foreign ownership. Their number is rapidly decreasing until 2004 and then remains constant, and at the end of 2010 there were 15 banks with majority foreign ownership. The share of banks with majority foreign ownership in the total assets of the banking industry has not significantly changed. At the end of 2001 the share was 89.3 percent, while on the end of 2010 the share was 90.6 percent, although the nine banks with majority foreign ownership have left the banking industry. Reduction of the number of banks, which are operating in the banking industry, is the result of the following events: mergers of banks or exit from the industry of individual banks. These events have mostly impacted on the small banks, the number of banks in the first and second category has increased, while the number of banks in the third and fourth category decreased (see Table 1). Therefore, only the first category increased its share in total banking industry assets while shares of other categories decreased. Banks that belong to the first category have increased their share in total assets from 70.7 percent at the end of 2001, to 91.16 percent at the end of 2010, representing an increase of 20.46 percentage points.

Table 1: Number of banks by size and ownership structure from 2001 to 2010

	Number of banks by size of bank asset				Number of banks with majority domestic ownership	Number of banks with majority foreign ownership
	I category	II category	III category	IV category		
2001	6	14	7	16	19	24
2002	9	12	7	18	23	23
2003	8	11	8	14	22	19
2004	9	7	10	11	22	15
2005	9	9	7	9	20	14
2006	10	12	4	7	18	15
2007	10	15	3	5	17	16
2008	10	16	1	7	18	16
2009	9	16	2	7	19	15
2010	9	17	2	5	18	15

Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Author

Banks that belong to the second category reduced its share in total assets of banking industry from 23.1 percent at the end of 2001, to 8.22 percent at the end of 2010, representing a decrease of 14.88 percentage points. The third category has reduced its share in total banking assets for three percentage points, to 0.33 percent at the end of 2010, while the fourth category decreased its share in total banking industry assets by 2.6 percentage points to 0.3 percent at end of 2010.

3 PERFORMANCE INDICATORS OF BANKING BRANCHES

3.1. *General performance indicators*

According to Orsag (1997, p.211) „profitability ratios measure opportunity of profits in respect of assets engaged in enterprises. These are indicators that reflect the short term, peak financial goal of the company. The most commonly used indicator for profitability of the asset are:

- a) Return on asset – ROA
- b) Return on equity - ROE

Return on asset (ROA) is measured as the ratio of total profits after taxes to total assets, while the return on equity (ROE) is measured as the ratio of total profit after tax to total shareholders' equity. Both indicators are expressed in percentage.

Orsag (1997, p.211) believes that the profitability of sales “is calculated as a ratio between some measure of profit to total sales, respectively to total revenue size. These indicators show the participation of various measures of profits achieved in the sale, respectively to total enterprise revenues so that profits here appears as kind of margin that belongs to the enterprise... Therefore these indicators are often called profit margin”. So, the profitability of the sales is quotient of the total sum of interest income and noninterest income, expressed as a percentage.

Net interest margin is expressed in the form of rate as the difference between the average lending interest rates and the average deposit interest rates. The average lending interest rate is the ratio of interest income and assets of banks on which they generate interest income. The average deposit interest rate is the ratio of interest expenses and liabilities on which banks pay interest. As net interest margin decreased, the banking industry is less profitable.

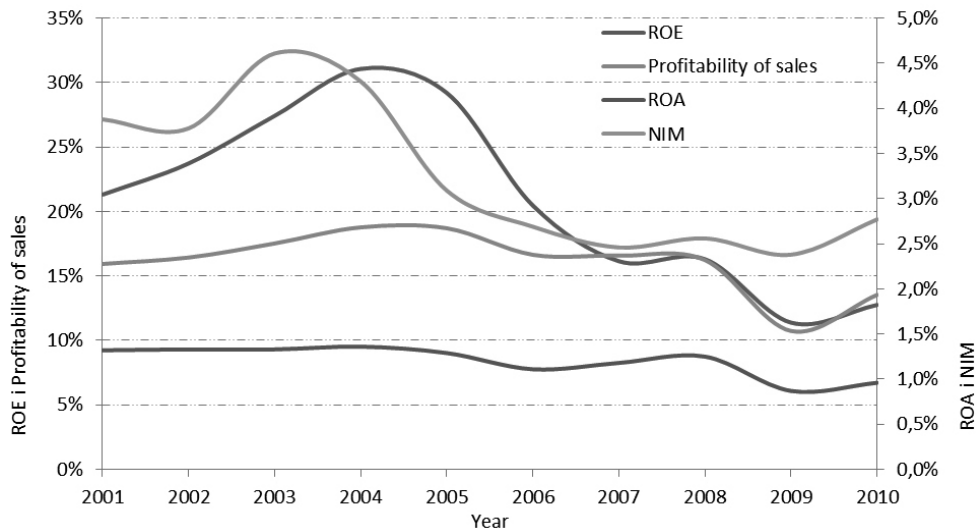
3.2. Measuring the success of the banking industry

Return on asset (ROA) in the ten-year period decreased by 0.36 percentage points, from 1.32 percent at the end of 2001, to 0.96 percent at end of 2010. In the case of indicators of profitability the largest decrease is recorded in return on equity (ROE), whose reduction is 8.56 percentage points, followed by profitability of sales with a reduction of 2.4 percentage points.

The average lending interest rate was reduced by 1.43 percentage points, while the average deposit interest rate was reduced by 0.32 percentage points, which affected the decrease in net interest margin from 3.88 percent in 2001 to 2.77 percent in 2010. Hence, the net price of products and services that the bank sold in the market in the ten-year period is reduced, and the cause for this could be the strengthening of the intensity of competition in the banking industry. Only from this indicator we cannot explicitly determine whether the previous statement is true, so we will investigate this claim in future works because in this study we are limited by the total number of pages.

Figure 1 shows the trends in performance indicators of banking industry in the past decade, since 2001 to 2010. Return on equity (ROE) and profitability of sales have a greater percentage of the value in compare of the return on asset (ROA) and net interest margin (NIM), therefore in Figure 1 we use two vertical axes. According to the indicators of success in the graph 1 the banking industry was the most successful since 2004 to 2006. The largest fluctuations are present in the return on equity (ROE), whose maximum value is 31 percent in 2004, and the lowest value was 11.36 percent in 2009. Minimum oscillations are present in the return of assets (ROA), which retains a value of about 1.3 percent. Analyzing a graph 1 leads to the conclusion that the performance of the banking industry in the ten-year period was reduced. All indicators of success show a decrease when compared with 2001.

Figure 1: Profitability indicators for banking industry from 2001 to 2010



Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Author

4. ANALYSIS OF BANK PERFORMANCE BY CATEGORY

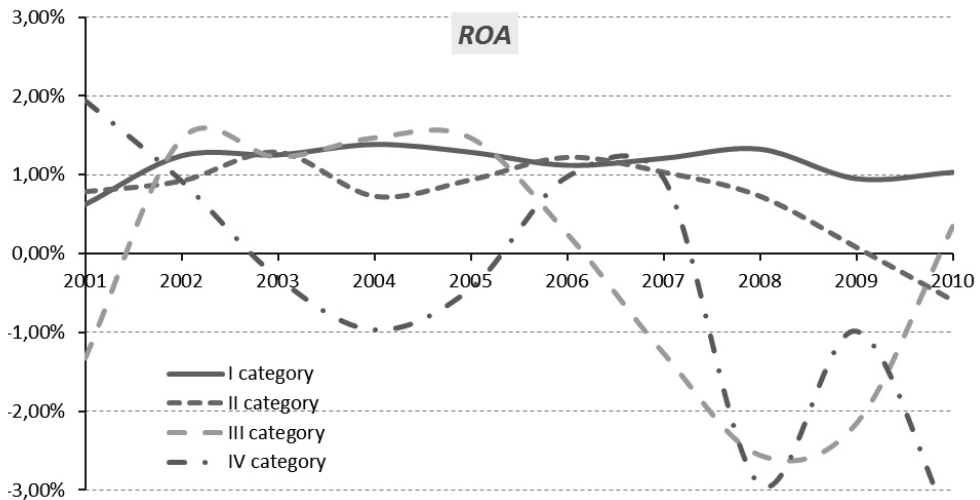
In this section we will show individual trends for each of the five benchmarks of success for each year of study, from 2001 to 2010. Summary results are presented in figures.

Figure 2 shows the movement of return on asset in the ten-year period for each year individually. The highest and the lowest level of return on asset, in the entire banking industry, are recorded by the banks that belong to the fourth category. The fourth category has the highest value in 2001 when the ratio stood at 1.94 percent and the lowest value in 2010 when the ratio stood at 3.51 percent. Then, the third category records the highest rate of return on asset until 2005 after which profitability declines significantly. The second category of banks records positive value on return on asset until 2009, and after that gets a negative sign. Return on asset in the first category has a very low volatility and the ratio is approximately 1.2 percent. This is the only category of banks which did not have a negative rate of return on asset.

Return on equity is shown in Figure 3, respectively for each bank category. Here is a slightly altered situation in relation to the return on asset (ROA), even though

we can distinguish certain similarities. The highest level of this ratio is realized by the first category, and its superiority is so convincing, that neither one category in any year has reached the value of return on equity of the first category. So, measured by return on equity banks of the first category are by far the most successful banks.

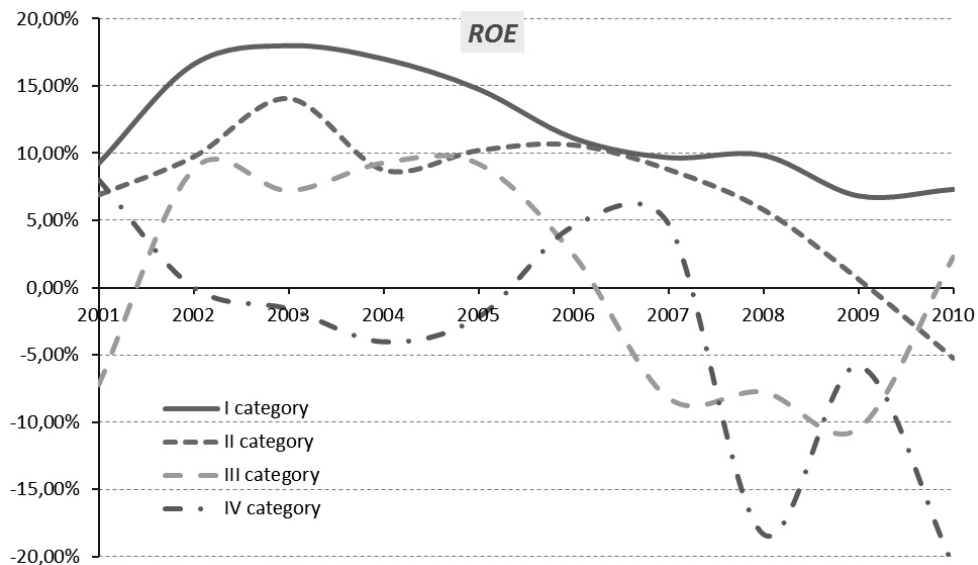
Figure 2: Analysis of the return on asset in the banking industry for the bank categories



Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Autor

They are followed by banks from second category whose ratio value in all years of study is above the value of the third and fourth category. The ratio of return on equity in the third category in 2001 is -7.24 percent, followed by an increase to 8.8 percent in 2002. Until 2006 the ratio is maintained at a high level. Since 2006, the coefficient becomes negative, and these values are retained until 2010. The fourth category in 2001 had the same value as the ratio of the first category, but after that the value of the ratio is negative in all years in which research is carried with the exception in 2006 and 2007.

Figure 3: Analysis of the return on equity in the banking industry for the bank categories



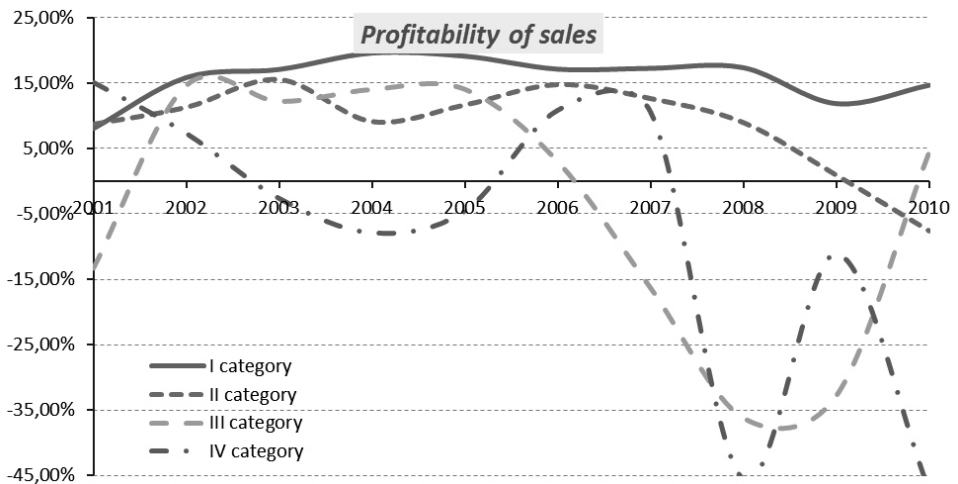
Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Autor

It should be noted that the Figure 2 and 3 are visually very similar, and the movement of the curves from Figure 2 follow the movement of the curves from Figure 3, the difference is that the ratio of return on asset has the much less oscillation than the ratio of return on equity.

Profitability of sales is shown in Figure 4. We can note that the most successful bank category is the first category. Its ratio in all years is at the highest levels with the exception of 2001 when the fourth category achieved a better result. In addition to the ratio which is maintained at a high level, the first category stands out for a low volatility, which affects the growth price of their shares on the secondary market. As with the previous two indicators, the second category follows the success of the first category. In the second category the value of the ratio is in all years of this study between 7.5 percent and 15 percent, except in 2009 and 2010 when this ratio takes a negative sign. Furthermore, the third and fourth category of banks is characterized by high volatility. The largest value of profitability of sales for third category is 14.62 percent and is recorded in 2002, while the largest value of profitability of sales for fourth category is 15.11 percent and is recorded in 2001. In

ten years period the profitability of sales of all categories records a negative values except in the case of the first category.

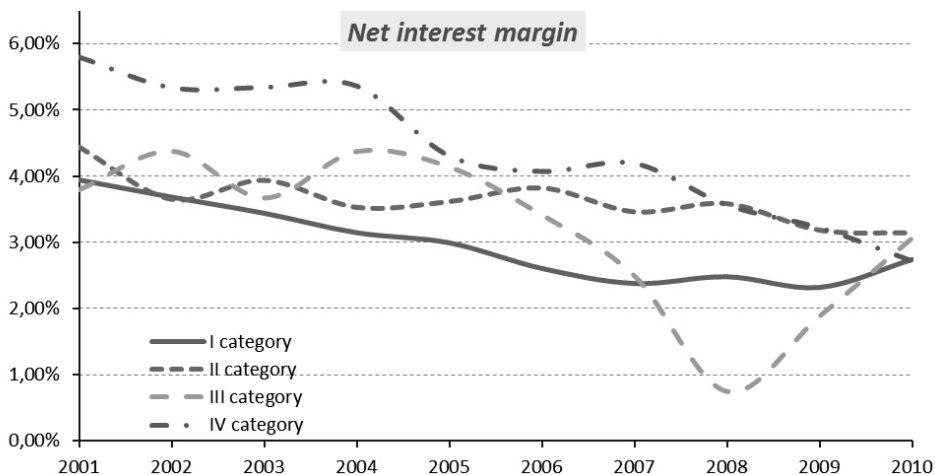
Figure 4: Analysis of the profitability of sales in the banking industry for the bank categories



Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Autor

Figure 5 shows the value of the net interest margin by year for each category. Smaller values of this indicator are implying that the banking industry is more successful, because this indicator is a result of differences between active and passive interest rates.

Figure 5: Analysis of the net interest margin in the banking industry for the bank categories



Source: Bilteni o bankama (2002), (2003), (2004), (2005), (2006), (2007), (2008), (2009), (2010), (2011); Calculation: Autor

The analysis of Figure 5 imposes a slightly different conclusion, unlike the previous three graphs that analyze the performance of banks by category. According to this indicator the fourth category is most successful whose net interest margin is in each year over the value of other categories. The fourth category is followed by a second category whose net interest margin retains between three and four percent. The next category by level of success is the third category, which is characterized by extremely high volatility, according to these criteria the lowest success was achieved between 2007 and 2009. The first category, which under previous indicators was the most successful, according to the net interest margin was classified at the back of this order. Its volatility is still maintained at low levels, because the value of the net interest margin in each year retains about three percent.

5 CONCLUSION

In the past ten years the development of the banking industry contributed to the reduction of the number of the banks, and an increase in concentration level. Banks have begun to offer an increasing range of products and services to attract new customers, and their interest rates began to decline. Lending rates have declined more slowly than deposit rates, which resulted in a slight decline in net interest margin. Higher levels of concentration with greater range of products and

services and the correction in interest rates affected the growth of competition in the banking industry which undoubtedly reflected on the overall results of the banks. By analyzing a graph 1, we can conclude that the banks increased their efficiency, with the exception of 2008 to 2010 in which the global banking crisis has affected on their activities. The increase of efficiency level in banking industry is primarily related to the banks of the first and the second category, which are succeeded, because of its size, to annul the effect which is caused by the reduction in performance of the banks in the third and the fourth category.

According to all indicators, the first category has very low volatility. This category is the most successful by all standards that we apply in this paper, except by net interest margin. According to the success the first category is followed by the second category whose volatility is also in low yield. The success of the third and the fourth category is similar. The biggest difference between the two is noticeable in the net interest margin by which a fourth category is far more successful, but with a slightly higher level of volatility. Accordingly, the third and the fourth category is characterized by low efficiency and high levels of volatility.

REFERENCES

Bilten o bankama, (2002), Maletić, Č. (ur), Broj: 4, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2003), Maletić, Č. (ur), Broj: 6, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2004), Maletić, Č. (ur), Broj: 8, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2005), Maletić, Č. (ur), Broj: 10, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2006), Maletić, Č. (ur), Broj: 12, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2007), Holjevac, D. (ur), Broj: 14, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2008), Broj: 16, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2009), Broj: 18, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2010), Broj: 20, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bilten o bankama, (2011), Broj: 22, Hrvatska narodna banka, ISSN: 1333-1035, Zagreb.

Bain, J. S., (1951), Relation of Profit Rate to Industry Concentration: American Manufacturing, 1936-1940, *The Quarterly Journal of Economics*, 65 (3), 293-324, ISSN: 00335533

Casu, B. & Girardone, C., (2006), Bank competition, concentration and efficiency in the single European market, *Manchester School* (14636786), 74 (4), 441-468, ISSN: 14636786

Mason, E. S., (1949), The current status of the monopoly problem in the United States, *Harvard Law Review*, 62 (8), 1265-1285, ISSN: 0017811X

Orsag, S., (1997), Vrednovanje poduzeća, *Infoinvest*, ISBN: 953-96747-2-7, Zagreb

Podpiera, A., (2008), Competition and Efficiency in the Czech Banking Sector, *Czech National Bank, Research Department*, 86-93, ISBN: 978-80-87225-03-5

Schaeck, K., Cihak, M. & Wolfe, S., (2009), Are Competitive Banking Systems More Stable?, *Journal of Money, Credit & Banking* (Blackwell), 41 (4), 711-734, ISSN: 00222879

Stigler, G. J., (1968), *The Organisation of Industry*, Irwin, ISBN: 978-0226774329, Homewood

DETERMINANTS OF PROFITABILITY OF FIRMS IN THE RETAIL SECTOR: THE CASE OF CROATIA

Nebojša Stojčić, Ph.D.¹, Katija Vojvodić, Ph.D.²

¹University of Dubrovnik, Croatia, nstojcic@unidu.hr

²University of Dubrovnik, Croatia, katija.vojvodic@unidu.hr

ABSTRACT

Profitability is often defined as an ultimate criterion of a firm's competitiveness. A firm is considered competitive if it can outperform its rivals and make profits in the long run. The ability of firms to make profits is commonly associated with a number of firm-specific, industrial and location-specific characteristics. The need to understand these factors and forces is particularly pronounced in the context of the current economic downturn. To explore the impact of firm size, market share, market orientation, agglomeration externalities, industrial concentration and foreign direct investment (FDI) on the profitability of firms, a GMM dynamic panel methodology is applied to the large sample of firms from the Croatian retail sector in the period between 2003 and 2010, taken from Amadeus database. The choice of dynamic panel methodology enables us to distinguish between the short and the long run effects of these factors and forces on profitability, as well as to take into account the potential sources of unobserved heterogeneity and endogeneity.

JEL Classification: D22, L81

Keywords: profitability, competitiveness, retail sector, dynamic panel analysis

1. INTRODUCTION

Economists often state that the principal objective of firm behaviour is to outperform their rivals in competitive battle. This ability to compete is being measured by indicators reflecting the competitive performance of firms, and those related to their competitive potential. The former group encompasses the results of firms in interaction with their rivals, while the latter includes the activities of firms, their

characteristics and features of their environment. However, it is taken as stylised fact that the ultimate criterion of a firm's competitiveness is its profitability (Buckley et al., 1988). This is particularly true for the long run prospects of firms, as in the long run firms can survive only if they remain profitable.

Traditional economic theory considered the existence of above-average profits only as a short run phenomenon which diminishes under pressure of competitive forces. However, a sizeable body of knowledge points to the persistence of profits over time. For example, industrial organisation literature explains the relative ranking of firms within their industries in terms of their profitability with industrial characteristics such as concentration, economies of scale and entry and exit barriers (Goddard et al., 2005).¹ In endogenous growth models, knowledge and technology enable firms to differentiate themselves from their rivals either by offering products at lower costs or better quality and thus achieve above-average returns (Aghion and Howitt, 1992; Grossman and Helpman, 1994). Similarly, resource-based view associates the competitive advantage of firms with distinctiveness of their human, physical and organisational capital resources (Barney, 1991). Finally, agglomeration literature attaches great importance to the location-specific determinants of profitability such as inter-firm knowledge and technology spillovers, cooperation with professional and scientific institutions as well as access to greater demand in large urban areas (Krugman, 1993).

Empirical research on the determinants of profitability has reported that efficiency, the ability to exploit economies of scale or to exercise market power all lead to high rates of profit (Benacek et al., 1997; Slade, 2004). In addition, measures of financial performance such as gearing or liquidity have been identified as important drivers of profitability (Goddard et al., 2005). Selling and Stickney (1989) report that profitability increases with the technological intensity of industry, entry barriers or the ability to pursue product differentiation strategy. Finally, much of the existing literature suggests that profitability tends to be persistent over time (Cubbin and Geroski, 1990).

Over recent decades the retail sector in Croatia has gone through significant changes. The expansion of small shops in the first half of 1990s was followed by the inflow of foreign direct investment in the 2000s. The penetration of large foreign retailers has increased competitive pressure, brought new managerial practices and provided the impulse for the restructuring of domestic enterprises (Anic and

¹ This approach is also known as Structure-Conduct-Performance (SCP) paradigm.

Nusinovic, 2003). These changes have resulted in the concentration of retail sector in Croatia (Segetlija, 2005; Karic and Kristek, 2009). In addition, the inflow of foreign rivals as well as small size of domestic market has motivated numerous firms to search for their business opportunities outside domestic borders. According to Anic and Nusinovic (2003), stronger intensity of competition exerted a downward pressure on the profitability of firms in this sector. However, most of existing studies are descriptive in nature and, to the best of our knowledge, there has been no attempt to quantify the impact of individual factors and forces on the profitability of firms in the Croatian retail sector.

This paper intends to fill the above mentioned gap in the literature. In order to explore the determinants of profitability of firms in the Croatian retail sector, a dynamic panel system GMM estimation technique is applied to Amadeus database of firms between 2003 and 2010. The selected methodology enables us to take into account the persistence of profitability, potential endogeneity of individual covariates, as well as the distinction between short and long run impact of individual variables on the ability of firms to make profits. Next section of the paper brings stylised facts about the Croatian retail sector, while model and methodology are discussed in Section 3. This is followed by the discussion of findings in Section 4. Finally, Section 5 concludes.

2. STYLISED FACTS ABOUT THE RETAIL SECTOR IN CROATIA

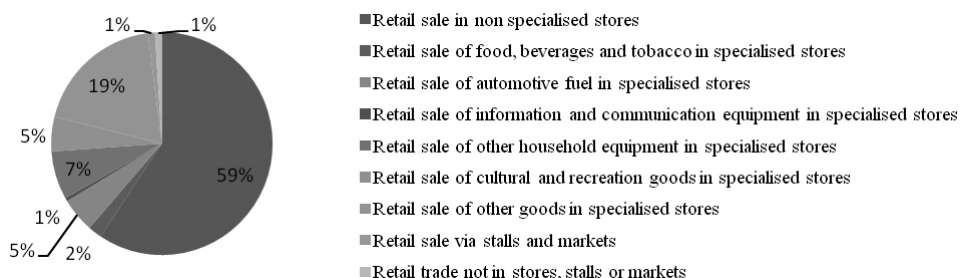
The analysis in this paper is based on the data coming from *Amadeus* database provided by Bureau van Dyke. This database contains annual information from financial reports such as balance sheet and profit loss accounts, financial ratios, as well as some general information about enterprises such as location or type of industry. For the purpose of the paper, the data for about 3700 firms collected over the period 2003-2010 have been accessed. The number of firms varies between 2922 in 2003 and 4754 in 2010 which means that panel is unbalanced.

Findings from the previous literature suggest that over the past decades the Croatian retail sector underwent major structural change which manifested itself in stronger development of non-food retailers at the expense of food retail stores (Anic and Nusinovic, 2003). Figure 1 presents the distribution of sales revenues across NACE 3 digit industries within the retail sector.² From there it is evident

² Sales revenues are expressed as the share of total sales in the retail sector.

that the greatest share of sales is being generated in retail sale in non specialised stores. This sector is being followed by retail sale of other goods in specialised store and household equipment. The sales generated in other industries had negligible share in total retail sector sales.

Figure 1: Distribution of sales in Croatian retail sector 2003-2010



Source: Authors' calculations

Table 1 brings stylised facts about the structure of sample and the performance of analysed companies. As it can be seen from there, the sample includes mostly small and medium sized firms with average firm size, measured by the number of employees ranging between 17 and 22. Furthermore, the market share of the analysed firms expressed as the ratio between their own sales revenues and sales revenues of the entire retail sector is relatively low, below 1%, and does not exhibit variations across time. Turning to the most important issue, the profitability of firms, a downward trend can be observed. More importantly, in the last two analysed years the average profitability takes negative values. Such finding may be associated with the recent economic downturn. However, it is also consistent with the findings from earlier literature. To this end, it has been suggested that the intensity of competition in combination with stagnating or increasing costs exerted pressure on the prices and profits of firms in Croatian retailing (Anic and Nusinovic, 2003).

Table 1: Changes in Croatian retail sector 2003-2010

	Number of firms	Firm size (employees)	Profitability (ROA)	Market share (%)	FDI (mil EUR)	Concentration (HHI)
2003	2922	17	0.48	0.02	70	0.15
2004	3339	18	0.26	0.02	122	0.16
2005	3547	22	0.16	0.02	119	0.16
2006	3677	19	0.13	0.02	86	0.15
2007	3935	22	0.12	0.02	108	0.13
2008	3756	22	0.15	0.02	151	0.13
2009	4266	19	-0.32	0.02	155	0.15
2010	4754	18	-0.47	0.02	69	0.15

Source: Authors' calculations and Croatian National Bank

The existing studies identify the inflow of foreign direct investment (FDI) as the factor that brought new technology, knowledge and managerial practices which enhanced the restructuring of enterprises in Croatian retailing (Anic and Nusinovic, 2003; Dunkovic, 2004). The information on foreign direct investment in the Croatian retail sector expressed in millions of EUR demonstrates that FDI in retailing was positive in all analysed years.³ Finally, the concentration of industry, measured by Herfindahl-Hirschmann (HHI) index, was growing until 2005 and has been stable since. The magnitude of coefficient is characteristic for moderately concentrated industry.

4. MODEL SPECIFICATION AND METHODOLOGY

The empirical analysis of determinants of profitability in Croatian retail sector is based on the model which relates the ability of firms to make profits with the number of firm and industry specific characteristics, as well as with its past realisations. This model takes the following form:

$$Prof_{it} = \alpha_0 + \alpha_1 Prof_{it-1} + \alpha_2 size_{it} + \alpha_3 share_{it} + \alpha_4 exp_{it} + fdi_{it} + hhi_{it} + \alpha_5 locef_{it} + \alpha_6 loc_{it} + u_i + v_{it}$$

where u_i stands for time-invariant elements of error term and v_{it} for usual idiosyncratic errors. In the above equation the dependent variable, the profitability of firm i in year t , is measured by the return on assets (ROA) defined as earnings before interest and taxes (EBIT) divided by total assets. The inclusion of lagged dependent variable on the right hand side of equation is intended to control for the persistence

³ The information on FDI was taken from Croatian National Bank (HNB).

of profits. On the one hand, competitive forces or quiet life behaviour may exert a downward pressure on profit performance of firms over time. However, on the other hand, by pursuing the strategy of differentiation in the presence of market imperfections, firms can enjoy long periods of the above average profitability.

The inclusion of *size*, the natural logarithm of the number of employees, allows for the relationship between economies of scale and scope and profitability. The presence of these economies can enable firms to achieve higher profits. However, larger size can be associated with stronger diversification, which would lead to diseconomies of scale and scope and negatively impact profitability. The model also includes the natural logarithm of the market *share* of a firm, defined as its sales as proportion of the total industry sales whereby industry is defined at NACE rev.2 4-digit level. On the one hand, higher market share should enable firms to achieve higher profits. On the other hand, the ability of firms to seize the market of their rivals will depend on their restructuring efforts in terms of both product innovations and improvements in efficiency (Goddard et al., 2005). These improvements have to be financed, particularly in the case of small firms, with own profits, which means that the two are in mutually reinforcing relationship, an issue to which we shall return later. Market orientation of firms can affect their profitability in two ways. First, by expanding beyond borders of domestic market, firms get in touch with knowledge and technology that can be used to improve their relative performance. Second, the participation on larger market means larger demand which may have a positive impact on profitability. To control for market orientation, the model includes categorical variable *exp* which takes the value of one if firm is an exporter.

In addition to these firm-specific characteristics, the model also includes two industry level variables. The concentration of industry, measured by the natural logarithm of Herfindahl-Hirschmann index (*hhi*), is intended to control for the relationship between anti-competitive strategies such as barriers to entry, as suggested in SCP approach. Hence, a positive coefficient can be expected for this variable. The model also includes the natural logarithm of FDI intensity (*fdi*) defined as foreign direct investment in retailing industry divided by the total foreign direct investment in Croatia in each year. As asserted earlier, while FDI acted as an impulse for restructuring of domestic retailers, foreign competition also exerted a negative pressure on the profitability of the entire sector, for which reason a negative sign can be expected on this variable.

Final two variables entering the model control for the relationship between agglomeration externalities and profitability. The location of firms in large urban areas can be associated with the access to higher demand and the ability to achieve internal economies of scale more easily, which should have a positive impact on profitability. For this reason, the model includes categorical variable *loc* taking the value of one if a firm is located in one of the five largest urban areas in Croatia.⁴ It is also recognised in the literature that stronger concentration of firms within the same industry on one location leads to within-industry economies, such as knowledge and R&D spillovers from other firms, professional and scientific institutions, as well as ease of access to specialised inputs and skilled labour (Krugman, 1993). The variable *locef* defined as the natural logarithm of a number of firms in a given region coming from the same NACE 4-digit industry divided by the total number of retailers in that region in one year, controls for these localisation economies. Table 2 brings the description of variables.

Table 2: Description of variables

Dependent variable	
Prof	Profitability of firm <i>i</i> – return on assets (EBIT/Total assets)
Independent variables	
size	Size of firm <i>i</i> – Number of employees
share	Market share – Sales of firm <i>i</i> divided by total sales of its 4-digit industry
exp	Dummy for market orientation - 1 if firm <i>i</i> is an exporter
<i>hhi</i>	Market concentration – Herfindahl-Hirschmann index at 4-digit industry level
fdi	FDI intensity – Amount of FDI in retail sector divided by total FDI in economy
loc	Dummy for location – 1 if firm <i>i</i> is located in a large urban area
locef	Localisation economies – Number of firms from the firm's 4-digit industry in an administrative region to the total number of firms in the region

The above discussion reveals several stylised facts about the model which need to be taken into account when choosing appropriate methodology. The longitudinal nature of dataset suggests that a suitable estimator should be looked for in the family of panel estimators. Furthermore, the persistence of profitability suggests that required estimator should be capable of handling the relationship between the current level of dependent variable and its past realisations, i.e. for the fact that any time-invariant source of cross-sectional variation will be correlated with profitabil-

⁴ These include Zagreb, Split, Rijeka, Osijek and Zadar.

ity in all periods. It has also been mentioned that profitability and market share are in mutually reinforcing relationship suggesting that the common set of unobserved factors could be correlated with both of them giving rise to potential endogeneity. Finally, the full impact of individual factors and forces on the profitability of firms is likely to be realised in the long run, which suggests that the estimation technique should make distinction between short and long run.

The methodology capable of handling all of the above mentioned issues is dynamic panel system GMM estimator (Arellano and Bover, 1995; Blundell and Bond, 1998). This method overcomes the problem of correlation between explanatory variables and time-invariant elements of error term by using lagged levels and lagged differences of potentially endogenous variables as instruments. Another advantage of dynamic panel technique is its ability to distinguish between the short and the long run impact of right-hand side variables on dependent variable. However, this estimator is found to be sensitive to the number of instruments used in the analysis and to the sources of cross-sectional dependence such as universal time shocks. With respect to the former problem, it is taken as a rule-of-thumb that the optimal number of instruments should not exceed the number of cross-sectional groups, while the latter problem is commonly controlled with inclusion of annual time dummies (Roodman, 2009). Dynamic estimators can be estimated with one-step and two-step procedures of which the latter is found to be robust to patterns of heteroscedasticity and cross-sectional correlation. However, standard errors obtained this way are found to be downward biased for which reason the estimation applies Windmeijer's (2005) corrections for robust standard errors.

5. DISCUSSION OF FINDINGS

The results of estimation for variables of interest are presented below in Table 3. For expositional convenience, this table does not refer to annual time dummies which are included in the estimation.⁵

⁵ n The model was estimated using statistical software Stata 11 with lagged dependent variable treated as predetermined and market share as potentially endogenous. These variables are instrumented by their own lags and differences, while other variables enter instrumentation matrix on their own. Detailed printout of estimation can be provided upon request.

Table 3: Results of estimation

	Short run	Long run
Lagged dependent variable	0.17(0.030)**	-
<i>size</i>	-0.10(0.02)**	-0.13(0.02)**
<i>share</i>	0.16(0.00)***	0.19(0.00)***
<i>exp</i>	0.01(0.70)	0.01(0.70)
<i>hhi</i>	0.08(0.00)***	0.10(0.00)***
<i>fdi</i>	-0.30(0.00)***	-0.36(0.00)***
<i>loc</i>	-0.02(0.22)	-0.03(0.24)
<i>locef</i>	0.23(0.00)***	0.29(0.00)***
<i>constant term</i>	1.29(0.16)	-
MODEL DIAGNOSTICS		
Number of observations	30196	
Number of groups	6845	
Wald test	174.10	
Prob>chi2	0.000	
Hansen J Statistic	10.70	
Prob> chi2	0.297	
Arellano-Bond m1 test for AR(1)	-3.83	
Prob>chi2	0.000	
Arellano-Bond m2 test for AR(2)	-0.05	
Prob>chi2	0.962	
Instrument count	24	

Source: Authors' calculations

Note: *, ** and *** denote statistical significance at 1%, 5% and 10% level respectively

The examination of relevant model diagnostics provides support to the model. Accordingly, Hansen test for validity of overidentifying restrictions cannot be rejected suggesting that these restrictions are valid. Furthermore, m1/m2 test suggests that there is autocorrelation of the first but no autocorrelation of the second order providing further support to the choice of instruments. Finally, the number of instruments used is relatively low compared to the number of cross-sectional groups.⁶

⁶ For expositional convenience Table 3 presents only the most important diagnostics. However, additional tests have been also imposed on the model, including difference-in-Sargan test for levels equation and for lagged dependent variable in order to check whether steady-state assumption is satisfied and whether the model suffers from cross-sectional dependence after inclusion of time dummies. Finally, the magnitude of coefficient on lagged dependent variable has been compared with those obtained using fixed effects panel estimator and OLS techniques as it has been suggested that true dynamic estimator should lie within the range of coefficients obtained with latter two techniques (Roodman, 2009). All tests provide support to our model. Detailed printouts of these diagnostics are available upon request.

The coefficient on lagged dependent variable is statistically significant and positive. This means that the profitability of firms in the Croatian retail sector has been developing over time. The coefficient on firm size is negative and statistically significant. In the context of earlier discussion in Section 4, this finding can be interpreted as evidence of diseconomies of scale and orientation of Croatian retailers on differentiation strategy. The estimated parameter on market share is statistically significant and positive, suggesting that the ability of firms to seize the market of their rivals leads to higher profits. However, the variable measuring the impact of exporting on profitability is not statistically significant.

Both industrial variables are highly statistically significant. The estimated parameter for concentration has a positive sign. Such finding can be understood in the context of propositions from SCP literature that stronger concentration provides opportunity to exercise anti-competitive strategies, which in turn leads to higher profits. The coefficient on foreign direct investment is also highly significant, but with a negative sign. Several studies mentioned earlier in this paper have found that the inflow of foreign competition exercised a downward pressure on the profits of firms in Croatian retailing, as domestic producers responded with the adjustment of prices. Findings of this paper should be understood in the same context.

The variable controlling for location in large urban areas has no statistical significance. This implies that agglomeration externalities, such as access to larger demand or better infrastructure, do not have impact on the profitability of analysed firms. However, the coefficient on localisation economies is highly significant and positive. As mentioned in the previous section, these economies refer to knowledge and technology spillovers, as well as the transfer of skills within industries which are otherwise costly and difficult to obtain. Bearing in mind findings from Table 1 about low average size of firms in the sample, as well as those from earlier literature suggesting that Croatian retailers mainly compete in terms of prices, it is likely that localisation economies enable firms to reduce their costs and thus achieve higher profits. Finally, all explanatory variables retain their significance in the long run. As it can be seen from Table 3 the magnitude of coefficients is about 1.2 times higher than in the short run. This suggests that the full impact of right-hand side variables manifests itself through increases in long run profitability which is often defined as an ultimate criterion of a firm's competitiveness.

6. CONCLUSION

There is a widespread consensus among economists that profitability presents one of the most important firm objectives. For many firms, particularly small and me-

dium sized ones, profits are the principal source of finance which can be invested in restructuring and improvements of competitiveness. While traditional economic theory explained the existence of above-average profits only as a short-run phenomenon, recent research in this field points to the persistence of profitability which can be attributed to a number of firm and industry-specific characteristics. Building on these foundations, this paper examined the determinants of profitability among firms in Croatian retailing sector. The existing body of knowledge has pointed to sizeable structural changes that took place in this sector during two decades of transition but there has been no attempt to quantify the impact of these changes on profitability of firms. To this end, dynamic panel system technique has been applied to a large database covering behaviour of Croatian retailers over much of the recent decade.

The results of investigation, in general, confirm the theses presented in earlier literature. In this context, the persistence of profitability over time is confirmed, while rising industrial concentration and the ability of firms to seize the market share of their rivals have a positive impact on profitability. Furthermore, the inflow of FDI and the increase in the size of firms negatively influence their ability to make profits. The latter two findings are particularly important as they can be associated with intensifying price competition, identified as a feature of this sector in the previous literature, as well as with the diversification strategy of Croatian retailers, which generally leads to diseconomies of scale and scope. Finally, the results of the investigation point to the importance of agglomeration externalities, such as within-industry economies. This finding suggests that firms in this sector rely on the transfer of knowledge, skill and technology as cost-sharing strategies in their attempts to survive the pressure of price competition.

REFERENCES

- Aghion, P. & Howitt, P. (1992). A Model of Growth Through Creative Destruction, *Econometrica* 60, 323-351.
- Anic, I. D. & Nusinovic, M. (2003). Croatian retailing in transition towards European retailing - Differences, convergence and perspectives. *Privredna kretanja i ekonomska politika* 96,71-92.
- Arellano, M. & Bover, O. (1995). Another Look at the Instrumental Variable Estimation of Error-Components Models, *Journal of Econometrics* 68, 29-51.
- Barney, J.(1991). Firm Resources and Sustained Competitive Advantage, *Journal of Management* 17.

- Benacek, V., Shemetilo, D. & Petrov, A. (1997). Restructuring and Measurement of Efficiency in Firms in Transition, Sharma, S. (ed.), *Restructuring Eastern Europe*, Cheltenham: Edward Elgar, 58-72.
- Blundell, R., & Bond, S. (1998). Initial Conditions and Moment Restrictions in Dynamic Panel Data Models, *Journal of Econometrics* 87, 115-143.
- Buckley, P.J., Pass, C.L. & Prescott, K. (1988). Measures of International Competitiveness: A Critical Survey, *Journal of Marketing Management* 4, 175-200.
- Cubbin, J & Geroski, P. (1990). The persistence of profits in the United Kingdom, Mueller, D.C. (ed.), *The Dynamics of Company Profits: An International Comparison*. Cambridge: Cambridge University Press.
- Dunkovic, D. (2004). Rivalry of domestic and foreign retailers in Croatia, *Management* 9, 76-96.
- Goddard, J., Tavakoli, M. & Wilson, J. (2005). Determinants of profitability in European manufacturing and services: Evidence from a dynamic panel model, *Applied Financial Economics* 15, 1269-1282.
- Grossman, G.M. & Helpman, E. (1994). Endogenous Innovation in the Theory of Growth, *The Journal of Economic Perspectives* 8, 23-44.
- Karic, M. & Kristek, I. (2009). Koncentracija maloprodajnog trzista u Republici Hrvatskoj, Segetlija, Z. & Karic, M. (ur.), *Poslovna logistika u suvremenom menadžmentu*, Osijek: Ekonomski fakultet.
- Krugman, P. (1993). First Nature, Second Nature and Metropolitan Location, *Journal of Regional Science* 33.
- Roodman, D. (2009). How to Do xtabond2: An Introduction to Difference and System GMM in Stata, *The Stata Journal* 9, 86-136.
- Segetlija, Z. (2005). Razvojne tendencije i strukturne promjene u hrvatskoj trgovini na malo, *Ekonomski pregled* 56, 39-59.
- Selling, T & Stickney, C. (1989). The effects of business environment and strategy on a firm's rate of return on assets, *Financial Analysts Journal* 45, 43-52.
- Slade, M. (2004). Competing models of firm profitability, *International Journal of Industrial Organization* 22, 289-308.
- Windmeijer, F. (2005). A Finite Sample Correction for the Variance of Linear Efficient Two-Step GMM Estimators, *Journal of Econometrics* 126, 25-51.

INDUSTRIAL ORGANIZATION

AUDIT FEES DETERMINANTS IN THE CROATIAN AUDITING SERVICES MARKET

Dr.sc. Ksenija Černe, Ph.D.¹, Robert Zenzerović, Ph.D.²

¹Juraj Dobrila University of Pula, Department of Economics and Tourism «Dr. Mijo Mirković», Croatia,
E-mail: ksecerne@efpu.hr

²Juraj Dobrila University of Pula, Department of Economics and Tourism «Dr. Mijo Mirković», Croatia,
E-mail: robert.zenzerovic@unipu.hr

ABSTRACT

Upgrading the legislation in the area of financial reporting requires from businesses, whose financial statements are object of the audit, disclosure of all fees paid to auditors as well as the basis on which fees are paid. Such emphasis on transparency provides the starting point for analysis of the audit fees determinants which takes the central place in this article whereby the audit fees include fees for the performed audit of financial statements.

The purpose of this paper is to point out the need for the establishment of appropriate mechanisms for regulating the amount of audit fees charged, since research findings indicate the presence of audit fees which amounts does not provide the covering of the costs that would assure gratification of minimum requirements that ensure the audit process is performed according to guidelines in the International Auditing Standards. The aim of this paper is in the function of achieving its purpose, and consists in identifying the most important audit fees determinants in the Croatian audit services market as well as the direction and intensity of their influence. The starting point of this research are the audit fee determinants emphasized in the previous researches conducted in economies with long tradition in performing the financial statement audit. The analysis of data from financial reports of 194 business entities whose securities are listed on the Zagreb Stock Exchange in 2009 showed that 50 business entities publicly disclosed the amount of audit fees so they represent the sample in this research.

Various research methods were used in drawing the conclusion among which the quantitative ones are emphasized. Partial Least Square regression is used for identifying the determinants of audit fees. As it combines features from principal component analysis and multiple regression, it was useful when determining the contribution of each assumed determinant of audit fee. Considering that, two models which capture most of information on mentioned determinants, at the same time also useful for predicting audit fees, are established. The contribution of each observed audit fees determinant is identified in an individual model. According to that, the most important contributors to specific model, as well as most influential determinants that define such audit fees model have been identified. Finally, obtained regression coefficients can be used to compute predicted audit fees.

JEL Classification: M42

Keywords: Financial statement audit fees, Audit fees determinants, Partial Least Square regression.

1. INTRODUCTION

Disclosure of audit fees is an important element of transparency of auditing firms whose dignity was seriously disrupted at the beginning of century with Enron, Worldcom and Parmalat cases. This disclosure is in function of determining the independence of audit firms as well as an instrument that can be used in evaluating the quality of audit process performed. Namely, unreasonably low fees charged for performing financial statement audit often indicate that the minimum activities prescribed in International auditing standards are not performed and the auditor's opinion expressed could be questionable. This gave a stimulus to authors to perform the research on audit fees that have to be publicly disclosed by companies operating in the Republic of Croatia starting from the fiscal year 2009.

In this article the authors are examining the determinants of audit fees charged to companies whose securities are listed in Croatian capital market – Zagreb stock exchange in order to identify the most important determinants and to estimate the direction and intensity of their influence what is the objective of the paper. The purpose of the paper is to point out the need for establishment of appropriate mechanisms for regulating the amount of audit fees charged what will, along with strengthening the role of auditors professional association, result in rising quality of auditing.

At the beginning the audit fees determinants are presented as well as research methodology used. The central parts of the paper are findings of the research which are the basis of conclusions drawn at the end.

2. AUDIT FEES DETERMINANTS

One of the first researches on audit fees determinants was performed by Simunic (1980) who gave the impulse for the research in this area. Further research was performed as well in highly developed countries with long tradition in auditing like United States (e.g. Palmrose, 1986; Francis and Simon, 1987.), United Kingdom (e.g. Chen et al., 1993.) and Australia (e.g. Francis, 1984; Francis and Stokes, 1986.) while in recent years researchers analyzed audit fees determinants in other less developed countries.

Researches which objectives were to identify the most important determinants of audit fees indicate that there are quite a lot of factors that have different impact depending on the size of audit service market and the impact of some of them is not precisely known (Zenzerovic, 2006). Most of authors (e.g. Simunic, 1980; Chen et al., 1993) concentrate their efforts on researching the impact of further seven audit fee determinants: auditee size, auditee complexity, auditee profitability, ownership control, timing variables, auditor location and auditor size.

The size of client or auditee was found to be the most significant determinant of audit fee. Auditee size is usually measured by total assets or total revenues where total assets is more frequently used and is suitable for balance sheet based audit approach. When auditors decide to use transaction based audit approach it is more suitable to measure auditee size by total revenues.

Auditee complexity is second determinant. Namely, more complex client requests more auditors' tasks to be done and consequently higher audit fee that has to be charged. Complex companies are the ones that have particular balance sheet composition (significant proportion of inventories, receivables and debtors in total assets), companies with many subsidiaries, subsidiaries that operate in different branches, companies with dislocated business units, companies operating in specific industries (banking, insurance and some other industries request specific knowledge from auditors), companies with big number of unusual transactions as well as those with complex systems of internal control.

Auditee profitability influence the audit fee in two directions and its role is more emphasized when auditee is facing financial problems. Non profitable auditee could put the pressure on overhead costs what might result in lower audit fee, while on the other hand, auditee's financial problems request from auditor to perform auditing in more details (focus more directly on valuation of assets, estimate the status of a auditee as a going concern, examine possible breaches of loan covenants etc.) and consequently charge higher audit fee. Auditee profitability is usually measured by profitability ratios like return on assets, return on equity and similar.

Ownership control is fourth audit fee determinant. Audit fee charged is usually higher for companies with diversified ownership structure because they require more extensive and higher quality audit than companies owned by only couple of shareholders with relatively high shareholdings.

Timing variables as audit fee determinant include period of the year in which the audit is performed and the period of time in which client requests audit report i.e. the time which past from the end of accounting year till the date of report. The audit fees will be higher if the financial statement audit is performed from January to June as well as in the cases when the period from the end of accounting year till the date of audit report is relatively short.

Audit fee depends on auditor location as well. Namely, in big countries with a few important economic centres – cities, audit fees are higher in those cities than in other towns. One of the rationales for this lies in the fact that the demand for auditing services is higher and consequently the prices are higher too. Another reason is connected with separate audit fee determinant – auditor size. Big auditing firms, especially Big four¹, are usually located in big cities and their practice is to charge the higher fees than medium size or small auditing firms do.

The starting point of the research will be previously presented determinants which direction, intensity of influence and importance in projection of audit fees will be tested on the sample of companies listed on Croatian capital market – Zagreb stock exchange.

¹ Big four auditing firms are: PriceWaterhouseCoopers, Delloite & Touche, KPMG and Ernst & Young.

3. ANALYSING AUDIT FEES DETERMINANTS

3.1. RESEARCH SAMPLE AND METHODOLOGY

Considering previously mentioned determinants of audit fees, the area of interest in this research was extended by question of importance of each quantitative determinant in audit fee projection. According to previous researches their impact is not questionable, but for the case of Croatia there is still not clear which determinant is more important for audit fees, or if they all have the same importance. So the intention has been to indicate which determinants should be considered as more important when discussing about audit fee amount.

The research sample consists of 50 business entities whose securities have been listed on the Zagreb Stock Exchange in 2009 and who publicly disclosed the amount of audit fees. According to disclosed amounts of audit fees the highest amount was 708.000 hrk, and the lowest 28.290,00 hrk, while the average audit fee was 167.686,84 kn. Financial statements and information about business entities in the sample have been collected from the public internet sources of Zagreb Stock Exchange, HANFA (Croatian financial services supervisory agency) and FINA (Financial agency).

The Partial Least Square (PLS) regression has been implemented on data in the sample, and the two predictive models for audit fee have been build. PLS regression is a technique that generalizes and combines features from principal component analysis and multiple regression. The goal of PLS regression is to predict dependent variable from independents and to describe their common structure. This method finds components from independent variables that are the most relevant for predicting dependent variables. PLS regression searches for a set of components, i.e. latent vectors or latent factors, that performs a simultaneous decomposition of independent and dependent variables with constraint that these components explain as much as possible of the covariance between independent and dependent variables (Abdi, 2010). The derived components are then used in regression to predict dependent variable.

Although the similar outcomes would be obtained by the multiple linear regression, this method determines not only the directions and intensity of determinants' impact but also the importance of each determinant of audit fee.

3.2. RESEARCH RESULTS

Previously described audit fees determinants referring to the size of client, complexity of client, auditee profitability, auditee ownership control and auditor size are classified as quantitative variables. All of them represent independent variables and in the first model each of them is presented by one indicator. Those indicators are not exclusively for each determinant, but are chosen for this model according to their appropriateness. According to that, the auditee size is presented by the total assets of the business entity, auditee complexity is presented with the number of subsidiaries, and the auditee profitability by ROA. Ownership control of business entities in the sample is presented by the share of largest owner expressed in percentage. Finally, the auditor size is represented by the number of certified auditors.

The consideration of proportion of variance explained through the coefficient of determination (R^2) is the first step in model analysis. R^2 values are computed for the independent variables (R^2X) and for dependent variables (R^2Y), allowing us to decide how many components to retain in the analysis. In this case two components or factors are going to be retained since there appears to be levelling of the R^2 value for the dependent variables at that point. The proportion of variance explained shows the contribution of each latent factor to the model. As in this case we have two latent factors, the Table 1 shows that the first factor explains 30,8% of the variance in the independent variable, and 55,90% variance in the dependent variable, while the second factor explains 18,10% variance in the independent and 3,3% variance in the dependent variable what is the difference of R^2 between factor 2 i 1. Considered together these two factors explain 48,90% of the variance in the predictors and 59,20% of variance in the dependent variable.

Table 1. Proportion of variance explained

	Factor 1	Factor 2
R^2X	0,308	0,489
R^2Y	0,559	0,592

Source: Authors' research

Degree of correlation between audit fees and chosen determinants are presented by correlation coefficients. The coefficients of correlation between audit fee and each determinant, as well as between determinants are shown as correlation matrix in Table 2. Coefficients indicate that there is positive correlation between audit fee and all its' determinants, but the most significant is with auditee total assets and

number of subsidiaries standing for auditee size and complexity. Correlation with other determinants exists but is not significant.

Table 2. Correlation matrix of audit fee and audit fees determinants

	Number of certified auditors	Total assets	ROA	Number of subsidiaries	Share of largest owner	Audit fees
Number of certified auditors	1,000	0,329	0,078	0,042	0,176	0,185
Total assets	0,329	1,000	0,264	0,303	0,194	0,688
ROA	0,078	0,264	1,000	0,139	-0,311	0,180
Number of subsidiaries	0,042	0,303	0,139	1,000	-0,190	0,520
Share of largest owner	0,176	0,194	-0,311	-0,190	1,000	0,149
Audit fees	0,185	0,688	0,180	0,520	0,149	1,000

Source: Authors' research

Estimated regression coefficients for each determinant as independent variable, can be used to compute predicted values of audit fees. Regression coefficients are included in equation of the model as follows:

$$\text{Audit fee} = 40192,073 - 692,546 \times \text{number of certified auditors} + 9,587E^{-0.5} \times \text{total assets} + 63761,647 \times \text{ROA} + 19607,755 \times \text{number of subsidiaries} + 896,444 \times \text{share of largest owner}$$

But what is particularly emphasized in model analysis is variable importance in the projection (VIP) which represents the contribution of each predictor, i.e. independent variable, to the model, cumulative by the number of factors in the model.

So far, according to regression coefficients, we were familiar with relationships between dependent and independent variables in the context of average change in dependent variable if the independent variable increases or decreases for a corresponding unit. Although regression coefficients serve for predicting the dependent variable, showing the direction of each independent variable, we are interested to find which predictors are most useful.

In the projection table (Table 3) independent variables are sorted by size of their importance loading. Considering them cumulative for both factors it is evident that the auditee size presented by its' total assets has the largest importance in projection, followed by auditee complexity presented by numbers of subsidiaries. Vari-

able's importance of other determinants for prediction is lower, so the contribution of those variables to the prediction model is less important than of the first two, although it is not negligible.

Table 3. Variable importance in the projection expressed cumulative for each factor

Determinant	VIP_1	VIP_2
Total assets	1,686	1,641
Number of subsidiaries	1,274	1,241
Number of certified auditors	0,453	0,604
ROA	0,441	0,511
Share of largest owner	0,365	0,377

Source: Authors' research

Compared with loadings on the first factor, cumulative VIP for total assets and number of subsidiaries slowly drops because they do not load very heavily on second latent factor. But on the other side, the VIP loadings for the number of certified auditors, ROA and the share of largest owner rises in the two factor model.

Auditee size and auditee complexity both significantly correlate with audit fee, and both have higher importance in the projection of the model than other independent variables. Although all determinants influence the audit fee in some way, such results indicate that when discussing and deciding about audit fee more attention has to be paid on those two determinants. Besides that, size and complexity can be used to differentiate users of audit services.

Predictor weights (w^* vectors) present association between predictors and dependent variable scores by each latent factor. The Table 4 shows weights for predictor variables i.e. the contribution of each predictor to the respective factor. As expected from the Table 3, the weights for auditee total assets and numbers of subsidiaries are largest on the first latent factor and quite lower on the second factor, while the weights for the number of certified auditors, ROA and the share of the largest owner are higher with second factor. According to w^* weights it is evident to which factor each independent variable contributes most. The results show that determinants auditee total assets and number of subsidiaries as audit fee determinants are the most important contributors of first component – and hence the model which explains approximately 55,90% of variability of the dependent variable.

Table 4. Weights for predictor variables

Determinant	w*1	w*2
Number of certified auditors	0,203	-0,742
Total assets	0,754	0,310
ROA	0,197	-0,489
Number of subsidiaries	0,570	0,273
Share of largest owner	0,163	0,273
Source: Authors' research		

Table 5. Factor loadings of predictor variables

Determinant	p1	p2
Number of certified auditors	0,348	-0,708
Total assets	0,723	0,082
ROA	0,295	-0,587
Number of subsidiaries	0,539	0,247
Share of largest owner	0,118	0,346
Source: Authors' research		

P vectors in Table 5 show which the most influential variables that define observed component are. Auditee total assets and numbers of subsidiaries again stand out with higher values which is consistent with previously mentioned VIP and w* vectors.

But what it would be if we have decided to show each, or some of the determinants with more than one indicator? Would in that case auditee size and complexity still be the important determinants or not? To find that out we have added some new indicators to audit fee determinants. In this new model, auditee size is presented by auditee total assets and total revenues, auditee complexity with number of subsidiaries, proportion of inventories, receivables and short – term liabilities in total assets, ROA, ROE and ROCE stand for auditee profitability. Share of the largest owner and share of ten largest shareholders are indicators for ownership control, while the same indicator rests for auditor's size.

After considering the proportion of variance explained through the coefficient of determination a decision to keep one latent factor has been made. As there is one factor in this model it explains 22,50% of the variance in the independent and 57,10% variance in the dependent variable.

Correlation coefficients in the first model showed significant correlation between audit fee and auditee size and complexity. Similar correlation is also confirmed in second model, as the higher and the most significant correlation coefficients are between audit fee and indicators of auditee size, i.e. auditee total assets and auditee total revenues. There is also a significant and positive correlation between audit fee and number of subsidiaries as one of the indicators of auditee complexity. Although there is not significant correlation with other complexity indicators, we can still conclude that auditee size and complexity have the most significant correlation with audit fee. Correlation coefficients are shown in Table 6.

Table 6. Correlation coefficients between audit fee and audit fees determinants

Indicators of determinants	Correlation coefficients
Total assets	0,688
Total revenues	0,672
Number of subsidiaries	0,520
Share of receivables in total assets	0,073
Share of short term liabilities in total assets	0,287
Share of inventories in total assets	0,087
Number of certified auditors	0,185
ROA	0,180
ROE	0,144
ROCE	0,120
Share or largest owner	0,149
Share of ten largest shareholders	-0,087

Source: Authors' research

In second model there are more independent variables and consequently more estimated regression coefficients are going to be used to compute predicted values of audit fees. Regression coefficients are included in equation of the model, as follows:

$$\begin{aligned} \text{Audit fee} = & 55454,196 + 2480,325 \times \text{number of certified auditors} + 5,075E^{-05} \\ & \times \text{total assets} + 7,07E^{-05} \times \text{total revenues} + 181921,421 \times \text{ROA} + \\ & 41751,969 \times \text{ROE} + 26191,623 \times \text{ROCE} + 10182,001 \times \text{num-} \\ & \text{ber of subsidiaries} - 285,137 \times \text{share of ten largest shareholders} + \\ & 350,005 \times \text{share or largest owner} + 34691,807 \times \text{share of receivables} \\ & \text{in total assets} + 94370,100 \times \text{share of short term liabilities in total} \\ & \text{assets} + 55531,839 \times \text{share of inventories in total assets.} \end{aligned}$$

We have been particularly interested in contribution of each independent variable to the model, that is, variable importance in the projection, after we added a few indicators more per determinant. Table 7 shows that even when determinants are presented with more than one indicator, their importance does not change significantly. Compared with Table 3, the higher importance in projection of audit fee is still related to auditee size, which is now presented by two indicators. Auditee complexity is on the second place with two of four indicators, and the number of certified auditors is third again. ROA, as one of the tree indicators of auditee profitability is next, followed by the share of largest owner expressed in percentage. Even

though the remaining indicators follow those first, the conclusion about the order of importance of determinants can be made the same as in previous model.

As expected from the VIP (Table 7) the w^* vector weights are largest for auditee total assets, total revenues and numbers of subsidiaries, as well as p vectors, indicating which determinants are the most influential variables and most important contributors in estimating audit fee.

Table 7. Variable importance in the projection

Indicators of determinants	VIP
Total assets	1,991
Total revenues	1,953
Number of subsidiaries	1,511
Share of short term liabilities in total assets	0,833
Number of certified auditors	0,537
ROA	0,523
Share of the largest owner	0,432
ROE	0,417
ROCE	0,348
Share of inventories in total assets	0,253
Share of ten largest shareholders	0,251
Share of receivables in total assets	0,212

Source: Authors' research

4. CONCLUSION

The aim of this paper was to indicate which of previously indicated audit fees determinants are the most important in projecting audit fees in the Croatian audit services market. Using the regression models derived we can calculate individual audit fee and observe the direction of determinants. But except the change and direction of each determinant as independent variable, we have been interested in which one is the most important. Research results indicate that auditee size and complexity are the most significant audit fee determinant, and the similar conclusion has been drawn according to their importance too. Auditee size and complexity presented by one indicator per each strongly correlate with audit fee, and their importance is greater than importance of other determinants in projecting audit fee. Such correlation and importance have not changed even when determinants have been shown with more than one indicator. While other determinants influ-

ence audit fee less intensively, direction of their impact is in compliance with previously research except auditee profitability for which is found to have direct impact on audit fee what indicate that the auditors operating in Croatian auditing service market charge higher fees for more profitable clients.

Although the models derived clearly indicate the role of each audit fee determinant, they have relatively low coefficient of determination that has a range from 55,9% to 57,1%. According to low coefficient of determination, relatively low audit fee charged for companies which securities are listed on Zagreb stock exchange as well as high variation between audit fees, there arises the need to establish the appropriate mechanism for regulating the audit fees. Authors suggest two stages approach. In the first stage the tariff of auditing services should be brought. In this stage that will last for five years the tariff will minimize the level of price competition. At the same time the role of association of professional auditors (currently it is Croatian Chamber of Auditors) will gradually strengthen and assure the rising quality of auditing services. The activities in second level starts after five years when it is expected that association of professional auditors fulfil minimum of quality assurance. In that point the tariff could be abolished.

The research have emphasized the audit fee determinants in Croatian auditing service market according to their importance, direction and intensity of their influence using Partial Least Square technique. Obtained results represent the starting point for future research and have even practical examination considering the possibility of using those two determinants in auditee differentiation. Also, a system of audit fee calculation with ponders for each determinant can be developed, including auditee size and complexity with higher ponders. Finally further research has to be done in order to determinate correlation, influence and importance of audit fees determinants for clients depending on their branches.

REFERENCES

Abdi, H.: (2003). Partial Least Squares Regression, In: Lewis – Beck, M., Bryman, A., Futing, T., eds. *Encyclopedia for Research Methods for the Social Sciences.*, Sage., 792-795.

Chen, P., Ezzamel, M. and Gwillam, D. (1993). Determinants of Audit Fees for Quoted UK Companies, *Journal of Business Finance and Accounting*, (November): 765-786.

- Francis, J. (1984). The Effect of Audit Firm Size on Audit Prices, *Journal of Accounting and Economics*, (August): 133 – 151.
- Francis, J. and D. Simon. (1987). A Test of Audit Pricing in the Small-Client Segment of the US Audit Market, *The Accounting Review*, (January): 145-157.
- Francis, J. and D. Stokes. (1986). Audit Prices, Product Differentiation, and Scale Economies: Further Evidence from the Australian Market, *Journal of Accounting Research*, (Autumn): 383-393.
- Joshi, P.L., Al Bastako, H. (2000). Determinants of Audit Fees: Evidence from the Companies Listed in Bahrain, *International Journal of Auditing*, 4, 129-138.
- Lai, K. W. (2009). Audit Opinion and Disclosure of Audit Fees, *Jornal of Accounting, Auditing and Finance*, (24), 1: 91-114.
- Larcker, D. F., Richardson, S. A. (2004). Fees Paid to Audit Firms, Accrual Choices and Corporate Governance, *Journal of Accounting Research*, (42), 3: 625-658.
- Naser, K., Abdullhameed, A., Nuseibeh, R. (2007). Determinants of Audit Fees: Empirical Evidence from Emerging Economy, *Scientific Journal of Administrative Development*, 5, 84-116.
- Palmrose, Z. (1986). Audit Fees and Auditor Size: Further Evidence, *Journal of Accounting Research*, (Spring): 97-110.
- Ronen, J. (2010). Corporate Audit and How to Fix Them, *Journal of Economic Perspectives*, (24), 2: 189-210.
- Simunic, D. 1980. The Pricing of Audit Services: Theory and Evidence, *Journal of Accounting Research*, (Spring): 27-35.
- Taylor, M.H., Simon, D.T. (1999). Determinants of Audit Fees: The Importance of Litigation, Disclosure, and Regulatory Burdens in Audit Engagements in 20 Countries, *The international Journal of Accounting*: 34 (3), 375-388.
- Zenzerovic, R. (2006). Utilization of Case Based Reasoninig in Auditing - Determining the Audit Fee, *Eight International Conference on Enterprise Information Systems, Proceedings on Artificial Intelligence and Decision Support Systems*, ISBN: 972-8865-42-2, Institute for Systems and Technologies of Information, Control and Communication. 182-188, Paphos, Cyprus.

www.hanfa.hr

www.zse.hr

CONCEPTUAL MODEL TO MANAGE TACIT KNOWLEDGE

Karin Širec, Ph.D.¹

¹University of Maribor - Faculty of Economics and Business – Slovenia,
karin.sirec@uni-mb.si

ABSTRACT

In the knowledge society aimed at sustainable development, the exchange of knowledge among different agents is becoming increasingly important. The paper discusses some fundamental issues related to the importance of knowledge management in cooperation between companies, such as the strategic outsourcing relationship. We investigate problems of managing tacit knowledge together with the importance of unlearning it. Based on surveys in the literature, we discuss several types of knowledge and issues related to sharing, learning, and—most importantly—unlearning obsolete tacit knowledge dimensions as well as several important aspects of managing successful outsourcing relationships. As the main problem of managing tacit knowledge lies in the fact that it escapes observation and measurement, an adequate framework that would make some dimensions of tacit knowledge more visible and manageable has to be developed. To overcome the perpetual elusiveness of tacit knowledge, we present a conceptual model that could help highlight dimensions of tacit knowledge that can be mobilized and observed through the manifestation of different behaviors. The paper contributes to a better understanding of the importance of knowledge management related to managing tacit dimensions on the level of cooperation between companies. The aim was to develop a model for managing different types of knowledge in case of strategic outsourcing relationship in such a way that it will develop into a sustainable outsourcing partnership.

JEL Classification: D83, M12, M16

Keywords: strategic outsourcing relationship, tacit knowledge management, learning and unlearning

1. THEORY BACKGROUND

1.1 *Strategic outsourcing relationship*

Outsourcing is a widely accepted business tool for transferring part of the business activities to another company to achieve different business goals. Widely spread knowledge about outsourcing and its permanent growth has led to the extension of its use in all business areas. Based on the review of the literature, authors have classified outsourcing according to its effects; the commonly used classifications are traditional, which some authors call tactical (e.g., Espino-Rodriguez & Padron-Robaina; 2004), as well as strategic and transformational. Strategic outsourcing differs from the traditional approach to outsourcing, which is based on the concept of performing the same activities at a lower cost while cooperation is static and unchangeable (Rebernik & Bradač; 2009). Strategic outsourcing is based on changes in the management's perceptions and on continuous adaptations to needs and changes on the market (Reuvid & Hinks; 2001). The fundamental differences between traditional and strategic outsourcing lie in their objectives and in the relationship between the participants (Capgemini; 2004). Strategic outsourcing—the core of our discussion—is focused on innovation and business improvements. Its main characteristic is a long-term relationship in which both parties stimulate and facilitate continuous and mutual business change in order to create value, develop capabilities, and manage uncertainty (Capgemini; 2004).

In the management of outsourcing relationships, several issues need special attention. Power et al. (2006) classify these issues into six major areas: work administration, communication management, knowledge management, personnel management, training and education, and financial management.

1.2 *Types of knowledge important in strategic outsourcing*

Knowledge is a living asset; dynamic and volatile, it is often difficult to observe and understand. Unlike information, it is not final and stored, but emerging and being constantly recreated and socially reconstructed in particular work contexts. Knowledge may be tangible or intangible by its nature (Meso & Smith; 2000, 232).

All kinds of knowledge together, as an emerging synergy, make knowledge a system that, in combination with values, needs, and possibilities, is the starting point of any human action (Mulej et al.; 2000). Thus, knowledge is an important part of a more complex system. On the other hand, organizations' knowledge resources

have pertinently been described as an iceberg (Svelby; 1997, Haldin-Herrgard; 2000). Structured, explicit knowledge is the visible top of the iceberg; this part of the knowledge resource is easy to find and recognize, and therefore also rather easy to share. Beneath the surface of conscious thought lies a vast sea of tacit knowledge, derived from a lifetime of experience, practice, perception, and learning. This concept is captured in Polanyi's (1958, 1966) often-quoted statement, "We know a lot more than we can express"; therefore, this part of the intangible knowledge resource can be more difficult to share (Haldin-Herrgard; 2000, 358).

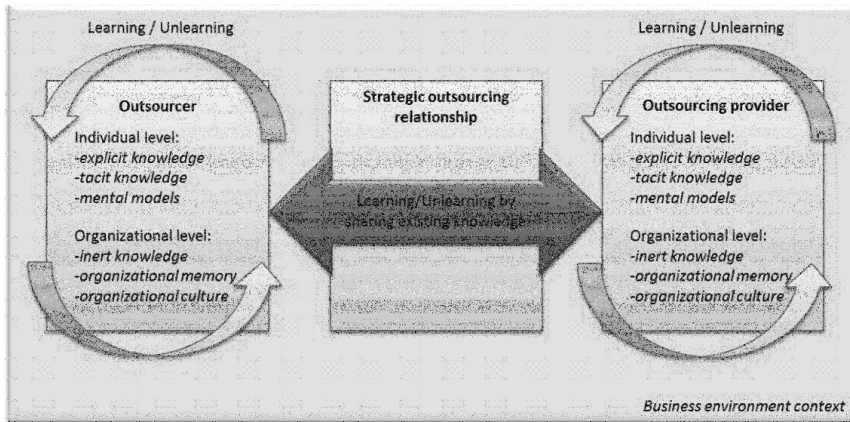
Tacit knowledge often enables us to perform at a higher level than our explicit knowledge does. Therefore, supporting the sharing of tacit knowledge throughout the company will be possible with methods like apprenticeship, direct interaction, networking, and action learning that includes face-to-face social interaction and practical experiences. The difficulty of expressing, codifying, and transmitting tacit knowledge makes it easier for a company to protect it than explicit knowledge. Moreover, tacit knowledge may only be effective when embedded in a particular organizational culture, structure, and set of processes and routines. The difficulty of copying tacit knowledge enables tacit knowledge to be the basis of an inimitable competitive advantage (Rebernik & Širec; 2007).

In many industries, success in today's markets depends on the ability to learn about emerging market opportunities and rapidly develop and spread the knowledge necessary to exploit them, rather than the ability to engage in careful long-term planning. The key driver of superior performance today is the ability to change when the business environment calls for it and to find the shifting sources of advantage. As a result of these changes, the ability to acquire, develop, and spread new knowledge has become an indispensable core competence. When considering strategic outsourcing, such abilities are of special importance.

Such an imperative requires a shift in the role of management in the strategic outsourcing relationship. Managers have to manage the organizational environment or context in which the relationship is performed rather than control the workers themselves (Stewart; 1997, Svelby; 1997). The management of the outsourcing relationship has to serve as a coach and facilitator, a boundary-buster, and head cheerleader. It needs to eliminate the barriers that prevent individuals from performing at their optimum levels. Success in the strategic outsourcing relationship requires a new form of vision-based leadership (Davenport; 1993, 117-37). This problem is multidimensional in its nature. Outsourcer and outsourcing pro-

vider have to consider a number of factors simultaneously. These factors, which exist at different levels, are presented in Figure 1.

Figure 1: Knowledge management attributes in the strategic outsourcing relationship



Source: Authors' own.

In the strategic outsourcing relationship, the outsourcer and outsourcing provider should get closer and closer in terms of common knowledge base, which requires sharing existing knowledge on individual, organizational, and environmental levels together with learning and unlearning obsolete knowledge. However, a particular problem always occurs when the knowledge must become visible to the other company.

1.3 Learning and unlearning explicit and tacit knowledge

By definition, an organization learns in only two ways: (a) through the learning of its members or (b) by incorporating new members who have knowledge the organization did not previously have (Simon; 1991, 125). We should also pay attention to the individual level, as learning and unlearning take place at both levels. When a company outsources, it has to adapt on two levels: the company and the individual. This adaptation takes place with the help of learning—namely, the acquisition of new knowledge from persons able and prepared to use acquired knowledge in decision making and influencing other organizations (Miller; 1996). Adaptation also takes place at the organizational level because new organizational routines have to be created and performed so that newly established outsourcing

ties and deployment of activities can take place. Successful learning results in modified behavior (MacDonald; 1995); in other words, the result of learning is adaptation. Furthermore, in the process of adaptation, the entrepreneur and organization have to unlearn many previously set rules and ways of doing business.

Looking at organizational learning from this perspective and understanding outsourcing as a learning process, one can expect a company to outsource if the entrepreneur is willing and able to learn and is capable of delegating some business tasks to the outsourcing partner. When current knowledge and required new knowledge are closely related, learning is not difficult; however, when a wide gap exists between current knowledge and new knowledge, individuals and organizations have to invest in the learning process. An important part of investment is unlearning obsolete knowledge and values that impede our ability to absorb new information and exploit it. Tacit knowledge, in particular, raises issues in relation to unlearning due to the fact that it is less easily identified or articulated, meaning it may be less easily challenged as part of the unlearning process (Becker; 2006).

If sharing tacit knowledge is a demanding task, its unlearning is even more difficult. To study non-expressed knowledge, an adequate methodology has to be developed. To summarize our understanding on managing tacit knowledge, we propose a theoretical framework on how the process that will enable long-term viability of business systems should occur (Rebernik & Širec; 2007):

- (1) recognition of the tacit dimension on an individual as well as organizational level;
- (2) observation of the behavior deriving from individuals as well as organizational teams according to possessed tacit knowledge;
- (3) the making of the behavior explicit by sharing it;
- (4) learning of the new knowledge and simultaneous unlearning of obsolete and inadequate knowledge.

Although tacit knowledge constitutes a major part of what we know, it is difficult for organizations to fully benefit from this valuable asset because tacit knowledge is inherently elusive; in order to capture, store, and disseminate it, it first has to be made explicit. However, such a process is difficult and often fails for three reasons (Stenmark; 2001, 9):

- (1) we are not necessarily aware of our tacit knowledge;

- (2) on a personal level, we do not need to make it explicit in order to use it; and
- (3) we may not want to give up a valuable competitive advantage.

Our understanding of the phenomena derives from the fact that tacit knowledge in its entirety is very difficult to recognize and benefit from. Thus, we propose bringing forward tacit knowledge that can potentially be mobilized and observable through different manifestations of behavior in order to make it explicit as only its explicitness would enable us to share it as well as learn what needs to be learned and unlearn those things that are outdated and obsolete (Rebernik & Širec; 2007).

2. MANAGING TACIT KNOWLEDGE IN STRATEGIC OUTSOURCING RELATIONSHIPS

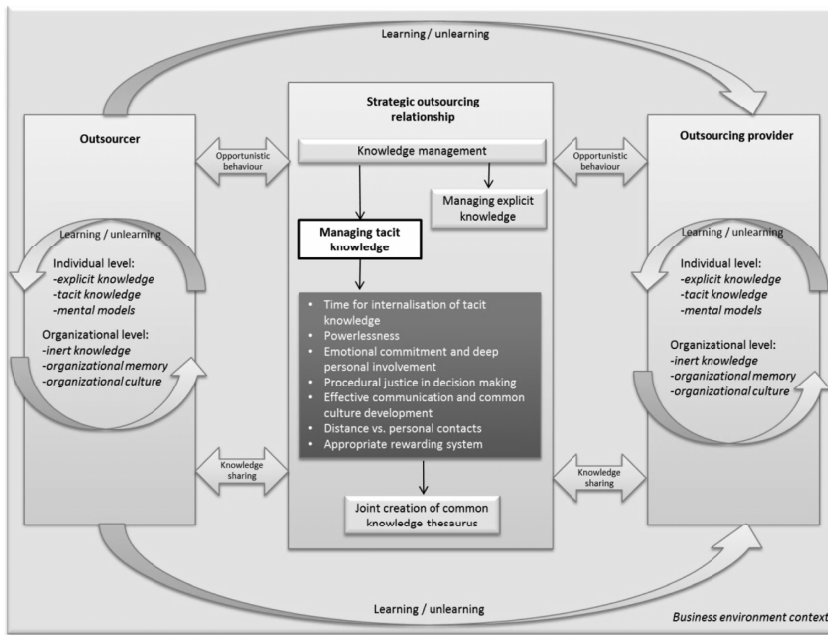
The sub-consciousness of tacit knowledge and the difficulty of expressing it are commonly found as the main problems in tacit knowledge diffusion. It is not only that we have difficulty expressing and articulating what we know; we may not even be conscious of what we know or how tacit knowledge connects to our explicit knowledge. In this section we present some of the most influential elements that effective management of tacit knowledge in strategic outsourcing relationship has to overcome.

The most important elements of managing tacit knowledge in strategic outsourcing relationship are:

- (1) Time for internalization of tacit knowledge;
- (2) Powerlessness;
- (3) Emotional commitment and deep personal involvement;
- (4) Procedural justice in decision making;
- (5) Effective communication and common culture development;
- (6) Distance vs. personal contacts; and
- (7) An appropriate rewards system.

By successfully managing these elements, partners in a strategic outsourcing relationship create the platform for the disclosure of tacit knowledge and can jointly create a common knowledge thesaurus that can be shared. A conceptual framework of managing tacit knowledge in strategic outsourcing relationships to create and share the thesaurus and achieve sustainable outsourcing partnership is provided in Figure 2.

Figure 2: Conceptual model to manage tacit knowledge in strategic outsourcing relationship



Source: Authors' own.

In the strategic outsourcing relationship, the nature of the relationship is based on knowledge sharing; participants take a more active role and assume more responsibility and risks in developing the relationship. The successful strategic outsourcing relationship depends on forging strong links among the management, system, and process functions that lead the organization to cooperate. Managing an effective strategic outsourcing relationship requires commitment from all included parties.

As in strategic outsourcing, the ownership of intangible assets of cooperating companies can be challenging to define; thus, it is important that cooperating parties “contractually specify who will have control over each dimension of each asset in each particular future contingency” (Grossman & Hart; 1986, 716). A successful relationship requires that the outsourcer and the provider disclose all information to ensure mutual benefits. To make the relationship efficacious, all parties need to exchange all relevant information. A provider is not only a performer of services, but also a partner who is included in the joint development of processes and products in both companies.

3. CONCLUSIONS

Over the years traditional outsourcing has evolved into long-term problem-solving strategic outsourcing focused on changes in business processes, productivity improvements, technology, and innovation. Instead of delegating simple routine tasks aimed at cost-effectiveness, today's outsourcing is concentrated on long-term cooperation between companies, developing it into business partnerships. The specialized skills and knowledge of outsourcing partners that would otherwise be very costly and almost impossible to obtain within a single company can be shared and exploited. Two main problems appear in such partnerships: the tacit dimension of knowledge in each company and the possibility that outsourcing partners will behave opportunistically. For a sustainable outsourcing relationship, these issues must be managed effectively.

The most important element of the strategic outsourcing relationship is knowledge management as both parties must share their knowledge to jointly create and exploit a common knowledge thesaurus. As any knowledge base consists of tacit and explicit knowledge and the explicit knowledge is relatively easy to share, special attention must be paid to tacit knowledge. The main prerequisite for sharing tacit knowledge is to make it clear to the partner what can be done by investing enough time for the internalization of tacit knowledge, taking care of powerlessness, appreciating emotional commitment and deepening personal involvement, ensuring procedural justice in decision making, establishing effective communication and common culture development, cultivating personal contacts despite the distances, and establishing an appropriate rewards system.

Participants involved in outsourcing activities not only learn from each other, but they also need to unlearn obsolete knowledge and skills contained in procedures, routines, and ways of doing business from the pre-outsourcing period. Sharing tacit knowledge is a demanding task, but its unlearning is far more difficult. In the era of ever-increasing globalization and transcontinental outsourcing, the management of knowledge—especially its tacit dimension—is becoming one of the key drivers of competitiveness. To overcome the perpetual elusiveness of tacit knowledge, we presented a conceptual model that could help manage the outsourcing relationships and contribute to the creation of a common knowledge thesaurus for outsourcing partners. In any relationship where information asymmetry exists, opportunistic behavior can arise. Policy makers and strategy developers should pay attention to such a possibility; otherwise, no sustainable relationship can be established among outsourcing partners.

Investigating strategic outsourcing in light of managing tacit knowledge raises many issues that future research should examine, especially in the area of opportunistic behavior in the outsourcing relationship and the creation of appropriate policy measures and strategic moves to prevent such behavior. The unlearning is another field in which appropriate models for immediate use in business practice still have to be developed. There is also a lack of empirical research on tacit knowledge, which could prove a number of findings and theoretical constructions that many authors have already developed.

LITERATURE

Becker, K. (2006). Individual and Organisational Unlearning: Directions for Future Research. *International Journal of Organisational Behaviour*, 10/4, 659-670, ISSN 1440-5377

Capgemini. (2004). Adapting to Change: Strategic Change Enabled through Transformational Outsourcing, 3.10.2006, Available from <http://www.capgemini.com>

Davenport, T. H. (1993). *Process Innovation: Reengineering Work through Information Technology*, Harvard Business School Press, ISBN 0875843662, Boston, MA

Espino-Rodriguez, T. F. & Padron-Robaina, V. (2004). Outsourcing and its Impact on Operational Objectives and Performance: A Study of Hotels in the Canary Islands. *International Journal of Hospitality Management*, 23, 287-306, ISSN 0278-4319

Grossman, S. & Hart, O. (1986). The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration. *Journal of Political Economy*, 94/4, 691-719, ISSN 0022-3808

Haldin-Herrgard, T. (2000). Difficulties in Diffusion of Tacit Knowledge in Organizations. *Journal of Intellectual Capital*, 1/4, 357-365, ISSN 1469-1930

MacDonald, S. (1995). (1995). Learning to Change: an Information Perspective on Learning in the Organization. *Organization Science*, 6, 557-568, ISSN 1047-7039

Meso, P. & Smith, R. (2000). A Resource-Based View of Organizational Knowledge Management System. *Journal of Knowledge Management*, 4/3, 224-234, ISSN 1367-3270

Miller, D. (1996). Configurations Revisited. *Strategic Management Journal*, 17, 505-512, ISSN 0143-2095

- Mulej, M., et al. (2000). *Dialektična in Druge Mehkosistemske Teorije (podlaga-zacelovitost in uspeh managementa)*, University of Maribor, Faculty of Economics and Business, ISBN 961-6354-01-9, Maribor
- Polanyi, M. (1958). *Personal Knowledge: Towards a Post-Critical Philosophy*, Routledge & Kegan Paul, ISBN 0-203-044215-6, London
- Polanyi, M. (1966). *The Tacit Dimension*, Doubleday & Co., 1966, Reprinted Peter Smith, 1983, ISBN 0844659991, Gloucester, Massachusetts
- Power, M. J.; Desouza, K. & Bonifazi, C. (2006). *The Outsourcing Handbook*, Kogan Page, ISBN 978-0749444303, London
- Rebernik, M. & Bradač, B. (2009). *The Role of Adaptation and Learning of Entrepreneurs in Managing Outsourcing Relationships*, In: *The Management of Small and Medium Enterprises*, M. Fink & S. Kraus (Eds.), pp. 282-298, Routledge, ISBN 978-0-415-46724-7, New York
- Rebernik, M. & Širec, K. (2007). *Fostering Innovation by Unlearning Tacit Knowledge*. *Kybernetes*, 36, 3/4, 406-419, ISSN 0368-492X
- Reuid, J. & Hinks, J. (2001). *Managing Business Support Services: Strategies for Outsourcing and Facilities Management (2nd edition)*, Kogan Page, ISBN 978-0749439002, United Kingdom
- Simon, H. (1991). *Bounded Rationality and Organizational Learning*. *Organization Science*, 2/1, 125-134, ISSN 1047-7039
- Stenmark, D. (2001). *Leveraging Tacit Organizational Knowledge*. *Journal of Management Information Systems*, 17/3, 9-24, ISSN 0742-1222
- Stewart, T. A. (1997). *Intellectual Capital: The New Wealth of Organizations*, Doubleday, ISBN 0-38-548228-0, London
- Svelby, K. E. (1997). *The New Organizational Wealth: Managing & Measuring Knowledge-Based Assets*, Berrett-Koehler Publisher, ISBN 1-57675-014-0, San Francisco, CA

BUSINESS
ADMINISTRATION
AND BUSINESS
ECONOMICS

NEUE BILANZPOLITISCHE KONZEPTION FÜR DIE SEGMENTBERICHTERSTATTUNG NACH *INTERNATIONAL FINANCIAL REPORTING STANDARD 8* (IFRS 8) IM DEUTSCHEN BILANZRECHT

Professor Dr. Bodo Runzheimer

Abstract

Die Entwicklung überstaatlicher Rechnungslegungsstandards beginnt im Jahr 1973 mit dem *International Accounting Standards Committee*/IASB. Die Nachfolgeorganisation – das *International Accounting Standards Board* (IASB) – formulierte 2001 das Ziel, international verbindliche Standards zu entwickeln und letztlich einen „Weltstandard“ für das *Financial Reporting* zu etablieren. Die EU (Europäische Union) schreibt seit 2005 erstmalig für kapitalmarktorientierte Unternehmen einheitliche Rechnungslegungsstandards verbindlich vor. Die Standards IAS/IFRS (*International Accounting Standards/International Financial Reporting Standards*) sind in den Amtsblättern der EU-Mitgliedstaaten veröffentlicht und die IFRS werden regelmäßig unter Berücksichtigung einer interessierten Öffentlichkeit weiterentwickelt.

Der **International Financial Reporting Standard 8 (IFRS 8)** beinhaltet für die externe Rechnungslegung in Form der **Segmentberichterstattung** ein Informationsträgerinstrument, das es ermöglichen soll, den Stand und die Entwicklung des extern berichtenden Konzerns/Unternehmens umfassend zu beurteilen. Die Konzeption der **Segmentberichterstattung** in den Abschlüssen nach IFRS ab 2009 ist neu. Materiell folgt sie weitgehend dem Konzept der *Statements of Financial Accounting Standards* (SFAS 131: „Disclosures about Segments of an Enterprise and Related Information“). Die Verabschiedung des IFRS 8 kommt für den IASB inhaltlich einem Paradigmenwechsel gleich. Für die Segmentberichterstattung bedeutet dieser Wechsel eine **neue bilanzpolitische Konzeption**, deren Kern im Austausch des *industry approach* (risk and reward approach) gegen den *management approach* besteht. Die intern zur Steuerung verwendeten Daten aus dem internen Rechnungs-

wesen werden grundsätzlich ohne Anpassung in die (externe) Segmentberichterstattung übernommen. Den Adressaten soll die Möglichkeit gegeben werden, das Unternehmen ‚*through the eyes of management*‘ zu sehen. Der *full management approach* (IFRS 8.25 ff.) stellt eine Erweiterung dieser Konzeption dar; nicht nur die Segmentabgrenzung erfolgt auf der Basis des *management approachs*, sondern die gesamte Ermittlung der verwendeten Segmentdaten.

Der Übergang der Segmentberichterstattung auf den *full management approach* nach IFRS 8 hat

Auswirkungen

für das interne Rechnungswesen

für die Struktur der Segmentberichterstattung

für die externe Prüfung der Segmentberichterstattung

und Probleme

interne Manipulationsmöglichkeiten als Problem

Segmentabgrenzung und ihre Probleme

Probleme hinsichtlich Bewertungsstetigkeit

Vereinfachung der Segmentberichterstattung und ihre Probleme

Kontrolle der Segmentberichterstattung und ihre Probleme

JEL Classification: M4

Keywords: International Financial Reporting Standard 8 (IFRS 8), International Accounting Standards Board (IASB), Deutsches Bilanzrecht, Segmentberichterstattung nach IFRS 8, Management Approach (Full Management Approach)

Einleitung

Die Ursprünge **überstaatlicher** Regelungen der Finanzberichterstattung von Unternehmen und Konzernen gehen auf das im Jahr 1973 gegründete „*International Accounting Standards Committee*“/IASC (www.ax-net.de) zurück. IASC verfolgte das Ziel, mit den „*International Accounting Standards*“/IAS (www.ax-net.de) Grundsätze für die Jahresabschlusserstellung festzulegen. Hintergrund war, dass insbesondere multinational aktive europäische Konzerne/Unternehmen Zugang zu den Kapitalmärkten (insbesondere zum US-amerikanischen Kapitalmarkt) suchten. Die US-amerikanische Börsenaufsicht verlangte für ein Listing an einer amerikanischen Börse einen nach „*United States Generally Accepted Accounting Principles*“, (US-GAAP) auf-

gestellten Jahresabschluss (vgl. Runzheimer, B., 2010, S. 822 ff.). Die US-GAAP sind auf die US-amerikanische Situation ausgerichtet; im europäischen Wirtschaftsraum fehlten **überstaatliche Rechnungslegungsstandards**. Für die nach nationalen Rechnungslegungsstandards aufgestellten Jahresabschlüsse war die notwendige Vergleichbarkeit erheblich eingeschränkt; die vielfach notwendige doppelte Rechnungslegung - z.B. nach deutschem und US-amerikanischen Recht - war sehr aufwendig und nicht problemlos (z.B. Gefahr eines möglichen Verlustes an Vertrauen in die Aussagefähigkeit der Rechnungslegung bei abweichenden Ergebnissen).

Die Nachfolgeorganisation – das „*International Accounting Standards Board*“ (IASB) – formulierte 2001 das Ziel, international verbindliche Standards zu entwickeln und letztlich einen „Weltstandard“ zu etablieren. Die EU (Europäische Union) preschte vor: „Seit 2005 werden erstmalig einheitliche Rechnungslegungsstandards in den Mitgliedsstaaten der EU für kapitalmarktorientierte Unternehmen angewendet. IAS/IFRS (*International Accounting Standards/International Financial Reporting Standards*) heißt das Schlagwort. Internationale Rechnungslegungsvorschriften werden für kapitalmarktorientierte Unternehmen von der EU verabschiedet.

Im Bereich der Rechnungslegung strebt die EU-Kommission eine höhere Qualität, bessere Vergleichbarkeit und höhere Transparenz der Finanzberichterstattung durch Unternehmen an. Sie ist für die Ausarbeitung, Durchführung und Anwendung der EU-Richtlinien im Bereich der Rechnungslegung zuständig“ (www.ax-net.de). In diesem Zusammenhang arbeitet die EU-Kommission eng mit den Behörden der wichtigsten Handelspartner der EU zusammen, ebenso mit dem IASB, der „*International Federation of Accountants*“ (IFAC), der „*Organisation für wirtschaftliche Zusammenarbeit und Entwicklung*“ (OECD), der *Weltbank*, der „*Konferenz der Vereinten Nationen für Handel und Entwicklung*“ (UNCTAD) etc. „Der Rat der europäischen Union stimmte mit großer Mehrheit 2002 einer Verordnung zu, mit der der Anwendung der International Accounting Standards (IAS, neu: IFRS – International Financial Reporting Standards) ab 2005 für die Konzernabschlüsse von kapitalmarktorientierten Unternehmen verbindlich vorgeschrieben ist“ (www.ax-net.de). Die Standards (vgl. Hoffmann, W.-D./Lüdenbach, N., 2009) sind in den Amtsblättern in der jeweiligen Landessprache der Mitgliedsstaaten veröffentlicht. Die IFRS „werden nun regelmäßig unter Berücksichtigung einer interessierten Öffentlichkeit weiterentwickelt“ (www.ax-net.de).

Für Konzernabschlüsse der übrigen Unternehmen und die Einzelabschlüsse bleibt es den Mitgliedsstaaten überlassen, die Anwendung der internationalen Standards anzuordnen oder zu ermöglichen (www.ax-net.de).

1 SEGMENTBERICHTERSTATTUNG NACH IFRS 8 - ZIELSETZUNG

International Financial Reporting Standard 8 (IFRS 8) beinhaltet für die externe Rechnungslegung in Form der **Segmentberichterstattung** ein Informationsinstrument, das es ermöglichen soll, den Stand und die Entwicklung des extern berichtenden Unternehmens umfassend zu beurteilen. „Mit der Segmentberichterstattung rücken die gegenwärtigen und künftigen Chancen und Risiken des Unternehmens in den Mittelpunkt des Interesses, die vom Adressaten besser identifiziert, analysiert und bewertet werden sollen. Es wird postuliert, die Transparenz der externen Rechnungslegung zu erhöhen und die Entscheidungsrelevanz der veröffentlichten Informationen (Daten) für die Adressaten wesentlich zu verbessern“ (Schweitzer, M., 2011, S. 40). Für Konzerne, die nach deutschem Handelsgesetzbuch/HGB bilanzieren, schreibt demgemäß § 297, Abs. 1 des neuen HGB (Bilanzmodernisierungsgesetz – BilMoG vom 28.05.2009) vor: „Der Konzernabschluss besteht aus der Konzernbilanz, der Konzern-Gewinn- und Verlustrechnung, dem Konzernanhang, der Kapitalflussrechnung und dem Eigenkapitalpiegel. Er kann um eine Segmentberichterstattung erweitert werden.“ Für die Bestimmung des Kreises von Unternehmen/Konzernen, die in den Anwendungsbereich des Standards IFRS 8 fallen, wird allein an die (geplante) Inanspruchnahme des Kapitalmarktes (IFRS 8.2) angeknüpft. Die Pflicht zur segmentierten Rechnungslegung besteht im Einzel- und Konzernabschluss von denjenigen Unternehmen, deren Eigen- oder Fremdkapitalinstrumente **öffentlich gehandelt** werden (vgl. Beine, F./Nardmann, H., 2011, S. 938 f.). Sämtliche in § 2 Abs. 1 Satz 1 WpHG (deutsches Wertpapierhandelsgesetz) genannten Papiere sind Wertpapiere im Sinne des IFRS 8. Der in IFRS 8 genannte „öffentliche Handel“ umfasst in Deutschland den Amtlichen Handel, den Regierten Markt sowie den Freiverkehr. Diese Vorschrift des IFRS 8 gilt – unabhängig von der Unternehmensform - für den Einzel- oder Konzernabschluss. „Enthält ein Geschäftsbericht sowohl den Konzernabschluss eines Mutterunternehmens, das in den Anwendungsbereich dieses IFRS fällt, als auch dessen Einzelabschluss, sind die Segmentinformationen lediglich im Konzernabschluss zu machen.“ (IFRS 8.4).

Sofern ein nicht in den Anwendungsbereich von IFRS 8 fallendes Unternehmen Informationen über Segmente in den Abschluss aufnehmen will, dürfen diese Angaben nur dann als **Segmentinformationen** bezeichnet werden, wenn diese Informationen den Anforderungen von IFRS 8 genügen (vgl. IFRS 8.3). Informationen über Segmente außerhalb des Abschlusses, beispielsweise für Angaben im deutschen Lagebericht, dürfen unabhängig von einer Beachtung der Vorschriften

von IFRS 8 als **Segmentinformationen** bezeichnet werden (vgl. Beine, F./Nardmann, H., 2011, S. 940).

Die Aufgaben der Segmentberichterstattung sind:

- (1) Bereitstellung finanzieller und „nicht-finanzieller“ Daten. „Nicht-finanzielle“ Daten sind solche, die aus dem internen Rechnungswesen übernommen werden.
- (2) Gliederung aggregierter Unternehmensdaten nach Unternehmenseinheiten, Bereichen bzw. Ebenen, so dass der Einblick in die Ertragskraft, in Chancen und Risiken sowie in die Vermögens-, Finanz- und Ertragslage des Unternehmens erhöht und der Entscheidungsbezug der publizierten Daten präzisiert wird (vgl. Schweitzer, M., 2011, S. 40). In einem ersten Schritt müssen die operativen Segmente des Unternehmens gemäß IFRS 8.5 definiert werden. Ein **operatives Segment** übt eine Geschäftstätigkeit aus, aus der es Umsätze erzielt und für die es Aufwendungen tätigt (auch mit anderen Segmenten), dessen **operativen Ergebnisse** durch den leitenden Entscheidungsträger für Zwecke der Erfolgsmessung und Ressourcenallokation regelmäßig überwacht werden und für das gesonderte Finanzinformationen verfügbar sind (vgl. Grünberger, D., S. 308).

2 SEGMENTBERICHTERSTATTUNG: KONZEPTION

Die Konzeption der Segmentberichterstattung in den Abschlüssen nach IFRS ab 2009 ist neu. Materiell folgt sie weitgehend dem Konzept der Statements of Financial Accounting Standards (SFAS 131: „Disclosures about Segments of an Enterprise and Related Information“ - vgl. Bragg, S.M., S. 189 ff.). „Die Verabschiedung des IFRS 8 kommt für den IASB inhaltlich einem Paradigmenwechsel gleich“ (Baetge, J./Haenelt, T., S. 43). Für die Segmentberichterstattung bedeutet dieser Wechsel „den Übergang auf eine neue bilanzpolitische Konzeption, deren Kern im Austausch des *industry approach* (risk and reward approach) gegen den *management approach* besteht. Mit diesem Schritt wird die Segmentberichterstattung endgültig auf die Konzeption des *management approach* festgelegt“ (Baetge, J./Haenelt T., S. 44; vgl. auch Beine, F./Nardmann, H., 2011, S. 937 f.; Hasselbach, K./Nawroth, C./Rödding, A., S. 567). Die intern zur Steuerung verwendeten Daten werden grundsätzlich ohne Anpassung in die Segmentberichterstattung übernommen. „Den Adressaten soll die Möglichkeit gegeben werden, das Unternehmen ‚*through the eyes of management*‘ (...) zu betrachten“ (www.ifrs-fachportal.de/SilviaRogler).

An dieser Stelle werden zur Verdeutlichung dieses bedeutenden Paradigmenwechsels beide bilanzpolitischen Konzeptionen in Anlehnung an M. Schweitzer (vgl. 2011, S. 41) gegenübergestellt:

- 1) Beide Konzeptionen nehmen Bezug auf die Art der Segmentbildung
- 2) Der **industry approach** verlangt eine chancen- und risikoorientierte Segmentbildung; der **management approach** verlangt hingegen eine **entscheidungsorientierte** Bildung der Segmente
- 3) Bestimmte Ebenen der Segmentierung (beispielsweise Geschäftsfelder oder Absatzregionen) werden beim **industry approach** als gegeben unterstellt; dabei werden homogene Potentiale für Chancen und Risiken zusammengefasst. Benutzte Daten aus dem **internen Rechnungswesen** werden nach den Grundsätzen der externen Rechnungslegung angepasst. Vertikal integrierte Segmente werden nur in wesentlichen Fällen dargestellt.

Beim **management approach** ist die **Struktur des internen Rechnungswesens** für die Ausrichtung der Ebenen der Segmentierung ausschlaggebend. Die **Struktur des internen Rechnungswesens** ist aber auf die **Entscheidungsprozesse des Managements** ausgerichtet. „Daten, die aus dem internen Rechnungswesen in die Segmentberichterstattung einbezogen werden, folgen den Organisations-, Verteilungs- und Bewertungsprinzipien des internen Rechnungswesens. Vertikal integrierte Segmente werden umfassend und mit der gleichen Präzision dargestellt, wie dies im internen Rechnungswesen geschieht“ (Schweitzer, M., 2011, S. 41). Ausschlaggebend für die Zuordnung von Aufwand und Ertrag zu den Segmenten ist entsprechend die Zuordnung von Vermögen und Schulden im internen Rechnungswesen. Die korrespondierende Allokation von Bestands- und Stromgrößen aufgrund des **Management Approach** ist nicht zwingend. „So kann bei einem Segment der Aufwand für Abschreibungen bei der Bemessung des Segmenterfolgs Berücksichtigung finden, ohne dass auch der abgeschriebene Vermögensgegenstand dem Segment zugerechnet werden muss. Allerdings sind mit einem solchen Vorgehen Angabepflichten verbunden (IFRS 8.27)“ (Beine, F./Nardmann, H., 2011, S. 948).

Der **full management approach** stellt eine Erweiterung dieser Konzeption dar; nicht nur die Segmentabgrenzung erfolgt auf der Basis des **management approachs**, sondern die **gesamte Ermittlung** der verwendeten Segmentdaten (vgl. Fink, C./Ulbrich, P., 2007, S. 1 ff.). Für die Gestaltung der **Segmentberichterstattung nach IFRS 8** ist der **full management approach** ausschlaggebend (IFRS 8.25 ff.).

Grundlage der Segmentberichterstattung nach IFRS 8 ist also der **Entscheidungsbezug** des **full management approach**. Der Entscheidungsbezug des

Hauptentscheidungsträgers bildet die „**Schnittstelle**“ (vgl. Haller, A.), einen „**Brückenschlag**“ (vgl. Schweitzer, M., 2011, S. 41) zwischen dem **internen und dem externen Rechnungswesen**. „Sein Entscheidungsbezug kann allgemein wie folgt beschrieben werden: entscheidungsrelevante Segmentdaten aus dem internen Rechnungswesen haben für operative Planungs- und Steuerungsentscheidungen der (externen) Adressaten dieselbe Qualität wie für operative Planungs- und Steuerungsentscheidungen des (internen) Managements. Diese Aussage (Hypothese) bildet den materiellen Kern des Paradigmenwechsels in der Segmentberichterstattung“ (Schweitzer, M., 2011 S. 41).

3 DER ÜBERGANG DER SEGMENTBERICHTERSTATTUNG AUF DEN FULL MANAGEMENT APPROACH NACH IFRS 8 - KONSEQUENZEN

3.1 Auswirkungen für das interne Rechnungswesen

Zunächst ist die Zuverlässigkeit der Daten des internen Rechnungswesens zu hinterfragen; d.h. die Genauigkeit und Zielorientierung der im internen Rechnungswesen erarbeiteten Daten ist zu prüfen. Die Genauigkeit „interner Daten kann als gegeben betrachtet werden, wenn sie keinem Manipulations- bzw. Ermessensspielraum unterliegen und wenn die Regeln ihrer Ableitung, Erfassung (Ermittlung), Verteilung, Transformation, Bewertung und Aggregation theoretisch begründet sowie intersubjektiv nachvollziehbar sind. Ihre *Zielorientierung* ist gegeben, wenn sie den Anforderungen nach Entscheidungsrelevanz, Kontrollrelevanz, Kommunikationsfähigkeit und Wirtschaftlichkeit genügen“ (Schweitzer, M. 2011 S. 41).

Bei Zukunftsdaten (Prognosedaten) müssen die Prognoseverfahren auf ihre empirische Tauglichkeit überprüft sein.

3.2 Auswirkungen für die Struktur der Segmentberichterstattung nach IFRS 8

Der Übergang der Segmentberichterstattung auf den **full management approach** nach IFRS 8 hat folgende Auswirkungen für die Struktur der Segmentberichterstattung (vgl. Baetge, J./Haenelt, T., S. 45; Aksöz, T., S. 12 ff.; Schweitzer, M. 2011, S. 41 f.):

- 1) Die Darstellung der Segmente hat sich an der Struktur des internen Rechnungswesens auszurichten
- 2) Rechtliche, organisatorische, güterbezogene, geografische und zeitliche Kriterien können für die Bildung der Segmente ausschlaggebend sein

- 3) Durch die Ausrichtung an der Struktur des internen Rechnungswesens wird die Verlässlichkeit der verwendeten Segmentdaten erhöht
- 4) „Rechnungstechnisch wird mit der Annahme gearbeitet, dass die gebildeten Segmente am Markt als selbständige Einheiten auftreten (*autonomous entity approach*)“ (Schweitzer, M., 2011 S. 41)
- 5) Ein relativ großer Spielraum für die Gestaltung der Segmentberichterstattung wird den Rechnung legenden Unternehmen/Konzernen eingeräumt
- 6) Dieser relativ große Spielraum für die Gestaltung der Segmentberichterstattung erschwert die zwischenbetrieblichen (überbetrieblichen) Vergleiche der verfügbaren Segmentdaten erheblich (solche Vergleiche sind mit Mängeln – Risiken – behaftet).

3.3 Auswirkungen für die externe Prüfung der Segmentberichterstattung nach IFRS 8

Auf die Aufgaben der Wirtschaftsprüfer (externe Pflichtprüfung) wirkt sich der Übergang auf die Segmentberichterstattung nach IFRS 8 wie folgt aus:

Die vielfältigen Gestaltungs- und Ermessensspielräume in Kombination mit der Ausrichtung der Segmentberichterstattung am internen Rechnungswesen bedingt die Jahresabschlussprüfung der Segmentberichterstattung nach IFRS 8 die Durchführung einer eingehenden und umfassenden Systemprüfung mit folgenden Prüfungsgegenständen (vgl. Langenbacher, G., S. 162; Baetge J./Haenelt, T., S. 48; Schweitzer, M., 2011 S. 42):

- 1) interne Organisations- und Berichtsstruktur
- 2) Segmentabgrenzung
- 3) Segmentzusammenfassung
- 4) Abgrenzung der berichtspflichtigen Segmente (*reportable segments*)
- 5) Prüfung der quantitativen Segmentdaten
- 6) Prüfung der qualitativen Erläuterungspflichten.

4 OFFENE PROBLEME DER SEGMENTBERICHTERSTATTUNG NACH IFRS 8

4.1 Interne Manipulationsmöglichkeiten als Problem

Grundsätzlich ist davon auszugehen, dass die Manipulationsmöglichkeiten der internen Rechnung geringer sind und die „Verlässlichkeit der Daten weniger ver-

letzen, als die der externen Rechnungslegung – beispielsweise beim beizulegenden Wert (fair value) nach IFRS mit einer Fülle unbestimmter Rechtsbegriffe, mit einer Vielzahl faktischer Wahlrechte und Ermessensspielräume sowie subjektiven Erwartungen und Schätzungen bei der Wertermittlung“ (Schweitzer, M., 2011 S. 42; vgl. auch Runzheimer, B., 2010, S. 820 ff.). Prinzipiell legt das Management für seine Informationsbasis bei Entscheidungen größten Wert darauf, dass die Daten, die im internen Rechnungswesen erarbeitet werden, verlässlich sind. Das Management fordert, dass die reale Entscheidungssituation und das jeweils aktuelle Entscheidungsproblem so realitätsnah (und zuverlässig) wie nur möglich dargestellt werden (vgl. Engelhardt, R.). Die Tatsache, dass der IASB in den IFRS 8 für die Segmentberichterstattung den full management approach zugrunde legt, zeigt, dass dem internen Rechnungswesen als Basis der Segmentberichterstattung nach IFRS 8 der Vorzug gegeben wird. Bei Daten, die der internen Steuerung dienen, wird vermutet, dass diese die Lage des Unternehmens ungeschönt widerspiegeln. „Da die internen Daten aber unverändert in der externen Rechnungslegung verwendet und damit veröffentlicht werden, könnte sich die Unternehmensleitung aber auch bei der Gestaltung des internen Rechnungswesens an den im Rahmen der externen Rechnungslegung verfolgten Zielen orientieren, die nicht immer in einer wirklichkeitsnahen Darstellung des Unternehmens bestehen werden. Dies wird auch als Zirkularitätseffekt bezeichnet“ (www.ifrs-fachportal.de/SilviaRogler). Weiterhin ist zu beachten, dass das Management daran interessiert ist, „wettbewerbssensible Daten der Publikation zu entziehen, was beispielsweise durch das Einfügen zusätzlicher Berichtsebenen durchaus möglich ist“ (Schweitzer, M., 2011, S. 42). Befreiungsregelungen analog den Schutzklauseln gem. § 286 Abs. 1 und 2 HGB gibt nach IFRS 8 aber nicht. „Ein gem. IFRS 8.2 zur Segmentberichterstattung verpflichtetes Unternehmen darf damit weder auf die Erstellung des Segmentberichts insgesamt, noch auf die Veröffentlichung einzelner Angaben verzichten, um beispielsweise Nachteilen gegenüber Wettbewerbern zu entgehen, die nicht kapitalmarktorientiert und damit nicht zur segmentierten Rechnungslegung verpflichtet sind“ (Beine, F./Nardmann, H., 2011, S. 940).

4.2 Segmentabgrenzung und ihre Probleme

Wie in der Vorgängerregelung IAS 14 sind auch nach IFRS 8 nicht zwingend alle intern ermittelten Segmente zugleich auch berichtspflichtige Segmente. Soweit es sich um Geschäftssegmente im Sinne von IFRS 8.5 ff. handelt, „bestimmt sich die Berichtspflicht weiterhin nach quantitativen Schwellenwerten (IFRS 8.11)“ (Beine, F./Nardmann, H., 2011, S. 943).

Wenn Signifikanzgrenzen für die Maßgrößen Segmenterträge/-aufwendungen, Segmentergebnis und Segmentvermögen/-schulden überschritten werden, entsteht Berichtspflicht für die Segmente. Die Festlegung der Maßgrößen gemäß IFRS setzt voraus, dass intern zur Beurteilung aller Segmente dieselben Maßgrößen herangezogen werden. „Weichen einzelne Maßgrößen (z.B. für das Betriebsergebnis) inhaltlich voneinander ab, ist die fragliche Signifikanzgrenze als Kriterium der Berichtspflicht nur bedingt verwendbar“ (Schweitzer, M., 2011, S. 42).

Dieses Problem betrifft zum einen die Präzisierung der Berichtspflicht von Segmenten wie auch zum anderen die Vergleichbarkeit der Segmente untereinander. Voraussetzung einer präzisen Abgrenzung der berichtspflichtigen Segmente ist die einheitliche Definition und Verwendung der benutzten Maßgrößen. Dies gilt insbesondere unter dem Aspekt der zwischenbetrieblichen/überbetrieblichen Vergleichbarkeit der Segmentberichterstattung, die bei der Rechnungslegung nach IFRS 8 im Vordergrund steht (vgl. Alvarez, M., S. 49 ff.).

Beim Zeitvergleich können unterschiedlich definierte Maßgrößen eher hingenommen werden, d.h. die zeitliche Vergleichbarkeit wird weniger beeinträchtigt (vgl. Schweitzer, M., 2011, S. 42).

4.3 Probleme hinsichtlich Bewertungsstetigkeit

Nach IFRS 8.17 sind Segmente, die in der Vorperiode als berichtspflichtig qualifiziert wurden, in der aktuellen Berichtsperiode auch dann separat darzustellen, wenn sie keinen der quantitativen Schwellenwerte (Grenzwerte) erreichen. „Allerdings ist der Ausweis nur geboten, falls das Management dem Segment eine andauernde Bedeutung beimisst (IFRS 8.17)“ (Beine, F./Nardmann, H., 2011, S. 947). Folglich liegt die Entscheidung über die Fortführung des Ausweises im subjektiven Ermessen des Managements. Faktoren, die für eine andauernde Bedeutung sprechen könnten, sind beispielsweise, dass nur ein vorübergehendes Absinken unter die 10 %-Schwellenwerte angenommen wird. „Auch eine Einstufung als ‚zur Veräußerung gehalten‘ kann Anlass für den fortgeführten separaten Ausweis sein“ (Beine, F./Nardmann, H., 2011, S. 947).

Die im Rahmen der Segmentberichterstattung verwendeten Daten sollen dem Prinzip der Stetigkeit und Vergleichbarkeit gerecht werden. „Die interne Bewertung kennt jedoch kein normiertes Prinzip der Stetigkeit, wie es für die externe Bewertung zwingend ist. Sie ist nach ihrer Funktion entscheidungsorientiert und flexibel“ (Schweitzer, M., 2011, S. 42). Jede Änderung der internen Bewertungs-

grundsätze wirke sich mithin auch direkt auf die externe Segmentberichterstattung aus (vgl. Baetge, J./Haenelt, T., S. 47). Diese Befürchtung teilt M. Schweitzer mit Recht nur begrenzt, „weil interne Bewertungsgrundsätze und –ansätze vom gewählten Zielsystem abhängen. Gewählte Ziele werden intern aber nicht willkürlich von Periode zu Periode gewechselt, sondern unterliegen kurz- bis mittelfristig einer Konstanz, die eine (relative) Stetigkeit der Bewertung zur Folge hat“ (Schweitzer, M., 2011, S. 43).

Das Zielsystem muss andererseits aber operativ ausreichend flexibel sein, um die erforderlichen Anpassungsentscheidungen zielführend und zeitnah treffen zu können (vgl. Trapp, R./Wolz, M., S. 88).

Ändert ein Unternehmen seine interne Organisationsstruktur derart, dass auch die Zusammensetzung der berichtspflichtigen Segmente sich verschiebt, schreibt IFRS 8.29 f. die Anpassung der Segmentdaten vergangener Perioden – einschließlich der unterjährigen Perioden – vor. Sofern die Informationen nicht verfügbar oder der Aufwand für die Bereitstellung der Informationen unverhältnismäßig wäre, kann auf die Anpassung verzichtet werden. „Ob diese Ausnahmen vorliegen, soll separat für jede Angabe geprüft werden. Allgemein ist anzugeben, ob die Vergleichsangaben der Vorjahre angepasst wurden oder nicht“ (Beine, F./Nardmann, H., 2011, S. 951). Wird keine Anpassung der Segmentdaten der Vorperioden vorgenommen, so sind im Jahr der Änderung die Segmentdaten in der Berichtsperiode sowohl auf Basis der alten als auch der neuen Segmentierung anzugeben (vorausgesetzt wird auch hier, dass die Daten verfügbar sind und der zusätzliche Aufwand nicht unverhältnismäßig ist). „Diese Maßnahme unterstützt zweifelsohne einen erwünschten Zeitvergleich und damit die Stetigkeit der Bewertung“ (Schweitzer, M., 2011, S. 43).

4.4 Vereinfachung der Segmentierung und ihre Probleme

Nach IFRS 8,19 wird empfohlen, die Zahl der **berichtspflichtigen Segmente** auf zehn zu begrenzen. Mit dieser zahlenmäßigen Begrenzung soll eine gewisse Übersichtlichkeit gewährleistet werden.

Nach IFRS 8.13 ist wirtschaftliche Voraussetzung für die Bildung eines Segments die Erfüllung folgender Kriterien:

- die Segmenterträge müssen mindestens 10% der Gesamterträge des Unternehmens ausmachen

- das Segmentergebnis muss mindestens 10% aller kumulierten Segmentergebnisse mit positivem/negativem Ergebnis umfassen
- das Segmentvermögen muss mindestens 10% des gesamten Vermögens des Unternehmens betragen.

Nicht berichtspflichtige Segmente, die mehrheitlich die Homogenitätskriterien nach IFRS 8.12 erfüllen, können nach IFRS 8.14 zusammengefasst werden (diese Vereinfachung der Segmentierung ergibt sich aus der oben genannten nach IFRS 8.19 empfohlenen Begrenzung der Zahl der berichtspflichtigen Segmente auf zehn). Soweit Segmente nicht gesondert ausgewiesen werden, ist nach IFRS 8.16 in einem **Sammelsegment** – „**Alle sonstigen Segmente**“ - zu berichten. Damit die Zahl der ausgewiesenen Segmente andererseits nicht zu klein wird, ist in IFRS 8.15 eine 75 %-Grenze festgelegt; dies bedeutet, dass die Summe der **Außenerträge**, die den ausgewiesenen Segmenten zugerechnet wird, mindestens 75 % der konsolidierten Gesamterträge des Unternehmens betragen muss.

„Sofern Geschäftssegmente jeden Schwellenwert unterschreiten, können diese unwesentlichen Segmente dennoch als berichtspflichtig bezeichnet und separat gezeigt werden, sofern das Management der Ansicht ist, dass Informationen über die Segmente – oder ein einzelnes Segment – von Nutzen für die Abschlussadressaten sind (IFRS 8.13). Wie nach IAS 14 obliegt die Entscheidung über die Gestaltung der Berichterstattung in diesem Fall der Unternehmensführung“ (Beine, F./Nardmann, H., 2011, S. 945).

Durch die Vereinfachung der Segmentberichterstattung sollen nach dem Übergang vom **industry approach** auf den **management approach** auch die Aufwendungen für die Bereitstellung der zu berichtenden Segmentdaten reduziert werden. „Jedenfalls war dies die Vorstellung des IASB, der davon ausging, dass die relevanten Informationen des internen Rechnungswesens unverändert in die Segmentberichterstattung übernommen werden können. In der praktischen Anwendung trifft dies nur bedingt zu. Allein die zusätzlichen Prüfungskosten des internen Rechnungswesens widerlegen diese Annahme“ (Schweitzer, M., 2011, S. 43).

Die Zuständigkeit für die praktische Gestaltung der Segmentberichterstattung liegt beim publizierenden Unternehmen. Beispielsweise berichtet die SIEMENS AG in ihrem Geschäftsbericht zum 30.09.2010 (www.siemens.de) auf der Basis von fünf Sektoren (*Industry, Energy, Healthcare, Equity Investments, Siemens IT Solutions and Services*). Ebenso weist die Deutsche Telekom in ihrem Geschäftsbericht fünf Segmente (Mobilfunk Europa, Mobilfunk USA, Breitband/Festnetz,

Geschäftskunden, Konzernzentrale & Shared Services) aus (www.telekom.com/Zwischenbericht zum 30.09.2011).

4.5 Kontrolle der Segmentberichterstattung und ihre Probleme

Die Segmentberichterstattung hat in ihren wesentlichen Komponenten „realisierte“ Größen der abgelaufenen Abrechnungsperiode zum Gegenstand, d. h. sie ist **vergangenheitsorientiert**. Mithin ermöglicht sie einen **Zeitvergleich**, aber nur sehr begrenzt eine **Steuerung** durch sachlich fundierte Kontrollen. Mit dieser Ausrichtung ist sie zwar für die externen Adressaten von einigem Nutzen, wichtiger für die Analysen der Segmentberichterstattung wäre „jedoch die Beantwortung der *Steuerungsfragen*:

- Wie wurden die realisierten Größen der abgelaufenen Abrechnungsperiode geplant?
- Welche Größen werden für die nächste Abrechnungsperiode geplant?
- Welche Größen werden über die nächste Abrechnungsperiode hinaus mittel- bis langfristig geplant?“ (Schweitzer, M., 2011, S. 43)

Würden die externen Adressaten in einem Erweiterungsschritt auch Kenntnis über die geplanten Daten (Soll) der abgelaufenen Abrechnungsperiode bekommen, wären sie in der Lage, für die abgerechnete Periode eine aussagekräftige (wenn auch kurzfristige) Ergebniskontrolle (Soll-Ist-Vergleich) vorzunehmen. Würde in einem zusätzlichen Erweiterungsschritt der Kontrollansatz um die **geplanten Daten** der Segmente der künftigen Abrechnungsperiode (**Plandaten**) ergänzt, wären die Adressaten in der Lage „unter Berücksichtigung der Abweichungen der *Ergebniskontrolle* sowie unter Verwendung eigener Prognosen zu den erwarteten Größen der Folgeperiode (Wird) ..., eine kurzfristige, (grobe) *Planfortschrittskontrolle* (Plan-Wird-Vergleich) durchzuführen“ (Schweitzer, M., 2011, S. 43).

5. ZUSAMMENFASSUNG

Die Ursprünge der überstaatlichen Regelungen der Finanzberichterstattung von Unternehmen und Konzernen gehen auf das in 1973 gegründete „*International Accounting Standards Committee/IASC*“ zurück. Die Nachfolgeorganisation – das „*International Accounting Board*“ (*IASB*) – formulierte 2001 das Ziel, international verbindliche Standards zu entwickeln und letztlich einen „Weltstandard“ zu etablieren. Die EU (Europäische Union) preschte vor: Seit 2005 werden erstmalig einheitliche Rech-

nungslegungsstandards in den Mitgliedsstaaten der EU für kapitalmarktorientierte Unternehmen vorgeschrieben und angewendet. IAS/IFRS (*International Accounting Standards/International Financial Reporting Standards*) heißt das Schlagwort.

Der Rat der Europäischen Union stimmte mit großer Mehrheit 2002 einer Verordnung zu, mit der der Anwendung der *International Accounting Standards* (IAS, neu: IFRS – *International Financial Reporting Standards*) ab 2005 für die Konzernabschlüsse von kapitalmarktorientierten Unternehmen verbindlich vorgeschrieben ist. Die IFRS „werden nun regelmäßig unter Berücksichtigung einer interessierten Öffentlichkeit weiterentwickelt“ (www.ax-net.de).

Der *International Financial Reporting Standard 8 (IFRS 8)* beinhaltet für die externe Rechnungslegung in Form der **Segmentberichterstattung** ein Informationsinstrument, das es ermöglichen soll, den Stand und die Entwicklung des extern berichtenden Unternehmens umfassend zu beurteilen. Die Pflicht zur segmentierten Rechnungslegung besteht im Einzel- und Konzernabschluss von denjenigen Unternehmen, deren Eigen- oder Fremdkapitalinstrumente **öffentlich gehandelt** werden.

„Die Verabschiedung des IFRS 8 kommt für den IASB inhaltlich einem Paradigmenwechsel gleich“ (Baetge, J./Haenelt, T., S. 43). Für die Segmentberichterstattung bedeutet dieser Wechsel „den Übergang auf eine neue bilanzpolitische Konzeption, deren Kern im Austausch des *industry approach* (risk and reward approach) gegen den *management approach* besteht. Mit diesem Schritt wird die Segmentberichterstattung endgültig auf die Konzeption des *management approach* festgelegt“ (Baetge, J./Haenelt T., S. 44). Die intern zur Steuerung verwendeten Daten (internes Rechnungswesen) werden grundsätzlich ohne Anpassung in die Segmentberichterstattung übernommen.

Grundlage der Segmentberichterstattung nach IFRS 8 ist der **Entscheidungsbezug** des *full management approach*. Der *full management approach* stellt eine Erweiterung dieser Konzeption dar; nicht nur die Segmentabgrenzung erfolgt auf der Basis des management approachs, sondern die **gesamte Ermittlung** der verwendeten Segmentdaten. Der Entscheidungsbezug des Hauptentscheidungsträgers bildet die „**Schnittstelle**“ (vgl. Haller, A.), einen „**Brückenschlag**“ (vgl. Schweitzer, M., 2011, S. 41) zwischen dem **internen und dem externen Rechnungswesen**.

Der Übergang der Segmentberichterstattung auf den *full management approach* nach IFRS 8 hat Konsequenzen hinsichtlich:

- Auswirkungen für das interne Rechnungswesen
- Auswirkungen für die Struktur der Segmentberichterstattung
- Auswirkungen für die externe Prüfung der Segmentberichterstattung

Offene Probleme der Segmentberichterstattung nach IFRS 8 bestehen in Bezug auf:

- Interne Manipulationsmöglichkeiten
- Segmentabgrenzung
- Bewertungsstetigkeit
- Vereinfachung der Segmentierung
- Kontrolle der Segmentberichterstattung

LITERATURVERZEICHNIS

Aksöz, T.: Stellenwert des Management Approach im Rahmen der IFRS-Rechnungslegung, Hamburg 2007.

Alvarez, M.: Segmentberichterstattung und Segmentanalyse, Wiesbaden 2004.

Baetge, J./Haenelt, T.: Kritische Würdigung der neu konzipierten Segmentberichterstattung nach IFRS 8 unter Berücksichtigung prüfungsrelevanter Aspekte, in: Zeitschrift für internationale Rechnungslegung (IRZ) 2008, Heft 1, S. 43 – 49.

Beine, F./Nardmann, H.: Segmentberichterstattung, in: Ballwieser, W. et al. (Hrsg.): Handbuch International Financial Reporting Standards, 7. A., Weinheim 2011, S. 935 – 960.

Bragg, S.M.: IFRS MADE EASY, Hoboken (New Jersey) 2011.

Deloitte: www.iasplus.de/standards/ifrs_08.php.

Diehm, J./Lösler, A.: IFRS für Dummies, Weinheim 2011.

Engelhardt, R.: Der Management-Approach in der Segmentberichterstattung nach IFRS 8, München 2009.

Fink, C./Ulbrich, P. (2006): Segmentberichterstattung nach ED 8 – Operating Segments, in: Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung (KoR) 2006, Heft 4, S. 233 ff.

Fink, C./Ulbrich, P. (2007): Verabschiedung des IFRS 8 – Neuregelung der Segmentberichterstattung nach dem Vorbild der US-GAAP, in: Zeitschrift für internationale und kapitalmarktorientierte Rechnungslegung (KoR) 2007, Heft 1, S. 1 ff.

- Grünberger, D.: IFRS 2010, Ein systematischer Praxis-Leitfaden, 8. A., Herne 2010.
- Hasselbach, K./Nawroth, C./Rödding, A.: Beck'sches Holding Handbuch, München 2011.
- Hoffmann, W.-D./Lüdenbach, N.: IAS/IFRS-Texte, 2. A., Herne 2009.
- Kudert, S./Sorg, P.: IFRS leicht gemacht – eine Einführung in die International Financial Reporting Standards, Berlin 2010.
- Lüdenbach, N./Hoffmann, W.-D.: IFRS Kommentar, 9. A., Freiburg 2011.
- Lüdenbach, N.: IFRS – Der Ratgeber zur erfolgreichen Anwendung von IFRS, 6. A., Freiburg 2010.
- Pellens, B. et al.: Internationale Rechnungslegung: IFRS 1 bis 8, IAS 1 bis 41, IFRIC-Interpretationen, Standardentwürfe. Mit Beispielen, Aufgaben und Fallstudie, 8. A., Stuttgart 2011.
- Runzheimer, B. (2010): Internationalisierung der deutschen Rechnungslegung – Führt die Fair Value-Bewertung zu einer nützlicheren Berichterstattung? in: Bar-kovic, D./Runzheimer, B. (Hrsg.): Interdisziplinäre Managementforschung VI, Osijek 2010, S. 820 – 842.
- Runzheimer, B. (1997): Neuere Entwicklungen in der Rechnungslegung deutscher Unternehmen, in: Huth, R./Meler, M (Hrsg.): XVIII. Wissenschaftliches Symposium, Osijek 1997, S. 53 – 61.
- Schweitzer, M. (2011): Paradigmenwechsel in der Segmentberichterstattung nach IFRS 8, in: Zeitschrift für Führungskräfte in Verwaltung und Wirtschaft, Hrsg.: VWA, Bochum 2011, Jg. 56, S. 40 – 45.
- Schweitzer, M. (2009): Fortschritte und offene Fragen der Segmentberichterstattung nach IFRS 8, in: Jahrbuch für Controlling und Rechnungslegung, Hrsg.: Seicht, G., Wien 2009, S. 201 - 221.
- Trapp, R./Wolz, M.: Segmentberichterstattung nach IFRS 8 – Konvergenz um jeden Preis?, in: Zeitschrift für internationale Rechnungslegung (IRZ), 2008, Heft 2, S. 85 ff.
- Wagenhofer, A.: Internationale Rechnungslegung: IAS, IFRS, SIC- und IFRS-Interpretationen, Wien 2010.
- Wiederhold, P.: Segmentberichterstattung und Corporate Governance: Grenzen des Management Approach, Wiesbaden 2009.

EMPIRISCHE BEFUNDE ZUR NUTZUNG DER CONJOINT ANALYSE ZUR MARKTSIMULATION IN DER DEUTSCHEN MARKTFORSCHUNGSPRAXIS

Danny Buyer^a, Thomas Cleff^{a,b,1}, Dirk Frank^a

^a Hochschule Pforzheim

^b Zentrum für Europäische Wirtschaftsforschung (ZEW), Mannheim

Abstract

Since the 80's the importance of Conjoint Analysis (CA) has been increasing steadily. Today it is considered to be state-of-the-art for preference measurements and it has great potential in the field of market forecasts. In literature there exist studies about the general use and prevalence of CA; however, they do not deal with the use of CA for means of market simulation. For this reason the authors have conducted online interviews with chosen members of the Association of German Market and Social Researchers (BVM-Berufsverband Deutscher Markt- und Sozialforscher e.V.) and of the Federal Association of German Business Consultants (BDU-Bundesverband Deutscher Unternehmensberater e.V.) concerning the use of CA in general and as tool for market simulation. Before presenting the interview results the article describes the most important CA techniques and a literature survey of previous studies about CA prevalence.

JEL classification: M31; D12; C53 ; E37

Keywords: Conjoint; Präferenzmessung; Marktprognose

1 Einleitung

Bereits seit fast fünfzig Jahren in der Psychologie genutzt und vor ungefähr vierzig Jahren in den USA zum ersten Mal für Marketingzwecke eingesetzt, gewinnt die Conjoint-Analyse (CA) seit den achtziger Jahren auch in der europäischen Marke-

¹ Kontaktadresse der Autoren: Hochschule Pforzheim, Tiefenbronner Str. 65, D-75175 Pforzheim, Telefon: +49 7231 28 6075 (Sekretariat), Fax: +49 7231 28 6070, E-mail: thomas.cleff@hs-pforzheim.de

tingtheorie und –praxis immer mehr an Bedeutung. Mittlerweile wird sie weltweit als „state-of-the-art“ auf dem Gebiet der Präferenzmessung angesehen. Einsicht in die Bedürfnisse und Wünsche der Konsumenten wird dabei durch die Bestimmung des Einflusses einzelner Produktmerkmale und deren Ausprägungen auf die Präferenz eines Konsumenten für ein Produkt ermöglicht. Ein großes Potenzial besteht aber auch in der Anwendbarkeit bei Marktprognosen, bei der sich Auswirkungen von produkt- und preispolitischen Entscheidungen schon vor Markteinführung eines Produktes abschätzen und hieraus Strategien zur konkreten Ausgestaltung der Marketinginstrumente, bis hin zu einer optimalen Abstimmung des Marketing-Mix, ableiten lassen. Obwohl die Prognosen von zukünftigen Marktanteilen innovativer Produkte einen unschätzbaren Wert für ein Unternehmen darstellen, ist die Verbreitung CA-basierter Verfahren erst in den letzten Jahren deutlich angestiegen, was vor allem mit der zunehmenden Verfügbarkeit von geeigneten Softwarepaketen zusammenhängt. Wie weit die Anwendung der Verfahren fortgeschritten ist, wurde bisher allerdings noch nicht untersucht. Zwar existieren Studien zur generellen Nutzung und Verbreitung der CA (Cattin/Wittink 1989, Wittink/Cattin 1989, Melles/Holling 1998, Hartmann/Sattler 2002), jedoch gehen diese nicht auf die Verwendung zum Zweck der Marktsimulation ein. Die Autoren haben deshalb ausgewählte Mitglieder des BVM (Berufsverband Deutscher Markt- und Sozialforscher e. V.) und des BdU (Bundesverband Deutscher Unternehmensberater e. V.) online über deren Nutzung der CA im Generellen und zum Zweck der Marktsimulation befragt. Hierzu werden zunächst die wichtigsten Techniken der CA skizziert (Kapitel 2) und ein Literaturüberblick über Studien zur Verbreitung der CA gegeben (Kapitel 3), bevor die Ergebnisse der eigenen Studie vorgestellt werden (Kapitel 4).

2 Von der Conjoint Analyse zur Marktsimulation

Dem Marktforscher ermöglicht die CA einen Einblick in die Präferenzstrukturen von potenziellen Konsumenten. Im Speziellen lassen sich viele einzelne – für das Marketing höchst relevante - Fragen beantworten, wie z.B. welchen Einfluss einzelne Eigenschaften und Eigenschaftsausprägungen eines Produkts auf die Präferenz der Probanden haben bzw. welche Merkmalsausprägungen bevorzugt werden und welche Präferenzwerte ein neues, noch nicht am Markt befindliches Produkt erzielen kann. Dabei ermittelt die CA zunächst jedoch „nur“ Präferenzwerte und keine Prognosen über reale Kaufentscheidungen (Brzoska 2003).

Mithilfe von Marktsimulationsmodellen kann daran anschließend ermittelt werden, welche Auswahlwahrscheinlichkeit innovative Produkte in Abhängigkeit von der Konkurrenz am Markt erzielen, ohne diese in der Realität einführen zu müssen. Es kann simuliert werden, wie sich die Verhältnisse im Markt verändern, wenn ein Produkt in seinen Eigenschaften verändert würde (Gaul/Baier 2009, S. 163 f. und Orme 2006, S. 79). Durch Einbeziehung von Kostenstrukturen kann auf diese Weise auch ermittelt werden, welche Eigenschaften und Ausprägungen das optimale neue Produkt aufweisen bzw. zu welchem Preis es eingeführt werden sollte.

Grundsätzlich sind alle Formen der CA zur Marktsimulation geeignet. Allerdings fehlt bei der klassischen CA wie auch bei der Adaptiven Conjoint-Analyse (ACA) der konkrete Bezugspunkt der Nutzenwerte zur Kaufentscheidung. Bei einer Marktsimulation auf Basis der traditionellen CA geht man vereinfacht davon aus, dass die Präferenz den zentralen und alleinigen Kaufentscheidungsfaktor darstellt, was in der Realität nicht zutrifft (Brzoska 2003, S. 108). Als Alternative zu den klassischen – auf Ratings oder Rankings basierenden – Conjoint Ansätzen haben sich die sog. auswahlbasierten Conjoint-Verfahren etabliert. Letztere weisen neben dem Vorteil der größeren Realitätsnähe zudem den Vorteil der None-Option auf. Diese Verfahren der Choice-Based Conjoint-Analyse (CBC) sind vor allem vor dem Hintergrund der Weiterverarbeitung für eine Marktsimulation von großem Vorteil, da sie einen Referenzwert und einen Bezugspunkt zur Kaufentscheidung und zur Zahlungsbereitschaft darstellen (Nitschke/Sattler 2005, S. 11). Die Zahlungsbereitschaft lässt sich mit Hilfe von CBC ermittelten Nutzenwerten errechnen, denn nur wenn der Gesamtnutzenwert eines Produkts größer ist als der Nutzenwert der None-Option kann man von Kaufwahrscheinlichkeit sprechen. Für alle Produkte mit Gesamtnutzenwerten unterhalb der None-Option wird der Nichtkauf dem Kauf eines Produkts vorgezogen. Um nun die Zahlungsbereitschaft für ein konkretes Produkt zu ermitteln, wird dessen Gesamtnutzenwert betrachtet. Ausgehend von der Annahme, dass der Nutzen eines Produkts mit steigendem Preis fällt, wird nun solange der Preis erhöht, bis der Gesamtnutzenwert des Produkts auf den Schwellenwert der None-Option absinkt. Somit ist die absolute Höhe der maximalen Zahlungsbereitschaft ermittelt. Diese spezifische Eignung für Preisoptimierung ist mit ein Grund dafür, warum die CBC zur populärsten Methode der CA aufgestiegen ist. Pilon (1998, S. 1) geht sogar so weit, Folgendes zu sagen: „choice based conjoint analysis is the ‘tool of choice’ for pricing studies in the mid-nineties”.

3 Literaturüberblick über Studien zur Verbreitung der Conjoint-Analyse

Die erste Studie über die Breite der Verwendung der CA stammt von Cattin/Wittink (1982). Die Autoren legten den Schwerpunkt vor allem auf die kommerzielle Nutzung der CA in den USA und auf Fragen, die die Durchführung der Marktstudien betreffen. Dazu befragten sie schriftlich 20 Marktforschungsunternehmen, von denen nur 17 an der Befragung teilnahmen. Bei einer Nachfolgestudie für den Zeitraum zwischen 1981 und 1985 erhielten Wittink/Cattin (1989) 66 antwortende auf 273 befragte Unternehmen. Zwischen diesen beiden Untersuchungen ist ein deutlicher Anstieg in der Anzahl der CA-basierten Marktforschungsprojekte zu verzeichnen gewesen. Beide Umfragen zeigen zudem, dass die Konsumgüterbranche mit rund 60% die meisten CA-Projekte in Auftrag gibt: Auf dem zweiten Platz folgt die Industriegüterbranche mit 18% bis 20%. Dienstleistungen bilden mit rund 13% bis 15% zu diesem Zeitpunkt noch einen kleinen Teil der Projekte.

Neben der Branche fragten die Autoren auch nach dem Zweck der Nutzung der CA. Für die Jahre 1971 bis 1980 dominiert hier die Neuprodukt- / Konzeptfindung mit 72%, vor dem Pricing mit 61%, der Marktsegmentierung mit 48% und der Verwendung für Werbung mit 39% der Projekte. Für den Zeitraum von 1981 bis 1985 steht die Neuprodukt- / Konzeptfindung an der Spitze, jedoch mit „nur“ noch 47%, gefolgt von der Wettbewerbsanalyse (40%), Pricing (38%), Marktsegmentierung (33%) und Umpositionierung (33%). Die Verwendung für den Bereich Werbung ist stark abnehmend.

Schon in der Befragung für den Zeitraum vor 1981 erwähnen Cattin/Wittink (1982), dass die Befragten zur Entwicklung von Handlungsempfehlungen für das Marketing entweder die Präferenzwerte aggregieren oder eine Marktsimulation zur Prognose von Marktanteilen durchführen. Sie machen jedoch keine Angaben dazu, wie häufig dieses Instrument verwendet wird und erheben auch keine weiteren Informationen hierzu.

Die erste Befragung zur kommerziellen Nutzung der CA in Europa stammt von Wittink/Vriens/Burhenne (1994). Ihre Zielgruppe bestand aus den Marktforschungsinstituten Europas, die quantitative Analysen anbieten. Dazu wurden 553 Unternehmen der „European Society for Opinion and Marketing Research“ (ESOMAR) und der Kunden des Softwareherstellers Sawtooth Software befragt. Von den 159 antwortenden Teilnehmern (Rücklaufquote: 29%) gaben 59 an, im betrachteten Zeitraum (Juli 1986 bis 1991) die CA genutzt zu haben. Mit 956 liegt die Anzahl der durchgeführten Projekte ungefähr so hoch wie bei der Studie von

Wittink/Cattin (1062 für eine etwa gleich lange Zeitspanne), wobei in Deutschland die meisten Projekte durchgeführt wurden (348). Auch in Europa ist in über der Hälfte der Fälle die Konsumgüterbranche Auftraggeber von Studien, in denen die CA genutzt wird, gefolgt von der Industriegüterbranche. Ein deutlicher Unterschied zu den Ergebnissen von Wittink/Cattin (1989) liegt in der Zielsetzung der Projekte, bei der Pricing vor Neuprodukt- / Konzeptfindung, Marktsegmentierung und der Wettbewerbsanalyse liegt

Die zwei neuesten Studien beschäftigen sich ebenfalls hauptsächlich mit der kommerziellen Nutzung und Durchführung der CA. Melles/Holling (1998) beschränken sich bei ihrer Befragung geografisch auf Deutschland und gehen zudem auf den Aspekt Marktsimulation ein. Sie befragten 519 Unternehmensberatungen und Marktforschungsinstitute sowie 94 Hochschulprofessoren an Lehrstühlen für Marketing, machen jedoch keine Angaben über das angewendete Auswahlverfahren. Insgesamt wurden 130 Fragebögen zurückgesendet (Rücklaufquote: 21%), von denen 57 angaben, die CA im Zeitraum von 1993 bis 1998 eingesetzt und in den fünf Jahren 1531 Projekte durchgeführt zu haben. Die wichtigste Branche stellt mittlerweile die Dienstleistungsbranche dar, vor der Konsumgüterbranche und der Industriegüterbranche. Hinsichtlich der Zielsetzung dominieren wiederum die Bereiche Produkt-/Konzeptentwicklung, Preisfindung (Pricing), Marktsegmentierung und Wettbewerbsanalyse. An der Spitze der angewendeten Datenerhebungsmethode liegt hier eindeutig das persönliche Interview (CAPI), vor persönlich-schriftlichen und persönlich-mündlichen Verfahren. Bei den computergestützten Erhebungen dominiert eindeutig ACA (76%), allerdings bereits gefolgt von CBC mit 29%.

Melles/Holling (1998) gehen zudem auf den Aspekt Marktsimulation ein. Wie wichtig dieser Aspekt ist, zeigt sich daran, dass 70% der Befragten angeben, Marktanteilsschätzungen im Anschluss an die CA durchzuführen. Die bevorzugte Transformationsregel stellt dabei eindeutig das First-Choice-Modell dar, aber auch das Logit-, das BTL- und das Probit-Modell werden genutzt. Marktsegmentierungen wenden gar 91% der Befragten an, mittlerweile eher auf Basis der Nutzenschätzung.

Hartmann/Sattler (2002, S. 1-14) beziehen sich auf die Zielgruppe der Marktforschungsinstitute in Deutschland, Österreich und der Schweiz. Auf Basis diverser Verbandslisten und Kundendateien von Softwareanwendern befragten sie 224 Institute (186 in Deutschland, 20 in Österreich, 18 in der Schweiz), wobei sie eine

Ausschöpfungsquote von 25,4% erreichten. Von diesen 54 Instituten haben 35 im letzten Jahr insgesamt 304 Projekte durchgeführt, was wiederum eine Steigerung verglichen mit der Zahl von Melles/Holling auf 8,7 Projekte pro Jahr und Unternehmen bedeutet. Der Trend bestätigt sich auch in der Tatsache, dass über die Hälfte der Befragten in ihrer Zukunftseinschätzung angibt, eine Steigerung der Anzahl der Projekte zu erwarten. Auch in dieser Studie tauchen die Bereiche Pricing (48%) und Product development (46%) als wichtigste Anwendungsfelder an der Spitze auf. Die beiden Autoren haben diese Frage zusätzlich nach den angewandten Methoden differenziert: Discrete Choice CA wird zu 75% für Pricing-Zwecke genutzt, während die ACA und die traditionelle CA verstärkt zur Produktentwicklung verwendet werden. Insgesamt ist die Discrete Choice CA mit 47% mittlerweile die meist genutzte Variante, gefolgt von ACA (34%) und der klassischen CA (20%).

Die vorgestellten Studien legen ihren Schwerpunkt auf die Verbreitung und Nutzung der CA und verwenden dazu - zum Teil in leicht abgewandelter Form - den von Cattin/Wittink (1982) eingeführten Fragenblock. Auch die Autoren des vorliegenden Beitrages greifen ihn für ihren Befragungsteil zur Verbreitung der CA auf. Dabei wird jedoch ein Schwerpunkt auf die Weiterverarbeitung der Ergebnisse der CA zum Zwecke der Marktsimulation gelegt. Im Fokus der Untersuchung standen dabei die Verwendung von CA zur Marktanteilsschätzungen von Neuprodukten oder Line Extendern sowie die Schätzung von Marktanteilsveränderungen bei Veränderungen bereits eingeführter Produkte. Neben der Messung der Verbreitung dieses Instruments in der Praxis, sollen die Stärken und Schwächen bzw. die Problemfelder aus Sicht (potenzieller) Anwender erfragt werden.

4 Conjoint-Analyse zur Marktsimulation in der deutschen Wirtschaft – Neueste Ergebnisse einer empirischen Studie

4.1 Entwicklung und Erstellung des Fragebogens

Da sich die Befragung mit einem sehr komplexen, ständig neuen Entwicklungen unterlegenen Thema beschäftigt, zu dem selbst in den Marktforschungsinstituten und Unternehmensberatungen häufig nur wenige Personen Auskunft geben können, wurden vor der Gestaltung des Fragebogens fünf 45 minütige qualitative Experteninterviews anhand eines themenorientierten Leitfadens geführt. Ziel dieser qualitativen Interviews war die Ermittlung und Offenlegung der relevanten

Themen und Probleme bei Anwendung der CA. Der Schwerpunkt lag vor allem auf dem bisher noch wenig erforschten Gebiet der Anwendung, sowie der Stärken und Schwächen der CA-basierten Marktsimulation. Des Weiteren wurde untersucht, ob das Thema Pricing im Bereich Marktsimulation eine gewichtige Sonderstellung einnimmt, die im Fragebogen spezieller Beachtung bedarf. Diese These wurde jedoch nach den Vorinterviews verworfen. Ebenso wurde danach darauf verzichtet, einen Vergleich zwischen der Marktsimulation auf Basis der CA und anderen Instrumenten zur Absatzprognose zu ziehen, da die Vorstudie Hinweise dazu lieferte, dass dieser Vergleich in der Praxis nur schwer zu ziehen ist.

Der hierauf hin entwickelte Fragebogen lässt sich inhaltlich in zwei große Teilbereiche gliedern: Der erste Teil der Befragung dreht sich um die CA und beinhaltet auch einen Teil der Fragen von Cattin/Wittink (1982), der zweite Teil geht auf die Marktsimulation ein und sondert die Unternehmen aus, die noch nie ein derartiges Verfahren angewendet haben.

Im Einzelnen werden zuerst Fragen nach der Art von Unternehmen und zur Anzahl der festangestellten Mitarbeiter im Unternehmen gestellt. Im Anschluss daran folgt die Filterfrage, ob im Unternehmen des Befragten schon einmal die CA eingesetzt wurde. Alle Unternehmen, in denen CA noch nie eingesetzt wurde, werden von der weiteren Befragung ausgeschlossen. In der nächsten Phase der Befragung wird nach der Anzahl an CA-basierten Projekten und nach den dabei verwendeten Methoden gefragt. Hier wurde das Antwortspektrum im Gegensatz zur Studie von Hartmann/Sattler (2002) differenzierter aufgefächert, was zum Teil auch den zahlreichen Neuentwicklungen in diesem Bereich geschuldet ist. Auch wurden Fragen nach den Produktkategorien, der beauftragenden Branche und die verwendete Datenerhebungsmethode aufgenommen.

Des Weiteren wurde eine Frage nach der gefragt für die CA verwendete Software gestellt, die bisher nur bei Wittink/Vriens/Burhenne (1994) erfragt wurde. Durch den großen zeitlichen Abstand zu dieser Befragung und der mittlerweile weit differenzierteren Softwarepalette wurden die vorgeschlagenen Antworten für diese Frage komplett neu erarbeitet. Schließlich wurde zum Abschluss des ersten Teils die Frage nach dem Projektziel bzw. nach dem Zweck der Nutzung der CA gestellt, deren Antworten jedoch um die für diese Befragung besonders interessierenden Bereiche „Marktsimulation Launch“ und „Marktsimulation Relaunch“ erweitert wurden. Diese Frage wurde zugleich dazu verwendet, beide Begriffe zu definieren und diente darüber hinaus als weitere Filterfrage zur Differenzierung in

Unternehmen, die die CA noch nie für den Zweck der Marktsimulation verwendet haben (Non-User) und solche Unternehmen, die eine derartige Anwendung bereits durchgeführt haben (User). Den Non-Usern wurde vor Beendigung der Befragung eine Statementbatterie gezeigt, auf der sie angeben konnten, wie sehr sie vorformulierte Kritikpunkte an bzw. Probleme mit der CA-basierten Marktsimulation von ihrer Verwendung abhalten.

Für die User der Marktsimulation wurde nun ein Übergang zu eben jenem Fragebogenteil geschaffen, indem noch einmal eine ausführlichere Definition des Verständnisses dieses Begriffs gegeben und die Frage gestellt wurde, in wie vielen ihrer CA-basierten Projekte im Anschluss eine Marktsimulation durchgeführt wurde. Daran schließen sich auch hier die Fragen nach der genutzten Software und dem Zweck der Nutzung an. Im Folgenden wurde nach der Methode der Transformation der Präferenzwerte in Auswahlentscheidungen und nach der Bewertung der Schwächen und Stärken der Marktsimulation auf Basis der CA gefragt. Um die Bewertungen untereinander vergleichen zu können, wurden für die Kritikpunkte sowie für die Stärken und Schwächen sowohl bei Usern als auch Non-Usern dieselben Skalen verwendet. Einer Beeinflussung der Antworten durch Reihenfolgeeffekte wurde dadurch vorgebeugt, dass die Fragen nach den Schwächen und Stärken des Verfahrens rotiert wurden. Im Anschluss an die Statementbatterien wurden die Teilnehmer gefragt, ob sie zusätzliche Faktoren in die Marktsimulation mit einbeziehen. Diese Frage soll Licht in das Thema der genaueren Ausgestaltung der Marktsimulation bringen und zeigen, auf welche Weise die Ergebnisse der Marktsimulation kalibriert, dargestellt und für das Marketing verarbeitet werden. Auch hier wurden mögliche Antworten vorgegeben, die nach der Häufigkeit der Einbeziehung bewertet werden mussten. Darüber hinaus wurde aber die Möglichkeit gegeben, eigene Antworten hinzuzufügen. Zum Abschluss der Befragung wurden die Antwortenden um eine Einschätzung der Präzision der Marktanteilsschätzungen gebeten. Hiermit soll herausgefunden werden, wie sehr die Praktiker dem Instrument vertrauen und für wie effektiv sie es halten. Nach kleineren Anpassungen des Fragebogens im Anschluss an einen Pretest mit zwei Marktforschungsexperten wurde die Befragung online gestellt.

4.2. Auswahlverfahren

Die Zielgruppe der Befragung besteht aus allen Praktikern, die die CA und somit möglicherweise auch die Marktsimulation nutzen. Um einen umfassenden und

möglichst repräsentativen Einblick in den Einsatz der Marktsimulation in Deutschland zu erhalten, wurden Marktforschungsinstitute und Unternehmensberatungen befragt, da bei diesen auch aufgrund vorangehender Studien der hauptsächliche Einsatz der CA und somit auch der mögliche Einsatz der Marktsimulation vermutet wird. Als Grundlage für die Marktforschungsinstitute wurde das Handbuch des BVM von 2008 herangezogen. Anhand des Leistungsverzeichnisses kann ermittelt werden, welche Marktforschungsinstitute eine bestimmte Leistung in ihrem Portfolio anbieten. In die Befragung aufgenommen wurden alle Institute, die unter folgenden Begriffen gelistet sind: „Conjoint-Analysen“, „Conjoint-Analysen/Conjoint-Measurement“, „Conjoint-Measurement“, „Absatzprognosen“, „Marktsimulation“. Dies ergibt für die Marktforschungsinstitute eine Stichprobengröße von 178 Instituten. Die in die Befragung aufzunehmenden Unternehmensberatungen wurden anhand des BdU ermittelt. Da bei dieser Quelle kein Leistungsverzeichnis vorhanden ist, wurden prinzipiell alle Mitglieder dieses Vereins in die Befragung aufgenommen. Die Mitgliederliste des BdU verzeichnet 516 Mitglieder (Stand 13.01.2010), elf dieser Mitglieder waren redundant verzeichnet. Bei weiteren 15 Mitgliedern war keine Email-Adresse aufgeführt. Von diesen konnten sieben Email-Adressen nachrecherchiert werden, die übrigen acht Mitglieder mussten ebenfalls von der Befragung ausgeschlossen werden. Für die restlichen 497 Unternehmensberatungen wurde eine einfache Zufallsauswahl von 50% gezogen, die zusammen mit den Marktforschungsinstituten befragt wurden. Aufgrund des geringen Rücklaufs (aus dem Bereich der Unternehmensberatungen) wurden später auch die restlichen Mitglieder befragt, so dass sich zusammen mit den Mitgliedern des BVM eine Gesamtstichprobengröße von 675 ergibt.

4.3. Erhebung

Die Erhebung erfolgte im Zeitraum zwischen dem 12.01.2010 und dem 31.01.2010. Hierzu wurde eine Standard-Email an die 675 Institute und Unternehmensberater mit der Bitte um Befragungsteilnahme gesendet. Über einen in der Email genannten Link konnte die Online-Befragung gestartet werden. Nach einer Woche wurde ein Reminder an diejenigen Adressen gesendet, die noch nicht an der Befragung teilgenommen hatten. Den Teilnehmern wurde als Incentive eine Übersicht über die Ergebnisse versprochen. Diese wurde im März 2010 versendet.

Insgesamt nahmen 142 Institute und Unternehmensberater an der Befragung teil, was einer Ausschöpfungsquote von 21% entspricht. Diese befindet sich im Be-

reich der oben vorgestellten Studien. 54 der Befragten haben die Befragung nicht zu Ende geführt, so dass die Nettostichprobe 88 Antwortende beträgt. Hierunter finden sich 50 Marktforschungsinstitute, drei Dienstleister für Datenanalyse, 29 Unternehmensberater und sechs Sonstige Dienstleister. Die geringe Zahl an Antworten aus dem Bereich der Unternehmensberater war so erwartet worden, da sich unter den Mitgliedern des BdU ein Großteil an Unternehmen befindet, der sich auf Personalberatung, HR-Beratung oder Organisationsberatung spezialisiert hat und dessen Kernkompetenzen folglich nicht im Bereich der multivariaten Verfahren liegt.

Insgesamt 60 der 80 Teilnehmer gaben an, die CA in ihrem Unternehmen schon einmal genutzt zu haben, darunter sechs Unternehmensberatungen, 48 Marktforschungsinstitute, drei Dienstleister für Datenanalyse und drei Sonstige. Fast alle, nämlich 58 der 60 Unternehmen haben die CA in den letzten zwei Jahren eingesetzt und in Summe wurden 871 Projekte durchgeführt, was einer Quote von Projekten pro Jahr und Unternehmen von 7,5 entspricht.

4.4. Ergebnisse

Schließt man von der Anzahl der festangestellten Mitarbeiter auf die Größe des Unternehmens, so zeigt sich, dass die meisten der antwortenden Befragten in kleinen bis mittleren Unternehmen arbeiten. 36% der Antwortenden arbeiten in einem Unternehmen mit 1-5, 19% in Unternehmen mit 6-10 und 34% in Unternehmen mit 11-50 Festangestellten. Die restlichen 11% verteilen sich zu 6% auf Unternehmen mit 51-100 und zu 5% auf Unternehmen mit mehr als 100 festangestellten Mitarbeitern.

Betrachtet man nun lediglich die Unternehmen, die die CA im Betrachtungszeitraum genutzt haben, so fällt die geringe durchschnittliche Anzahl der durchgeführten Projekte pro Unternehmen auf. So haben 55% der Unternehmen 1-9 Projekte in den letzten beiden Jahren durchgeführt, 37% liegen bei 10-49 Projekten und 5% haben mehr als 50 Projekte durchgeführt. Der Mittelwert über alle 60 Unternehmen liegt bei 14,52 Projekten in den letzten beiden Jahren.

Genau wie bei Melles/Holling (1998) liegt die Konsumgüterbranche mit 65% an der Spitze der Nachfrage, gefolgt von der Industriegüterbranche (45%), den finanziellen Dienstleistungen (42%) und den anderen Dienstleistungen (28%). Bei der inhaltlichen Zielsetzung der durchgeführten Studien dominieren die Produkt- / Konzeptentwicklung sowie die Preisfindung mit deutlichem Abstand (vgl.

Tabelle 1). Aber bereits auf den Plätzen drei und fünf folgen „Marktsimulation Launch“ und „Marktsimulation Relaunch“ mit 55% bzw. 42% der Projekte. Man erkennt schon an dieser Stelle die große Bedeutung, die der Marktanteilsschätzung zukommt.

Tabelle 1: Zu welchem Zweck/welche Fragestellung wird die CA in Ihrem Unternehmen allgemein angeboten und eingesetzt? (Mehrfachantwort; n=60)

Zweck / Zielsetzung	Prozentwert
Produkt- / Konzeptentwicklung	78
Preisfindung	73
Marktsimulation „Launch“	55
Marktsegmentierung	45
Marktsimulation „Relaunch“	42
Wettbewerbsanalyse	35
Repositionierung	25
Markenwertmessung	20
Distributionspolitik	7
Werbungsplanung	3

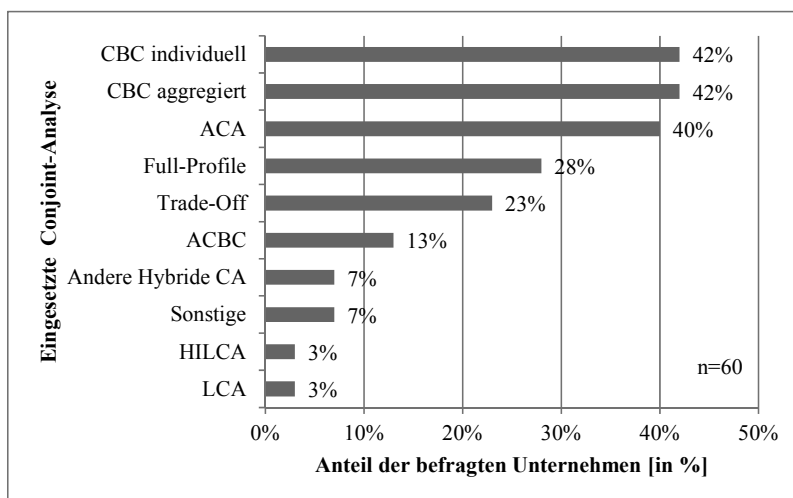
Quelle: Eigene Berechnungen.

Die Datenerhebungsmethoden, die für die Conjoint-Projekte verwendet werden, wurden mit Hilfe einer Konstantsummenskala erfragt, indem die angegebene Anzahl an Projekten auf die unterschiedlichen Methoden zu verteilen waren. Der Trend hin zur Nutzung des Internets, der sich schon bei der Studie von Wittink/Vriens/Burhenne (1994) andeutet und sich bei Melles/Holling (1998) fortsetzt, zeichnet sich auch bei der vorliegenden Studie ab. Im Durchschnitt wird bei den durchgeführten Projekten zu fast 44% die Online-Befragung eingesetzt. Mit deutlichem Abstand folgen die Datenerhebungsmethode Face-to-Face (25,4%) und die telefonische Befragung (19,4%), wohingegen Paper-Pencil (7,2%) kaum noch Bedeutung hat.

Hartmann/Sattler (2002) sind in ihrer Studie die ersten, die nicht mehr nach der Skalierung der Antworten, sondern nach den Methoden der CA fragten. Dies lässt sich zurückführen auf die Tatsache, dass sich durch die Herausbildung neuer Bewertungsverfahren und durch den Fortschritt im Bereich der Informationstechnik eine Entwicklung vollzogen hat, am Ende derer die Art der Bewertung nicht mehr so leicht vom Forscher zu variieren ist, sondern untrennbar mit der gesam-

ten Methode verknüpft ist. Oft wird sie durch die Verwendung einer bestimmten Software vorgegeben. Auch in vorliegender Studie wurde nach den genutzten Methoden der CA gefragt. Zuerst wurde ermittelt, welche Methoden überhaupt eingesetzt wurden, anschließend wurde – nur für die angegebenen Methoden – wiederum eine Verteilung der vom Unternehmen durchgeführten Projekte mittels Konstantsummenverfahren auf die Methoden vorgenommen. Für die erste Stufe ergibt sich die in Abbildung 1 dargestellte Verteilung.

Abbildung 1: Welche der folgenden Methoden sind bei diesen Projekten zum Einsatz gekommen? (Mehrfachantwort)



Quelle: Eigene Berechnungen.

Sowohl die CBC mit individueller als auch mit aggregierter Nutzenwertermittlung kommen am häufigsten zum Einsatz. Wie bei Hartmann/Sattler (2002) zeigt sich, dass die CBC (oder „discrete choice CA“) die aktuell populärste Methode der CA darstellt. Die ACA – bis in die neunziger Jahre die meistgenutzte Methode – findet sich erst auf dem dritten Rang. Auch die traditionelle CA wird weiterhin genutzt, sowohl mit Full-Profile- als auch mit Trade-Off-Darstellung der Stimuli. Die neueste Methode von Sawtooth Software Inc., ACBC, liegt hinter den populärsten und bekanntesten Methoden, hat den Durchbruch jedoch noch nicht geschafft. Die restlichen Varianten der CA kommen nur vereinzelt zum Einsatz.

Zum Abschluss sollten auch noch die in der Praxis eingesetzten Softwarepakete ermittelt werden. Hier zeigt sich das erwartete Bild, dass wenige Softwareanbieter den Markt dominieren. 60% der Antwortenden haben mindestens ein Mal die Software SKIM genutzt. Dahinter folgt mit großem Abstand SPSS / PASW (28%) – der Marktführer auf dem Gebiet der statistischen Analyse in Deutschland, der aber bezüglich der CA deutlich hinter Sawtooth liegt. Ein Grund dafür dürfte sein, dass die SPSS nicht über die Möglichkeit einer CBC oder ACA verfügt, sondern lediglich die traditionelle CA möglich ist. Nur vereinzelt genutzt werden die Softwarepakete von Globalpark (vier Nennungen) und SAS (eine Nennung). Auffällig ist ein großer Prozentsatz in der Kategorie „Sonstiges“ (25%), unter der vor allem Eigenentwicklungen genannt werden (neun Nennungen), sowie die Software CIS der Firma IfaD (Institut für angewandte Datenanalyse) mit zwei Nennungen.

Ein Ziel der Befragung ist es herauszufinden, welche Probleme CA-nutzende Unternehmen davon abhalten, deren Ergebnisse in einer Marktsimulation weiterzuverarbeiten. Um das zu erforschen, wurden alle Unternehmen, die die Frage nach dem Zweck der Verwendung der CA nicht mit Marktsimulation „Launch“ oder „Relaunch“ beantworteten, herausgefiltert, und vor Beendigung der Befragung über eben jene Probleme befragt. Hierzu wurde eine Statementbatterie mit möglichen Problemen entwickelt, die die 22 Antwortenden auf einer Viererskala („trifft überhaupt nicht zu“, „trifft eher nicht zu“, „trifft eher zu“, „trifft voll und ganz zu“) bewerteten. Darüber hinaus wurde auch die Möglichkeit gegeben, ein Statement nicht zu beurteilen. Für diese Frage werden zur Auswertung der Mittelwert und die Top2Box herangezogen. Die Top2Boxen werden immer auf der Basis aller 22 Unternehmen ermittelt, die die CA nicht zur Marktsimulation nutzen, der Mittelwert hingegen bezieht sich nur auf die Unternehmen, die nicht die Kategorie „Kann ich nicht beurteilen“ gewählt haben. Dadurch ergibt sich bei der Mittelwertberechnung für jedes Statement eine unterschiedliche Basis.

Tabelle 2: Sie haben angegeben, dass Sie die CA nicht zur Marktsimulation nutzen. Welche der folgenden Probleme bzw. Kritikpunkte halten Sie davon ab?

Statement/Problem	Mittelwert	Top2Box
Simulation vernachlässigt, dass unterschiedliche Märkte/Branchen unterschiedlich schnell auf Einführung neuer Produkte reagieren	3,13 (n=15)	55%
Prognosen sind ungenau / nicht valide	3,0 (n=14)	45%
Prognosen können von vielen Faktoren beeinflusst werden, die nicht in der Simulation erfasst werden (Werbung, Handel, POS, Trends, Aktivitäten des Wettbewerbs, ...)	3,0 (n=14)	45%
Erstellung von Marktsimulationen gehört nicht zu den Kernkompetenzen meines Unternehmens	2,94 (n=16)	59%
Marktrrägheit / Diffusionsprozesse in der Simulation unterschätzt	2,93 (n=14)	46%
In künstlicher Conjoint-Situation zeigen Probanden höhere Zahlungsbereitschaften als in der Realität	2,91 (n=11)	36%
Conjointbasierte Marktsimulationen überschätzen das reale Marktpotenzial	2,91 (n=11)	32%
Conjointbasierte Marktsimulationen können mögliche Markterweiterungen durch neu eingeführte Produkte nicht simulieren	2,87 (n=15)	45%
Produktähnlichkeiten werden in der Simulation zu wenig beachtet	2,77 (n=13)	36%
Großer Erfahrungsschatz zur Durchführung einer conjointbasierten Marktsimulation nötig	2,77 (n=13)	36%
Conjointbasierte Marktsimulationen benötigen einen Referenzmarkt, was sie für echte Innovationen unbrauchbar macht	2,71 (n=14)	41%
Prognosen müssen aufwändig kalibriert werden	2,64 (n=14)	32%
Sättigungseffekte können nicht mit einbezogen werden	2,62 (n=13)	32%
Überführung der Präferenzwerte in Marktanteile ist schwierig	2,57 (n=14)	36%
Bedeutung des Preises in Relation zu anderen Conjoint-Dimensionen wird unterschätzt	2,38 (n=13)	27%
Preissensitivität wird überschätzt	2,38 (n=13)	27%
Keine geeignete Software vorhanden	1,75 (n=12)	15%
Sonstiges	3,43 (n=7)	27%

Quelle: Eigene Berechnungen.

Als größtes Problem bei der Marktanteilsschätzung auf Basis der CA wurde von den Non-Usern bewertet, dass die Simulation die unterschiedlichen Geschwindigkeiten vernachlässigt, mit der unterschiedliche Branchen und Märkte auf die Einführung neuer Produkte reagieren. Diese Aussage weist auch mit 32% den höchsten Wert aller Statements für die Kategorie „trifft voll und ganz zu“ auf. Ein weiterer wichtiger Kritikpunkt der Non-User liegt in der Prognosegenauigkeit. So sind jeweils 45% der Antwortenden der Auffassung, die Prognosen seien ungenau bzw. nicht valide und könnten von zu vielen nicht einbezieharen Faktoren beeinflusst werden. Auf dem vierten Platz folgt ein eher pragmatischer Hinderungsgrund, da 59% der Non-User angeben, die Marktsimulation gehöre nicht bzw. eher nicht zu den Kernkompetenzen ihres Unternehmens. Ein weiterer Punkt der von den Non-Usern als Problem gewertet wird, das sie vom Einsatz der Marktsimulation abhält, ist die Unterschätzung von Marktträgheit und Diffusionsprozessen.

Was die explizite Untersuchung des Faktors Preis mithilfe der Marktsimulation angeht, scheinen die Non-User wenig Bedenken zu haben. Die Unterschätzung der Bedeutung des Preises in Relation zu anderen Conjoint-Dimensionen wird ebenso von nur 27% der Antwortenden mit „trifft eher zu“ bzw. „trifft voll und ganz zu“ bewertet. Absolut keinen Hinderungsgrund der Nutzung sehen die Non-User in der Verfügbarkeit von Software.

Nach dieser Frage war die Befragung für die 22 Non-User beendet, für die 38 Unternehmen, die schon eine Marktsimulation durchgeführt haben, wurde ein Übergang zur zweiten Phase der Befragung geschaffen. Dazu wurden die Teilnehmer gefragt, in wie viel Prozent der angegebenen CA-Projekte sie eine Marktsimulation im vorab definierten Sinne angeschlossen haben. Im Durchschnitt sind bei 62% der CA-basierten Projekte auch Marktsimulationen durchgeführt worden. Dieser Wert belegt wiederum die große Bedeutung, die die Absatz- bzw. Marktanteilsschätzung im Bereich des Marketings einnimmt, und wie sehr die CA mittlerweile mit der Marktsimulation verbunden wird. 47% der Antwortenden führt sogar in mehr als 75% der Fälle eine Marktsimulation im Anschluss an eine CA durch. Nur 11% der Teilnehmer (4 Unternehmen) hat in den letzten zwei Jahren die Ergebnisse der CA nie für eine Marktanteilsschätzung genutzt.

Auch für den Bereich der Marktsimulation wurde nach der für diesen Zweck verwendeten Software gefragt: 63% der Antwortenden haben in den letzten zwei Jahren auf das Softwareprogramm SMRT von Sawtooth zurückgegriffen, gefolgt von eigenen Programmierungen mit 40%. Die Abhängigkeit vom Marktführer

wird in Ermangelung an Alternativen vor allem durch die selbständige Programmierung eines Tools behoben. SPSS / PASW scheint nicht als adäquater Ausweg gesehen zu werden, denn nur 13% haben diese Software bereits für die Marktsimulation genutzt.

Eine Simulation eines Marktes mit mehreren (potenziellen) Produkten und die Absatzprognose daraus kann für zahlreiche Zwecke eingesetzt werden: Die „Aufdeckung von Preisspielräumen bei bestehenden Produkten“ war bei 74% der Teilnehmer Zielsetzung der Marktsimulation. Vor allem die Ermittlung des Potenzials von Preiserhöhungen bei Produkten, die bereits auf dem Markt sind, scheint hierbei im Mittelpunkt zu stehen. Direkt dahinter mit jeweils 71% folgen die „Volumenschätzung bei Einführung neuer Produkte“ und die „Produktentwicklung“. Auf dem vierten Platz liegt die „Neupreispositionierung /-findung mit 61%, gefolgt von „Produktlinienveränderung“ mit 47%.

Bei der Wahl der Transformationsregeln werden die First Choice und Logit von 55% bzw. 50% der Teilnehmer zur Transformation der Präferenzwerte in Wahlurteile genutzt. Allerdings wurde auch Randomized First Choice von 45% der Befragten angewendet, mit steigender Tendenz. Ein Grund für die fortgeschrittene Etablierung der Methode könnte sein, dass sie in der weit verbreiteten Software SMRT von Sawtooth standardmäßig als mögliche Transformationsregel integriert ist.

Um die Probleme der Praxis mit der Marktsimulation von allen Seiten zu beleuchten, wurden auch die User nach ihrer Kritik an der Marktsimulation befragt. Dazu wurde dieselbe Statementbatterie wie bei den Non-Usern verwendet.

Tabelle 3: Ich nenne Ihnen nun einige typische Kritikpunkte, die im Zusammenhang mit der Marktsimulation (auf Basis der CA) in der Literatur und von Praktikern genannt werden. Welche davon treffen Ihrer Meinung nach auf die Marktsimulation zu?

Kritikpunkt	Mittelwert	Top2Box
Prognosen können von vielen Faktoren beeinflusst werden, die nicht in der Simulation erfasst werden (Werbung, Handel, POS, Trends, Aktivitäten des Wettbewerbs, ...)	3,46 (n=37)	87%
Großer Erfahrungsschatz zur Durchführung einer conjointbasierten Marktsimulation nötig	3,30 (n=37)	79%
Marktträchtigkeit / Diffusionsprozesse in der Simulation unterschätzt	3,13 (n=31)	65%
Simulation vernachlässigt, dass unterschiedliche Märkte/ Branchen unterschiedlich schnell auf Einführung neuer Produkte reagieren	3,00 (n=36)	71%
Sättigungseffekte können nicht mit einbezogen werden	2,94 (n=31)	61%
Conjointbasierte Marktsimulationen überschätzen das reale Marktpotenzial	2,94 (n=32)	58%
Prognosen müssen aufwändig kalibriert werden	2,82 (n=34)	53%
Conjointbasierte Marktsimulationen können mögliche Markterweiterungen durch neu eingeführte Produkte nicht simulieren	2,74 (n=35)	53%
In künstlicher Conjoint-Situation zeigen Probanden höhere Zahlungsbereitschaften als in der Realität	2,70 (n=37)	47%
Überführung der Präferenzwerte in Marktanteile ist schwierig	2,69 (n=35)	47%
Prognosen sind ungenau / nicht valide	2,67 (n=36)	50%
Conjointbasierte Marktsimulationen benötigen einen Referenzmarkt, was sie für echte Innovationen unbrauchbar macht	2,66 (n=35)	53%
Preissensitivität wird überschätzt	2,51 (n=37)	45%
Produktähnlichkeiten werden in der Simulation zu wenig beachtet	2,49 (n=35)	45%
Bedeutung des Preises in Relation zu anderen Conjoint-Dimensionen wird unterschätzt	2,37 (n=35)	34%
Sonstiges	2,86 (n=7)	11%

Quelle: Eigene Berechnungen.

Im Vergleich mit den Non-Usern ist zu erkennen, dass die Werte insgesamt höher ausfallen. So liegt der Mittelwert für das wichtigste Hindernis bei den Non-Usern bei 3,13. Bei den Usern ergibt sich für den aus ihrer Sicht größten Kritikpunkt – die Tatsache, dass die Prognosen von vielen Faktoren beeinflusst werden können, die nicht in der Simulation erfasst werden – ein Mittelwert von 3,46. Darüber hinaus geben 87% der User an, dass dieses Statement „eher“ oder „voll und ganz“ zutrifft. Diese auch in der Literatur immer wieder kritisierte Tatsache scheint also in der Praxis weitestgehend bekannt zu sein und übereinstimmend Bedenken hervorzurufen. Während bei der ersten Aussage noch recht hohe Übereinstimmung zwischen Non-Usern und Usern besteht (Non-User: Platz 3 – User: Platz 1), ist im nächsten Punkt ein deutlicher Unterschied in der Bewertung zu erkennen, der aber schon im Statement selbst begründet liegt. So erreicht der von den Non-Usern durchschnittlich mit 2,77 bewertete Punkt, ein großer Erfahrungsschatz sei zur Durchführung einer CA-basierten Marktsimulation nötig, bei den Usern einen Mittelwert von 3,30. Womöglich zeigt sich erst bei Nutzung der Marktsimulation, dass Erfahrungen in der Branche und mit dem Tool vonnöten sind, um es adäquat einsetzen zu können. 47% der User sind der Meinung, dass dieses Statement „voll und ganz zutrifft“. Wie auch beim ersten Statement hat keiner der Befragten die Bewertung „trifft überhaupt nicht zu“ abgegeben.

Bei beiden Gruppen als schwerwiegende Probleme identifiziert sind die Statements zur Unterschätzung der Marktträchtigkeit bzw. der Diffusionsprozesse und zur Vernachlässigung unterschiedlicher Reaktionsgeschwindigkeiten unterschiedlicher Märkte und Branchen auf Neuprodukteinführungen, die auf den nächsten Plätzen folgen. Auch die nächste Aussage, die von den Usern als ernsthaftes Problem identifiziert wird, hat mit der Reaktion und dem Verhalten des Marktes bezüglich eines Produkts zu tun. Ein Wert von über 60% in der Top2Box belegt die Auffassung, die fehlende Möglichkeit des Einbezugs von Sättigungseffekten stelle eine ernstzunehmende Schwäche des Instruments dar. Unter den Non-Usern wird dies nicht als eines der größten Probleme gesehen, ebenso wenig wie die Überschätzung des realen Marktpotenzials durch conjointbasierte Marktsimulationen, was im Ranking der Mittelwerte der User hingegen durchaus als Kritikpunkt gesehen wird. Ein Punkt, der von den Non-Usern deutlich kritischer gesehen wird als von den Usern ist die Aussage, die Prognosen seien ungenau bzw. nicht valide. Während dies den zweitwichtigsten Hinderungsgrund der Nutzung für die Non-User darstellt, sehen die User eine Vielzahl an größeren Kritikpunkten. Auch dieser Unterschied lässt sich durch die fehlende Erfahrung der Non-User erklären. Sie

kritisieren auf allgemeine Weise die Prognosegenauigkeit, während die User aus Erfahrung im Umgang mit der Marktsimulation spezifische Probleme identifiziert haben, die die Prognosegenauigkeit beeinträchtigen können, und folglich diese in den Vordergrund stellen.

Eine Gemeinsamkeit zwischen den Non-Usern und den Usern besteht eindeutig in der Bewertung der Eignung der Marktsimulation für den Bereich Pricing. In beiden Gruppen werden die Überschätzung der Preissensitivität sowie die Unterschätzung der Bedeutung des Preises in Relation zu anderen Conjoint-Dimensionen auf den hinteren Rängen platziert. Dennoch ist jeweils knapp die Hälfte der User der Meinung, diese Kritikpunkte träfen „eher“ oder gar „voll und ganz“ zu. Mit die wenigste Zustimmung erreicht außerdem die Aussage Produktähnlichkeiten werden in der Simulation zu wenig beachtet. Dies ist wohl auf die Nutzung der First-Choice Regel und die zunehmende Nutzung von RFC zur Transformation der Nutzenwerte zurückzuführen, wodurch das hier angesprochene IIA-Problem umgangen wird.

Um die Gründe für die Nutzung der Marktsimulation auf Basis der CA besser zu erforschen, wurden auch die Stärken des Verfahrens aus Sicht der Praktiker erhoben. Dazu wurde erneut auf einer Statementbatterie mit vorformulierten Aussagen mit üblicher 4-Punkte-Skala abgefragt.

Tabelle 4: Ich nenne Ihnen nun einige typische Stärken, die im Zusammenhang mit der Marktsimulation (auf Basis der CA) in der Literatur und von Praktikern genannt werden. Welche davon treffen Ihrer Meinung nach auf die Marktsimulation zu?

Stärken	Mittelwert	Top2Box
Möglichkeit, Merkmalsausprägungen und Produkte beliebig miteinander zu kombinieren (Produktoptimierung)	3,49 (n= 35)	82%
Erlaubt Einblick in die Preis-Absatz-Beziehung und ermöglicht dadurch Preisoptimierung	3,17 (n= 36)	68%
Möglichkeit zur Identifikation heterogener Zielgruppen / Definition zielgruppenspezifischer Angebote	3,06 (n= 34)	74%
Simulation von Preisen, die gegenwärtig nicht auf dem Markt realisiert werden	3,06 (n= 36)	63%
Ist am besten geeignet, das Entscheidungsverhalten von (potenziellen) Kunden zu prognostizieren	3,03 (n= 36)	76%
Möglichkeit der Integration von Kosten oder weiteren Informationen	2,91 (n= 34)	63%
Marktanteile eines neuen Produkts können schon prognostiziert werden, bevor es vollständig entwickelt ist	2,86 (n= 36)	66%
Bietet die valideste Möglichkeit zukünftige Marktanteile zu prognostizieren	2,79 (n= 34)	63%
Substitutionseffekte werden beachtet	2,74 (n= 31)	55%
Vergleichsweise kostengünstiges Instrument	2,71 (n= 35)	55%
Für den Kunden / Auftraggeber leicht nachvollziehbar und handhabbar	2,44 (n= 36)	34%
Sonstiges	2,67 (n= 9)	11%

Quelle: Eigene Berechnungen.

Betrachtet man die Rangliste der Stärken der Marktsimulation aus Sicht der User, so fällt auf, dass sich die Vorzüge des Instruments mit dessen wichtigsten Zielsetzungen weitgehend decken (vgl. Tabelle 1). Wie in Tabelle 4 abzulesen, sind die wichtigsten Stärken, die hinter der Marktsimulation stehen, die „Möglichkeit, Merkmalsausprägungen beliebig miteinander zu kombinieren (Produktoptimie-

nung)“, was für die Produktentwicklung als auch für die Produktlinienveränderung enorm hilfreich ist, „Erlaubt Einblick in die Preis-Absatz-Beziehung und ermöglicht dadurch Preisoptimierung“, was der Aufdeckung von Preisspielräumen dienen kann, oder auch „Simulation von Preisen, die gegenwärtig nicht auf dem Markt realisiert werden“, was wiederum die Neupreispositionierung verbessert. Die Punkte, die sich direkt auf die Prognose von Marktanteilen beziehen und folglich mit der Volumenschätzung in Verbindung gebracht werden, weisen jedoch nur durchschnittliche Werte auf, was etwas überrascht, da die Volumenschätzung bei den Zielsetzungen der Marktsimulation an zweiter Stelle steht. Trotz der mittelmäßigen Platzierung sind 63% der User der Auffassung, die Aussage die Marktsimulation auf Basis der CA biete „die valideste Möglichkeit zukünftige Marktanteile zu prognostizieren“ treffe eher bzw. voll und ganz zu. Darüber hinaus zeigt auch der hohe Wert in der Top2Box von 76% bezüglich der Aussage, die Marktsimulation auf Basis der CA sei „am besten geeignet, das Entscheidungsverhalten von (potenziellen) Kunden zu prognostizieren“, welche Prognosemöglichkeiten dem Verfahren zugeschrieben werden.

Ganz am Ende der Reihenfolge rangieren eher unternehmerische Aspekte wie die Einstufung des Tools als „vergleichsweise kostengünstiges Instrument“, das jedoch in der Top2Box immer noch einen Wert von 55% erreicht. Mit nur 34% in dieser Kategorie landet die leichte Nachvollziehbarkeit und Handhabung für den Kunden mit deutlichem Abstand weit abgeschlagen.

Genau wie die Stärken und Schwächen wurden auch die Faktoren, die zusätzlich in die Marktsimulation einbezogen werden, auf einer Viererskala bewertet. Mit den Ausprägungen „Immer“, „Häufig“, „Selten“ und „Nie“ soll die Häufigkeit des Einbezugs zusätzlicher Informationen ermittelt werden. Zur Interpretation werden ebenfalls die Top2Box und der Mittelwert ausgewiesen. Letzterer weist bei jedem Faktor die gesamte Basis von 38 Unternehmen auf, da auf eine Integration der Antwortmöglichkeit „Kann ich nicht beurteilen“ an dieser Stelle verzichtet wurde.

Tabelle 5: Beziehen Sie zusätzliche Faktoren in die Marktsimulation mit ein?
(n=38)

Faktor	Mittelwert	Top2Box
Daten von Konkurrenzprodukten	2,82	74%
Gewichtungsfaktoren auf Basis von aus anderen Fragen derselben Befragung gewonnen Informationen (z.B. Markenbindung)	2,5	53%
Historische Absatz-/Preisdaten	2,26	45%
Verfügbarkeit von Gütern und Dienstleistungen	2,11	42%
(geplante) Ausgaben für Werbung/Kommunikationspolitik	2,08	34%
Kostenfunktionen	2,00	26%
Deckungsbeiträge	1,89	18%
Sonstiges	1,58	21%

Quelle: Eigene Berechnungen.

Fast Drei Viertel der 38 Antwortenden beziehen häufig oder immer Daten von Konkurrenzprodukten mit in die Marktsimulation ein, wobei die meisten Nennungen auf die Kategorie „Häufig“ entfallen (53%). Auf dem zweiten Platz folgen Gewichtungsfaktoren, die zur Kalibrierung der Prognosen eingesetzt werden. Dabei werden zumeist die Ergebnisse aus der CA mit einem Gewichtungsfaktor multipliziert, der mithilfe von Informationen wie beispielsweise der Markenbindung der Befragten ermittelt wird. Auch historische Absatz- und Preisdaten sowie die Verfügbarkeit von Gütern und Dienstleistungen sind wichtige Möglichkeiten der Kalibrierung, die von über 40% der Befragten häufig oder immer eingesetzt werden. Etwas überraschend landen die Faktoren „Kostenfunktionen“ und „Deckungsbeiträge“ auf den letzten Plätzen und werden nur selten genutzt. Diese Informationen bieten zwar eine einfache Möglichkeit, in Kombination mit der Ermittlung einer Preis-Absatz-Funktion nicht nur den optimalen Preis, sondern auch den erwarteten Gewinn und die Rendite zu prognostizieren, diese Option wird in der Praxis jedoch nicht sehr häufig genutzt.

Für eine Einschätzung der zukünftigen Entwicklung der CA wurde auf zwei offene Fragen zurückgegriffen: Es wurde gefragt, für welche Anwendungsfelder man die CA in der Zukunft zusätzlich einsetzen könnte und was methodisch dazu benötigt würde. Bei der ersten Frage entfielen die meisten der Nennungen (sechs) auf den Bereich Zweck bzw. Zielsetzung der CA. Hier wurden Ziele wie Incentivierungsprogramme, Testmarktsimulation oder auch Benefitsegmentierung genannt.

Zwei der sechs Nennungen entfallen auf Zielsetzungen im Zusammenhang mit der Untersuchung der Marke. Neben dem Zweck der Nutzung fassten drei Unternehmen die Formulierung „Anwendungsfelder“ in der Frage als Branchen auf und erwähnten dabei den Servicebereich, die Konsumgüterbranche oder auch die Nutzung der CA für Wahlkampfzwecke. Nur eine Person interpretierte die Frage im methodischen Sinn und ist der Meinung, dass die CA vor allem dann eingesetzt werden wird, wenn man eine Anspruchsinflation erwartet.

Bei der Frage nach den (methodischen) Weiterentwicklungen, die für die zuvor geäußerten Anwendungsfelder nötig sind, zeigt sich entweder, dass bei den Vorschlägen kein allzu weiter Blick in die Zukunft getätigt wurde oder, dass die Entwicklung der CA bereits weit ausgereift, vielleicht gar ausgereizt ist. Fast die Hälfte der Nennungen (fünf) liegt im Bereich „keine Erweiterungen nötig“. Eine realistischere Erhebungssituation wurde immerhin zwei Mal genannt. So ist eine Person der Meinung, es wurde beinahe kein Versuch unternommen, „das Befragungsdesign und die Analyse nicht nur mächtiger, sondern auch realistischer und damit valider zu machen. Die Frage, ob die CA wirklich modelliert wie Menschen im realen Leben entscheiden, ist viel zu wenig beachtet worden. Es ging immer nur um Modellierungsmächtigkeit.“

Zum Abschluss der Befragung sollten die Teilnehmer ein Urteil über die Genauigkeit der Marktanteilsschätzungen abgeben. Kein Befragter hat die Kategorie „Sehr präzise“ gewählt. Mehr als Zwei Drittel der Befragten erwartet, dass die Abweichung der Prognosen zwischen 10% und 20% liegt, fast ein Drittel geht sogar von Abweichungen von über 20% aus. Die kritische Beurteilung aus Sicht der Befragten zeigt, dass bei der Prognose von Marktanteilen durchaus mit Abweichungen zu rechnen ist.

5 Fazit

Die vorgestellten Ergebnisse belegen, dass die CA im Bereich des Marketings weiterhin sehr stark genutzt wird und sowohl in der Praxis als auch in der Literatur als die derzeit beste Methode zur Messung von Präferenzen gesehen wird. Darüber hinaus hat die Befragung gezeigt, dass die Marktsimulation, also die Absatz- oder Marktanteilsprognose von neuen oder modifizierten Produkten, eines der häufigsten Verfahren der CA darstellt. Der Vorteil derartiger Prognosen liegt dabei in der direkten Einbeziehung der Konsumenten bzw. aktueller Konsumenteninformati-

onen. Dabei wird die Überlegenheit der dekompositionellen Verfahren gegenüber den kompositionellen kaum noch bezweifelt.

Dennoch sind die Anwender dieser Verfahren nicht restlos von der Prognosegenauigkeit der Marktanteilsschätzungen überzeugt. Eine Abweichung von der realen Marktentwicklung wird durchaus erwartet. Die Anwender kennen die Schwächen des Verfahrens und wissen, wie vorsichtig bei der Interpretation der Schätzungen vorgegangen werden muss.

Hingegen ist die Nützlichkeit dieses Instruments, vor allem für die Bereiche Pricing und Produktgestaltung, unbestritten. Das hauptsächliche Problem der Methode besteht darin, dass die Präferenz zwar einen wichtigen, aber nicht den allein kaufentscheidenden Faktor darstellt. Viele Einflüsse, die in der Realität Auswirkungen auf die Kaufentscheidung haben, können nicht in die Befragung einbezogen werden. Hingegen besteht ebenfalls das Argument, dass eine Erhöhung der Komplexität der Stimuli nur zu reduzierten heuristischen Entscheidungsfindungen beim Konsumenten führt: Kaufentscheidungen werden auf wenige Aspekte reduziert und post-hoc rationalisiert. In diesem Fall sind die auswahlbasierten den klassischen Methoden überlegen.

Unter den befragten Praktikern in Deutschland gibt es keine eindeutige Vorstellung darüber, in welche Richtung die Entwicklung der CA und der Marktsimulation in den folgenden Jahren verlaufen könnte und welche methodischen Weiterentwicklungen den Markt verändern könnten. Was die Methode der CA angeht, so werden sicherlich weiterhin die Auswahlentscheidungen dominieren, da sie die größte Realitätsnähe aufweisen und die anfänglichen Schwächen bei der Schätzung der Teilnutzenwerte mittlerweile kaum noch bestehen. Gerade im Bereich der Berechnung der Teilnutzenwerte wurde in den letzten Jahren am meisten geforscht. Vielleicht wird in der Zukunft versucht, das Befragungsdesign zu verbessern und Methoden zu entwickeln, die den realen Kaufakt noch besser abbilden und externe Einflüsse besser aufnehmen können. So zeigen Arora und Allenby (1999) und Ding und Eliashberg (2008) Möglichkeiten auf, den Einfluss von sozialen Interaktionen stärker zu beachten. Die CA unterstellt grundsätzlich, dass Entscheidungen allein gefällt werden, obwohl viele Entscheidungen dem Einfluss auch anderer Personen unterliegen.

In diesem Zusammenhang ist insgesamt zu hinterfragen, wie realistisch die Grundannahmen der CA (Homo oeconomicus, rationale Auswahl einzelner Komponenten mit dem höchsten individuellen Nutzen, Proband hat den Überblick

über alle Ausprägungen usw.) wirklich sind und wie Verletzungen dieser Annahmen die Validität von CA-basierten Ergebnissen und Prognosen beeinflussen.

Sicher scheint, dass die Erhebung zukünftig individueller gestaltet wird, das heißt adaptive Methoden, die die Choice Sets für jeden Probanden und bei jeder Frage neu und auf den jeweiligen Probanden zugeschnitten generieren, treten in den Vordergrund. Möglicherweise hilft diese Entwicklung, mehr Eigenschaften in die Befragung aufnehmen zu können – ein Wunsch, der die Verwender der CA seit jeher beschäftigt. Wichtig wird darüber hinaus sein, die Befragung für den Probanden attraktiver zu machen, und zwar nicht nur durch optische Verbesserungen, sondern vor allem durch eine interessantere inhaltliche Gestaltung. So gibt es Ansätze, Antworten mit Incentives zu verbinden, die Auswahlentscheidungen als Auktionen durchzuführen oder die Befragung wie ein Spiel zu gestalten.

Bezüglich der Auswertungstechnik könnte die Entwicklung in die Richtung gehen, auch Daten anderer Natur mit einzubeziehen. Denkbar wäre zum Beispiel, die Antwortzeit oder die Augenbewegungen von Probanden aufzunehmen und auszuwerten. Darüber hinaus wird es wohl weitere Ansätze zur Integration der Spieltheorie geben, um die Ermittlung der optimalen Lösung von Preis- und Produktentscheidungen zu verbessern.

Es gibt also zahlreiche Forschungsansätze für die Weiterentwicklung der CA und der CA-basierten Marktsimulation, die die Prognosegenauigkeit des Verfahrens sicherlich erhöhen und die Methode somit noch populärer machen werden. Die Entwicklung auf dem Gebiet der Nutzenschätzung ist gut ausgereift, dagegen wird es im Bereich des Erhebungsdesigns und der Auswertung der Ergebnisse in einer Marktsimulation noch weitere Fortschritte geben. Auch auf dem Softwaremarkt besteht noch Entwicklungspotenzial. Aktuell wird er sehr stark von Sawtooth dominiert, wodurch sich einige Unternehmen gezwungen sehen, eigene Tools zu programmieren. Ein Grund für die Vorherrschaft dieses Softwarevertreibers ist sicherlich die einfache Bedienbarkeit der Tools, was dazu führt, dass auch weniger mit der Methodik vertraute Personen in der Lage sind, sowohl eine CA als auch eine Marktsimulationen durchzuführen. Deshalb ist zu befürchten, dass mit dem Anstieg der Nutzung des Verfahrens auch die Zahl der Verwender steigt, die eigentlich nicht das nötige Hintergrundwissen und die nötige Erfahrung zur adäquaten Durchführung und Umsetzung des Verfahrens besitzen.

Literaturverzeichnis

- Arora, N. und Allenby, G. (1999): Measuring the Influence of Individual Preference Structures in Group Decision Making. In: *Journal of Marketing Research*, Vol. 36, S. 476-487.
- Brzoska, L. (2003): Die Conjoint-Analyse als Instrument zur Prognose von Preisreaktionen. Eine theoretische und empirische Beurteilung der externen Validität. Dr. Kovač: Hamburg.
- Cattin, Ph. und Wittink, D. R. (1982): Commercial Use of Conjoint Analysis: A Survey. In: *Journal of Marketing*, Vol. 46, S. 44-53.
- Ding, M. und Eliashberg, J. (2008): A Dynamic Competitive Forecasting Model Incorporating Dyadic Decision-Making. In: *Management Science*, Vol. 54, No. 4, S. 820-834.
- Gaul, W. und Baier, D. (2009): Simulations- und Optimierungsrechnungen auf Basis der Conjointanalyse. In: Baier, D. und Bruschi, M. (Hrsg.): Conjointanalyse. Methoden – Anwendungen – Praxisbeispiele. Springer: Berlin und Heidelberg, S. 163-182.
- Hartmann, A. und Sattler, H. (2002): Commercial Use of Conjoint Analysis in Germany, Austria and Switzerland. Hamburg. (Research Papers on Marketing and Retailing, University of Hamburg, No. 006.)
- Herrmann, A.; Huber, F. und Regier, S. (2009): Adaptive Conjointanalyse. In: Baier, D. und Bruschi, M. (Hrsg.): Conjointanalyse. Methoden – Anwendungen – Praxisbeispiele. Springer: Berlin und Heidelberg, S. 113-127.
- Melles, T. und Holling, H. (1998): Einsatz der Conjoint-Analyse in Deutschland. Eine Befragung von Anwendern. Westfälische Wilhelms-Universität Münster, Psychologisches Institut IV, Dezember 1998.
- Nitschke, T. und Sattler, H. (2005): Präferenzstrukturen und Zahlungsbereitschaften für Online-Medieninhalte: Eine empirische Analyse am Beispiel von Online-Videoangeboten. Hamburg. (Research Papers on Marketing and Retailing, University of Hamburg, No. 26.)
- Orme, B. (2006): Getting Started with Conjoint Analysis. Strategies for Product and Pricing Research. Research Publishers LLC: Madison.

Pilon, T.L. (1998): Extensions to the Analysis of Choice Studies. Sawtooth Software Research Paper Series

Wittink, D.R. und Cattin, Ph. (1989): Commercial Use of Conjoint Analysis: An Update. In: *Journal of Marketing*, Vol. 53, S. 91-96.

Wittink, D.R.; Vriens, M. und Burhenne, W. (1994): Commercial Use of Conjoint Analysis in Europe: Results and Critical Reflections. In: *International journal of research in marketing*, Bd. 11, S. 41-52.

ZWECKGESELLSCHAFTEN IM KONSOLIDIERUNGSKREIS NACH FINANZKRISE UND BILANZRECHTSMODERNISIERUNGSGESETZ – EINE EINFÜHRUNG –

Markus Häfele¹

ABSTRACT

The scope of consolidation was extended by including special purpose entities, which was carried out via a new structure in § 290 HGB (Code of Commercial Law), particularly No. 4 of paragraph 2. The risk and reward approach, which relies on SIC 12, significantly diminishes the possibility of “off-balance” accounting and of pushing risk-taking off balance sheets. This contributes to increased transparency in accounting, which the legislature has been seeking. The scope of consolidation has in effect been extended, and this should prevent risk-laden transactions from being conducted off balance sheet. Whether or not special purpose entities are required to consolidate, however, will continue to be decided on a case-to-case basis, which implies significant leeway in the assessment, as well as accompanying challenges.

JEL Classification: M41

Keywords: Scope of consolidation, special purpose entity, risk and reward approach, risk-laden transactions

1. EINLEITUNG

Zweckgesellschaften werden, wie schon ihr Name impliziert, gegründet, um bestimmte, eng begrenzte Ziele zu erreichen. Sie sind als Finanzierungsvehikel im

¹ WP / StB Prof. Dr. jur. Markus Häfele ist Professor an der Fakultät für Wirtschaft und Recht an der Hochschule Pforzheim. Er lehrt Rechnungslegung und Prüfungswesen unter anderem in den § 8a und § 13b WPO akkreditierten Masterstudiengängen.

Zuge der Finanzmarktkrise in den Focus der medialen Aufmerksamkeit gerückt². Diese Gesellschaften haben aufgrund der negativen Konsequenzen aus der Umgehung der Konsolidierungspflicht bzw. der Auslagerung von Risiken aus der Konzernbilanz über das interessierte Fachpublikum hinaus einige Bekanntheit erlangt. Die initiiierenden Unternehmen wurden aufgrund von Liquiditätszusagen und der Übernahme von Ausfallrisiken teilweise mit bestandgefährdenden Risiken aus der Geschäftsbeziehung zu diesen Zweckgesellschaften konfrontiert³. Mit dem Bilanzrechtsmodernisierungsgesetz (BilMoG), das eine Konsolidierungspflicht von Zweckgesellschaften in § 290 Abs. 2 Nr. 4 HGB vorsieht, hat der Gesetzgeber auf diese Unzulänglichkeit in der deutschen Bilanzierungspraxis reagiert.

2 RECHTLICHE GESTALTUNG - BETEILIGTE

Zweckgesellschaften⁴ sind beispielsweise wesentlicher Bestandteil von sogenannten Asset-Backed-Securities-Transaktionen (ABS-Transaktionen)⁵. Diese Transaktionen sind im Kern rechtlich um eine Zweckgesellschaft aufgebaut. Ein Unternehmen⁶, typischerweise eine Bank, veräußert an die rechtlich selbständige Special Purpose Entity (SPE) Finanzaktiva. In der Regel stellen diese Aktiva (verbriefte) Kundenforderungen aus Immobilien- oder Kreditkartengeschäften oder Leasinggeschäften dar. Die Zweckgesellschaft finanziert den Erwerb der Forderungen durch die Ausgabe von Wertpapieren, die auf dem übertragenen Forderungsportfolio basieren, an Dritte, sprich Investoren. Diese Schuldtitel sind durch die Forderungen gesichert⁷.

² So hat die Deutsche Prüfstelle für Rechnungslegung festgestellt, dass der Konzernabschluss der ehemaligen Landesbank Sachsen Girozentrale zum Abschlussstichtag 31. Dezember 2006 und der Konzernlagebericht 2006 aufgrund der Nichtangabe von Haftungsrisiken im Zusammenhang mit Zweckgesellschaften fehlerhaft sind. Hierüber war gemäß § 37q Abs. 2 Satz 1 WpHG zu berichten.

³ Schruff, Wienand in: Der Konzern, S. 511 ff. (511).

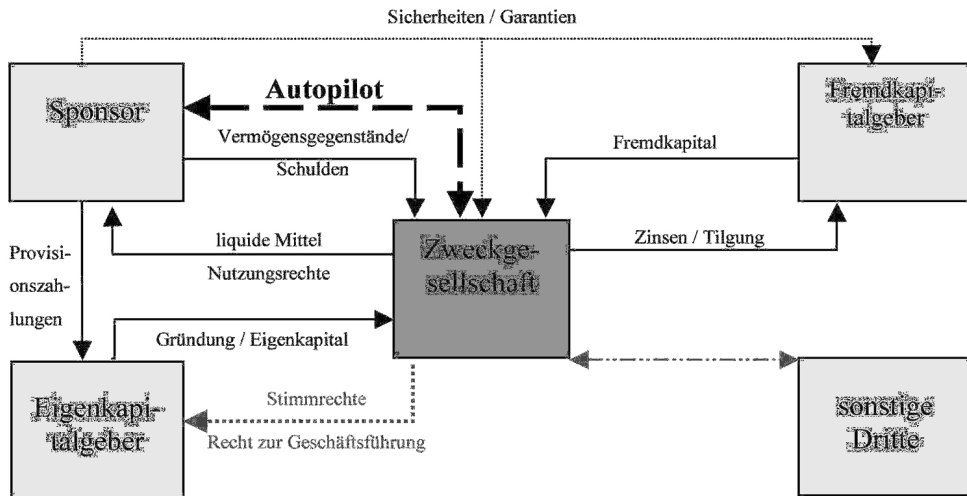
⁴ Special purpose entities, kurz SPE, oder special purpose vehicle, kurz SPV, oder Conduits.

⁵ IDW RS HFA 8 Anm. 43. Allerdings können auch beispielsweise über Leasingobjektgesellschaften Sachverhalte aus der Konzernbilanz ausgelagert werden.

⁶ Auch als Originator / Initiator oder Sponsor (SIC 12.1) bezeichnet, vgl. Schimmelschmidt, Uwe; Happe, Peter in: DB 2004 Heft 48, Beilage 9, S. 1ff. (1).

⁷ FörSchle, Gerhart; Kroner, Matthias in: Beck'scher Bilanzkommentar § 246 Rnr. 29.

Quelle: Glander, Sven; Blecher, Christian in: KoR 2011, S. 467 ff. (468).



Der Vorteil und damit auch der Anlass für die Gründung einer Special Purpose Entity besteht für den initiiierenden Unternehmer (Originator / Initiator / Sponsor) in dem sogenannten „off-balance-sheet-effect“⁸, das heißt der bilanzbefreienden Wirkung der Transaktion. Durch den Forderungsverkauf an die Zweckgesellschaft erhält der veräußernde Unternehmer Liquidität, die zur Schuldenreduzierung eingesetzt werden kann, was beispielsweise aufgrund der Bilanzverkürzung zu einer Erhöhung der Eigenkapitalquote führt. Diese Bilanzverkürzung tritt jedoch nur bei rechtlicher und tatsächlicher Unabhängigkeit der Zweckgesellschaft vom Originator ein. Die angestrebte Wirkung wird verfehlt, wenn die Zweckgesellschaft im Konzernabschluss konsolidiert werden muss.

Neben dem Originator als Forderungsverkäufer und der Zweckgesellschaft als Forderungskäuferin sind weitere juristische und natürliche Personen in derartige Transaktionen involviert. Die Zweckgesellschaft erhält, wie gesagt von Investoren Liquidität aus der Emission von Wertpapieren, die im Rahmen der Finanzierung des Forderungskaufs an den Originator weitergereicht wird. Ein Service Agent, oft der Originator selbst, übernimmt Inkasso und Abwicklung der originären Forderungen. Daneben kann noch ein Treuhänder (in der Regel eine Wirtschaftsprüfungsgesellschaft) mit der Verwaltung der angekauften Forderungen betraut sein. Ein

⁸ Förtschle, Gerhart; Kroner, Matthias in: Beck'scher Bilanzkommentar § 246 Rnr. 29.

Kreditinstitut fungiert als Liquiditätsgeber und stellt der SPE Kreditlinien zur Vorfinanzierung des Forderungsankaufs zur Verfügung. Rating Agenturen bewerten die (auf der Basis des Forderungsportfolios) zu begebenden Wertpapiere für den Kapitalmarkt bzw. die Investoren. Denkbar ist in diesem Zusammenhang ein Credit Enhancement, in dem ein Sicherungsgeber zur Kreditverbesserung bereitsteht, um die Bonität des Forderungsportfolios zu optimieren, was wiederum Auswirkungen auf die Bonität des Ratings für die zu begebenden Wertpapiere zeitigt. Trotz dieser rechtlich aufwendigen Konstruktion sollte der Dreh- und Angelpunkt der SPE nicht aus den Augen verloren werden. Das genuine Ziel der Zweckgesellschaft ist und bleibt der „Off-Balance-Sheet-Effect“ beim Originator. Dieser Zweck steht und fällt mit der Wirksamkeit des Forderungsverkaufs und der Unabhängigkeit der Special Purpose Entity.

3 FORDERUNGSVERKAUF

Zunächst stellt sich die Frage, ob ein wirksamer Forderungsverkauf vorliegt. Ein „true sale“ setzt den Übergang des wirtschaftlichen Eigentums an den Forderungen des Originators auf den Erwerber, die SPE, voraus. Wären die veräußerten Finanzaktiva weiterhin dem Veräußerer wirtschaftlich zuzurechnen, müsste man einen Verkauf verneinen und möglicherweise ein Darlehensverhältnis annehmen. Diese Einzelfallbeurteilung kann sich an bestimmten Indikatoren orientieren, bei deren Vorliegen ein Übergang des wirtschaftlichen Eigentums zu bejahen ist. Ein wesentliches Indiz für das Vorliegen eines „true sale“ ist die Verteilung des Bonitätsrisikos. Der Hauptfachausschuss des IDW geht zwar davon aus, dass auch ein ungewöhnlich hoher Kaufpreisabschlag per se nicht zu einem Fehlschlagen der angestrebten Ausbuchung führt, jedoch muss das Unternehmen die Finanzaktiva regresslos veräußern⁹.

Schädlich in diesem Sinne (das heißt zur Ausbuchung der verkauften Forderung kommt es beim veräußernden Unternehmen mangels Übertragung des wirtschaftlichen Eigentums gerade nicht) sind auch Vereinbarungen über die Rückveräußerung der Forderung gegen ein im Voraus bestimmtes Entgelt sowie Rückkaufzusagen des Unternehmers. Ebenso kontraproduktiv sind nur vorläufige Kaufpreisfestlegungen verbunden mit einer Anpassungspflicht, die nach den tatsächlich eingetretenen Forderungsausfällen bemessen wird. Auch die Übernahme einer First-loss-Verpflichtung durch das Mutterunternehmen steht einer Ausbuchung entgegen,

⁹ IDW HFA 8 Anm.7.

ebenso in dieses Spektrum fällt die Übernahme der Equity-Notes-Tranche durch den Originator, der dadurch – realistisch betrachtet – alle zu erwartenden Risiken abdeckt¹⁰. In diesen Fällen sind die Kaufpreisabschläge zur Abdeckung des Bonitätsrisikos zweckentfremdet¹¹ und führen gerade nicht zur gewollten wirtschaftlichen Zurechnung der Finanzaktiva zu der SPE¹².

4 DAS KONSOLIDIERUNGSKONZEPT DES § 290 HGB

Das Bilanzrechtsmodernisierungsgesetz stellt für die Konsolidierungspflicht von Zweckgesellschaften eine Zäsur dar. Im Gegensatz zu SIC 12 war vor der Geltung des BilMoG dann eine Einbeziehung der SPE in den Konzernabschluss nötig, wenn die Zweckgesellschaften entweder gemäß § 290 Abs. 1 HGB a. F. i. V. m. § 271 Abs. 1 HGB unter der einheitlichen Leitung eines Mutterunternehmens standen oder ein Beherrschungsverhältnis nach den Regelungen des § 290 Abs. 2 HGB a. F. anzunehmen war¹³. Das Konzept der einheitlichen Leitung bezog sich auf alle wesentlichen Entscheidungsbereiche, die innerhalb der SPE auftreten können. Auch eine Festlegung im Voraus konnte erfolgen. War jedoch das Tatbestandsmerkmal der einheitlichen Leitung zu bejahen, so scheiterte die Konsolidierungspflicht nach § 290 Abs. 1 HGB a. F. zumeist am mangelnden Vorliegen einer Beteiligung gemäß § 271 Abs. 1 HGB. Oftmals waren auch die formalen Beherrschungskriterien des § 290 Abs. 2 HGB a. F. zu verneinen, hierauf wurde gerade bei der Gründung der Zweckgesellschaften geachtet¹⁴. Nichtsdestotrotz konnte auch in der Vergangenheit unter Umständen eine Zurechnung der Rechte gemäß § 290 Abs. 3 HGB erfolgen, wenn die Mehrheit der Chancen und Risiken aus der Zweckgesellschaft beim Originator lag¹⁵ und der eigentliche Gesellschafter kein wirtschaftliches Interesse an der SPE hatte¹⁶. Allerdings ist diese Zurechnungsvorschrift auslegungsbedürftig.

¹⁰ Mujkanovic, Robin in: StuB 2008, S. 136 ff. (138).

¹¹ Förtschle, Gerhart; Kroner, Matthias in: Beck'scher Bilanzkommentar § 246 Rnr. 32.

¹² IDW HFA 8 Anm.7 im Falle von Risikoabschlägen, so auch BFH v. 26. August 2010 in: DB 2010, 2652.

¹³ Mujkanovic, Robin in: StuB 2008, S. 136 ff. (139).

¹⁴ Mujkanovic, Robin in: StuB 2008, S. 136 ff. (140).

¹⁵ Adler; Dürig; Schmaltz § 290 Anm. 139.

¹⁶ WP-Handbuch 2006, M 76.

So stellte sich u. a. die Frage, ob der Originator nur die Mehrheit der Risiken oder sämtliche Risiken zur Bejahung einer Konsolidierungspflicht zu tragen hatte¹⁷.

In § 290 Abs. 2 HGB geht das Control Konzept davon aus, dass eine Einbeziehung eines Unternehmens in den Konzernabschluss eines Mutterunternehmens bei beherrschendem Einfluss vorzunehmen ist. Dieser Einfluss ist dann unwiderlegbar gegeben, wenn die Tatbestände des Absatzes 2 vorliegen, also etwa die Mehrheit der Stimmrechte bei dem Gesellschafter (Originator) verbleiben, Nr. 1, oder die Befugnis zur Bestellung und Abberufung von Organen (der SPE) gegeben ist, Nr. 2, oder nach Nr. 3, wenn ein Beherrschungsvertrag zwischen Originator und SPE besteht.

Im Zuge des BilMoG wurde § 290 Abs. 2 HGB geändert, um den Konsolidierungskreis zu erweitern¹⁸. Der Umfang der unwiderlegbaren Vermutung, bei der ein beherrschender Einfluss und mithin Konsolidierungspflicht gegeben ist, wurde ausgedehnt. Während die bisherigen Regelungen in den Nr. 1 bis 3 des Absatzes 2 von der Frage abhängig waren, ob das Unternehmen rein rechtlich betrachtet die Möglichkeit hatte, die Willensbildung der Unternehmung zu bestimmen (legal control), kommt mit der neu eingefügten Nr. 4 in Anlehnung an IAS 27.13 und SIC 12 der Aspekt der economic control stärker zum Tragen¹⁹.

Die unwiderlegbare Vermutung gilt, wenn das Mutterunternehmen bei wirtschaftlicher Betrachtung die Mehrheit der Chancen und Risiken eines Unternehmens trägt, das zur Erreichung eines eng begrenzten und genau definierten Ziels des Mutterunternehmens dient, so die Legaldefinition in § 290 Abs. 2 Nr. 4 HGB. Regelt der Gesellschaftsvertrag der Zweckgesellschaft im Einzelnen alle wichtigen Fragen der Geschäftstätigkeit im Vorhinein verbindlich und konkret, so dass dadurch für die SPE eine Art „Autopilotmechanismus“ installiert wird²⁰, die Geschäftstätigkeit ist letztendlich auf den Erwerb bzw. das Halten der Finanzaktiva sowie der Emission von Schuldtiteln zur Refinanzierung reduziert²¹, so muss von diesem „eng begrenzten und genau definierten Ziel“ ausgegangen werden. Ziel des Gesetzgebers war es, die Auslagerung von Risiken möglichst weitgehend zu ver-

¹⁷ WP-Handbuch 2006, M 76 mit weiteren Nachweisen.

¹⁸ Kozikowski, Michael; Kreher, Markus in: Beck'scher Bilanzkommentar § 290 Rnr. 65, 67.

¹⁹ Hoffmann, Jürgen in: DB 2011, S. 1401 ff. (1401).

²⁰ Theile, Carsten; Salewski, Nadja in: BBK 2011, S. 177 ff. (182).

²¹ Mujkanovic, Robin in: StuB 2008, S. 136 ff. (137); Kozikowski, Michael; Kreher, Markus in: Beck'scher Bilanzkommentar § 290 Rnr. 71.

hindern und in der Folge die Vermögens-, Finanz- und Ertragslage des Konzerns möglichst transparent darzustellen²². Durch die Neuregelung soll es in Zukunft vermehrt zu einer Konsolidierung von Zweckgesellschaften kommen.

Mit der Einbeziehung einer wirtschaftlich orientierten Betrachtungsweise für das Bestehen eines beherrschenden Einflusses hat sich das HGB an die internationalen Rechnungslegungsvorschriften angenähert, insbesondere an die Regelungen des SIC 12 „Consolidation – Special Purpose Entities“²³. Mit IFRS 10 „Consolidated Financial Statements“ hat das IASB im Mai 2011 einen Standard veröffentlicht, der IAS 27 und SIC 12 zukünftig ersetzt²⁴. Nach SIC 12.10, der durchaus auch zur Auslegung der Neuregelung herangezogen werden kann²⁵, sind folgende Kriterien entscheidend für ein Beherrschungsverhältnis und damit für die Konsolidierungspflicht²⁶:

- Die Geschäftstätigkeit der SPE ist an den besonderen, individuellen Erfordernissen des Initiators ausgerichtet.
- Dem Initiator wiederum steht die Möglichkeit der Beeinflussung der Geschäftstätigkeit zu, wobei auch die Einrichtung eines Autopilotmechanismus ausreicht.
- Eine Beherrschung wird auch zu bejahen sein, wenn der Initiator die Mehrheit der Nutzen und Lasten trägt, also bei wirtschaftlicher Betrachtungsweise Chancen und Risiken der Geschäftstätigkeit der SPE auf seiner Seite liegen.

In dieser Fassung geht § 290 Abs. 2 Nr. 4 HGB weiter als der bisherige Beherrschungstatbestände in § 290 Abs. 2 HGB a. F.²⁷, denn entscheidendes Kriterium in Nr. 4 ist die Übernahme der Chancen und Risiken, während formale Beherrschungskriterien nicht relevant sind. Der Gesetzgeber hat hier eine Spezialregelung für Zweckgesellschaften eingeführt, die sich an dem Risk and Reward Ansatz aus SIC

²² BT-Drucksache 16/12407 S. 84 ff. (89).

²³ Glander, Sven; Blecher, Christian in: KoR 2011, S. 467 ff. (468).

²⁴ Nach IFRS 10.C1 ist der Standard erstmals für Geschäftsjahre verpflichtend anzuwenden, die am oder nach dem 1. Januar 2013 beginnen. Abkehr vom „Risk and Reward Approach“ zugunsten eines „Activity Approach“, Erchinger, Holger; Melcher, Winfried in: DB 2011, S. 1229 ff.

²⁵ Kozikowski, Michael; Kreher, Markus in: Beck'scher Bilanzkommentar § 290 Rnr. 67.

²⁶ Glander, Sven; Blecher, Christian in: KoR 2011, S. 467 ff. (469).

²⁷ Gelhausen, Friedrich; Deubert, Michael; Klöcker, André in: DB 2010 S. 2005 ff. (2007).

12 anlehnt²⁸. Das Ergebnis dieses Abwägungsvorgangs ist für die Konsolidierung der SPE beim Originator von entscheidender Wichtigkeit²⁹.

Im Rahmen der Abwägung ist eine qualitative Analyse der einzelnen Faktoren entscheidend. Eine Gesamtwürdigung der Chancen und Risiken sollte unter Berücksichtigung von Wahrscheinlichkeiten erfolgen³⁰. Die Übernahme der Mehrheit der Chancen und Risiken in absoluter Hinsicht ist entscheidend³¹. Für den Ersteller der Konzernbilanz und den Konzernabschlussprüfer impliziert diese Gewichtung naturgemäß Beurteilungsspielräume. Damit einhergehende Unsicherheiten werden durch die Einbeziehung von künftigen Entwicklungen über den Abschlussstichtag hinaus noch ausgedehnt³².

5 ZUSAMMENFASSUNG

Die Erweiterung des Konsolidierungskreises durch die Einbeziehung von Zweckgesellschaften erfolgte durch die Einführung einer neuen Struktur in § 290 HGB, insbesondere durch die Nr. 4 des Absatzes 2. Der an SIC 12 angelehnte Risk and Reward Ansatz verkleinert die Möglichkeiten einer „Off-Balance“-Bilanzierung und die Auslagerung von Risiken erheblich. Dies kommt der vom Gesetzgeber angestrebten erhöhten Transparenz in der Bilanzierung zu gute³³. Der Konsolidierungskreis ist in der Folge deutlich ausgeweitet, die Abwicklung risikobehafteter Transaktionen außerhalb der Bilanz soll verhindert werden³⁴. Die Beantwortung der Frage nach einer Konsolidierungspflicht von Zweckgesellschaften bleibt allerdings nach wie vor eine Einzelfallbetrachtung und birgt erhebliche Beurteilungsspielräume mit den damit einhergehenden Schwierigkeiten.

²⁸ Kritisch Glander, Sven; Blecher, Christian in: KoR 2011, S. 467 ff. (468).

²⁹ Gelhausen, Friedrich; Deubert, Michael; Klöcker, André in: DB 2010 S. 2005 ff. (2008).

³⁰ DRS 19.57; DRS 19.59.

³¹ Kozikowski, Michael; Kreher, Markus in: Beck'scher Bilanzkommentar § 290 Rnr. 75; DRS 19.54, eine relative Mehrheit soll nicht genügen.

³² Gelhausen, Friedrich; Deubert, Michael; Klöcker, André in: DB 2010 S. 2005ff. (2008); Glander, Sven; Blecher, Christian in: KoR 2011, S. 467 ff. (472).

³³ vgl. Beschlussempfehlung und Bericht des Rechtsausschusses des Deutschen Bundestages zum Gesetzesentwurf des BilMoG vom 24. März 2009, BT-Drucks. 16/12407 S. 116.

³⁴ Petersen, Karl; Zwirner, Christian; Künkele, Kai Peter (2011) S. 217.

LITERATURVERZEICHNIS:

Adler, Hans; Düring, Walther; Schmaltz, Kurt: Rechnungslegung und Prüfung der Unternehmen – Kommentar zum HGB, AktG, GmbHG, PublG und nach den Vorschriften des Bilanzrichtlinien-Gesetzes, 6. Aufl., Stuttgart 1995 ff.

Beck'scher Bilanzkommentar, Verfasser (2012), 8. Auflage, München.

Deutsches Rechnungslegungs Standards Committee e.V. (DRSC), DRS 19 Pflicht zur Konzernrechnungslegung und Abgrenzung des Konsolidierungskreise.

Erchinger, Holger; Melcher, Winfried: IFRS-Konzernrechnungslegung - Neuerungen nach IFRS 10, Quelle: DB 2011, S. 1229 ff.

Gelhausen, Friedrich; Deubert, Michael; Klöcker, André: Zweckgesellschaften nach BilMoG: Mehrheit der Risiken und Chancen als Zurechnungskriterium, Quelle: DB 2010 S. 2005ff.

Glander, Sven; Blecher, Christian: Die adäquate Abbildung von Zweckgesellschaften im Konzernabschluss - Eine kritische Analyse der Einbeziehungskonzeptionen nach IFRS und HGB unter Berücksichtigung der ungenutzten Potenziale des Konzepts der einheitlichen Leitung, Quelle: KoR 2011, S. 467 ff.

Hoffmann, Jürgen: Einige Zweifelsfragen zur Konsolidierungspflicht von Zweckgesellschaften nach § 290 Abs. 2 Nr. 4 HGB, Quelle: DB 2011, S. 1401 ff.

IDW (Hrsg.) WP Handbuch 2006, Wirtschaftsprüfung, Rechnungslegung, Beratung, Band I, 13. Auflage, Düsseldorf, 2006.

IDW RS HFA 8 Zweifelsfragen der Bilanzierung von asset backed securities-Gestaltungen und ähnlichen Transaktionen (Quelle: WPg 21/002, S. 1151 ff., FN-IDW 11/2002, S. 640 ff.; WPg 4/2004, S. 138, FN-IDW 1-2/2004, S. 28 f.) Vom 09.12.2003 (Stand).

Mujkanovic, Robin: Zweckgesellschaften nach BilMoG, Quelle: StuB 2008, S. 136 ff.

Petersen, Karl; Zwirner, Christian; Künkele, Kai Peter (2011): BilMoG in Beispielen, 2. Auflage, Herne.

Schimmelschmidt, Uwe; Happe, Peter: Off-Balance-Sheet-Finanzierungen am Beispiel der Bilanzierung von Leasingverträgen im Einzelabschluss und im Konzernabschluss nach HGB, IFRS und US-GAAP, Quelle: DB 2004 Heft 48, Beilage 9, S. 1ff.

Schruff, Wienand: Die Behandlung von Zweckgesellschaften nach dem Bilanzrechtsmodernisierungsgesetz, Quelle: Der Konzern, S. 511 ff.

Theile, Carsten; Salewski, Nadja: HGB-Konzernabschluss: Einbeziehung von Zweckgesellschaften, Quelle: BBK 2011, S. 177 ff.

How do product bundling and internationalization influence the market for professional services in high prize countries?

November 2011

Abstract

In industrialized countries the service sector has in the last years taken the place of the most important industrial sector in terms of turnovers, contribution to the gross national products as well as employment. And studies that predict the future show that this trend will continue. Scientific research has not caught up with the market development yet. Especially the field of professional services seems to be transforming in the last years. Especially due to the financial crises unwritten laws of the industry have proven wrong. Companies like Consultancies used to be a guarantor for growth and high profits but today even giants like A.D. Little or A.T. Kearny are not safe. The consequences in today's shareholder value oriented business environments are clear: investors pull their money out fueling market consolidation in the professional service world that once was marked by great individualism.

There is a lack of research in the field of services itself. Still today the second sector – industry – is covered in most management literature. The field of business-to-business services and therefore the area in which professional service firms mostly operates remains uncovered by most. In order to improve the knowledge of the industry, quantitative research data has been evaluated. But this will not be enough to get a grip on this highly diverse industry. Therefore interviews with service professionals have been conducted in order to get a full picture of the issues to be discussed. On the other hand talking about the key challenges is one perspective talking about the customer point of view of these key challenges is a second perspective this essay wants to offer.

Introduction

The market for services is on the rise. Worldwide the service sector accounts for 43%¹ of the total world employment. In developed countries the importance of the service sector is even bigger. Here the service sector even reaches 73%² of the GNP³. In low-income economies the service sector reaches around 38% of the GNP (Lee & Carter (2009) p.312). This trend will continue. Especially in industrialized countries the majority of employment as well as new job creation will happen in the field of services (Bouwman & Felt (2008) in Bouwman & De Vos & Hakker (2008) p.11) But looking at some professional service companies struggle to participate in this growth or even be profitable it seems that there still is a challenge for companies to participate in this development.

¹ ILO Study „Global Employment Trends Report “ (2009)

² OECD Study „Economic Globalization Indicators “ (2010)

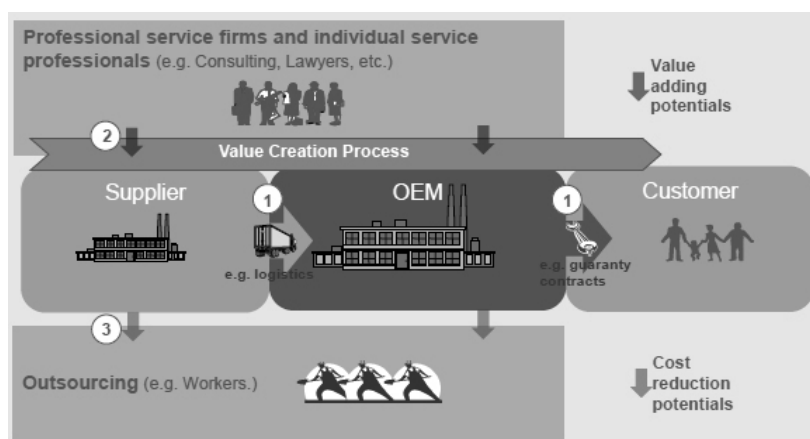
³ Countries that rely on the service sector for the bulk of their wealth are said to have so called service economies (Masterson & Pickton (2010) p. 242)

First of all we need to take a close look on what is considered a professional service. Researchers relate the following attributes to professional services (Fitzsimmons & Fitzsimmons (2008) p. 323; Lowendahl (2009) p.35):

- Services that are delivered by knowledge workers who are able to offer a high level of specialization and customization (versus standardization in mass-market services)
- Services that have challenging face-to-face interactions with customers that require very high behavioral skills and competence (e.g. negotiation). Customers are a lot of times referred to as clients.
- Services that are delivered by highly educated professional. People and their knowledge are usually the greatest assets of professional service firms
- Services must offer innovative solutions and therefore routines and standard procedures are relatively few. The delivery involves a high degree of customization that is unique in every specific application
- Services which are based on Professional norms (e.g. behavior, collaboration principles). These norms are the base for the unique culture within the professional service firm. (e.g. consulting firms often “import” professional norms from other professions, such as law and auditing)

How professional service firms operate

Outsourcing, offshoring, consulting – there are many terms used when talking about professional services. Even companies that have their focus on production (e.g. car producing companies) might still at some point of their value creation offer services in order to be attractive to customers. Therefore there is no clear classification on professional service business models. One attempt to classify professional services is shown in the illustration below. In this case the service offers are classified by their input to the value creation process.



- (1) Professional services as add-on to produced goods or inclusion into the value creation process of the customer (e.g. warranty contracts, client counseling or training)
- (2) Service as an impact on the value creation process through a professional service firm (e.g. strategy consulting)

(3) Outsourcing after make-or-buy comparison in (e.g. order to reduce cost)

Another possibility to classify professional service companies is over the judicial/contractual form in which they operate:

- Service/consulting contracts (the task is defined and usually very complex, the way how the task is delivered is managed by the service company, the payment is usually done by daily rate⁴)
- Work contracts⁵ (the result of the service is set, the way how the result is delivered is managed by the service company, the payment depends on the delivery status of the work)
- Labor leasing (the task is not necessarily defined and usually not complex, the way how the task is delivered is managed by the customer company, payment is usually done by an hourly rate)

To first understand this business model of professional service companies is important in order to understanding the key challenges the industry faces.

Methodology

In the German market for professional service firms there is one market research institute (Luenendonk) that focuses on conducting studies in the professional service market. Luenendonk works closely with the German subsidiaries of professional service firms. Therefore Luenendonk is able to provide a yearly overview on the development of the industry as well as the key challenges of the industry. Besides the key performance indicators of the companies working in the field of professional services will be compared in turns of turnover, growth, profit and employee figures providing the biggest comparison study within the German market for professional service firms. This data does not substitute for qualitative interviews gathered from professionals (mostly managers or CEO working in the professional service industry). After drawing the results from these sources the perspective of potential customers was taken into consideration by evaluating interviews with leading professionals within the field of sourcing and supplier management.

Key challenges in the professional service industry

There are clear challenges that mark today's professional service industry. One of them being changing customer requirements.

In the illustration below the frequency of use of different service offers today is depicted. We find that single services (e.g. body shopping of single resources) are the most common to be chosen by customers today. Full-service offers (e.g. work contracts or turnkey operations would fall into this category) today are not as common to be chosen by customers. The complexity in single services is not as high and the service provider does not take as much responsibility today for the results of the service that is provided. The more complex services are the more the customer requirement is complete problem solving in service bundles or full-service offers rather than single services. This is especially true for complex technical service providers (Schuh & Georgi (2008) p. 63).

⁴ Also mentioned in literature as a „fee“ (Daniels & Radebaugh & Sullivan (2011) p.62)

⁵ Sometimes also mentioned as “turnkey operations/projects” (Daniels & Radebaugh & Sullivan (2011) p.62)

This means that today customers do rather outsource tasks of lesser complexity and have a high involvement with the people performing the service. They stay in control over the service provider and they stay responsible for the outcome of the service performance.

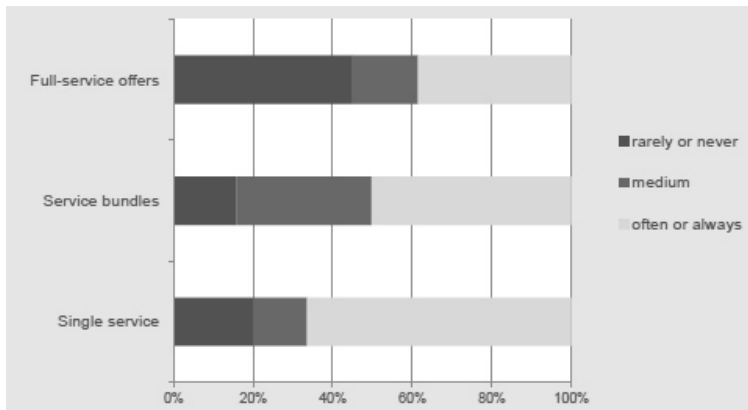


Illustration 2: Use of complex services and service bundles today (Adapted from Schuh & Georgi (2008) p. 64)

For tomorrow the picture of the future trends is totally different. Most customers see the full-service offers as increasing or even strongly increasing. Customers are more and more willing to trust service providers with complete tasks or even turn-key projects. This results in service companies having to handle more responsibility for the conduction of the service and for the result that is delivered by them. But this trend does not mean that single services will lose their attractiveness for customers. The majority of customers predict that the diffusion of single services will remain at the same level in the future. This again shows that the service markets in general will probably stay at least at the same level (in the case of single services) or even increase (in the case of service bundles or full-service offers).

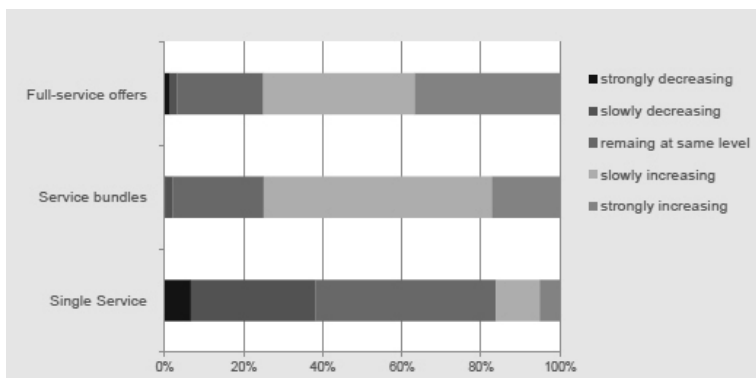


Illustration 3: Future trends towards complex services and service bundles (Adapted from Schuh & Georgi (2008) p.65)

This trend is also confirmed by the data evaluated from the Luenendonk professional service market studies of the years 2009 and 2010 as well as the qualitative interviews conducted with service professionals.

Another key challenge is the growth in cross-border services.⁶ This trend is fueled by the following factors (Lee & Carter (2009)):

- Deregulation and liberalization
- Quality service as imperative
- Homogenization of global customers
- Global economies of scale
- Enabling technologies (e.g. internet collaboration)
- Need to follow the clients

This depiction of key challenges does not provide a full picture of the key challenges that professional service companies face today. But it gives a clear view that vast changes are necessary within the organization of professional service companies in order to face these challenges.

The customer perspective on these challenges

As the professional service industry and the offers have developed over the years the attitude and needs of service customers is changing as well. In the beginning of the rise of professional services there have been several waves of outsourcing trends, e.g. IT consulting in the 90's. Industrial companies of today have usually already gone through a process of focusing on core competencies, outsourcing different areas and a lot of times have changed strategy between in- and outsourcing several times. Today even in core department (e.g. development) a ratio between consultants/temporary work staff and internal employees of 1:1 has been reached. But this development is limited. It is clear that the capacity needed to coordinate and supervise individual external staff is very high. There are numerous tasks involved when it comes to supervision of external services ranging from the buying process of professional services, over the distribution of tasks, coordination meetings, controlling results, phasing in new staff, etc. Therefore a lot of times a ratio of 1:1 internal and external staff might not be the optimum. Is the ratio leaning even more to the external side, a lot of times it becomes unhealthy for smooth processes within the organization. But than again customers do depend on the external service providers due to numerous reasons ranging from e.g. being dependent of special know-how only the service provider possesses to problems finding on staff or the unwillingness to take the risk of hiring own staff.

Due to this development customers are caught between being dependent on there supplier but being unable to use them in a way that is manageable for their organization. Therefore it is the logical step to take to try to transfer a part of this service management to the professional

⁶ This is mentioned as internationalization in the Luenendonk study.

service firm itself. This is done by the bundling of service tasks and the request for turn-key projects within the field of professional services stated earlier.

Another customer need is to reduce cost. As service customers themselves have had years to discover the advantages of globalization and discover the possibilities that lie within using low cost countries for parts of their production or development they start to expect to be offered near- and offshoring solutions by their professional service suppliers as well. This is confirmed by a trend that plausibility calculations done by sourcing departments buying professional services will include a certain percentage of work that is done in a low cost country within their plausibility calculation. This means that a supplier of services might be expected to deliver e.g. 7% of the fees as low cost country fees. The supplier may or may not be able to offer low cost country labor but the fees will still be reduced and the supplier can only generate its full margin if the percentage is performed in a low cost country. In addition to this customers of services expect to have their suppliers in place when they globalize to a new location because they expect a local offer for their activities abroad.

What professional service companies can do in order to adapt

- Adapt their own company structures in order to be able to offer service bundles of turn-key projects. There are plenty of structures that allow this kind of performance, one of them being a matrix structure that includes the possibility to have vertical project oriented teams within the existing structure. Another possibility is the organization by customers that will allow a strong control of all activities within this customer company.
- Controlling tool implementation that will allow the measurability of complex service bundles and turn-key projects. If services are less complex it is easy to keep an eye on turnover and margin as well as profitability of the performance. This will change dramatically as service offers become more complex. Usually there is no way around working with professional IT and Controlling toolsets when controlling service performance.
- Connect procedures and organizational set-ups to the customer structure. When performing a complex service it is necessary to be connected closely to the customer and its structure. This does not necessarily mean to adapt to the structure but it is recommended to have a clear communication connection (e.g. joint performance control board) implemented before starting the service performance.
- Stay in touch with customer strategy when it comes to internationalization. Opening a new office is not something to be done overnight even within the rather low investment service business. Therefore knowing the customer expectations and strategy to go global is important in order to align the own internationalization strategy.
- Choose partnerships in order to be able to fulfill more complex customer needs by obtaining know-how or new locations with partners. As the complexity of offers

increases, one company may find itself unable to offer what the customer wants. Instead of hectically trying to acquire the missing piece it might be a solution to work with a partner that offers what is missing to fulfill the request.

- Retain senior staff. Service companies a lot of times do not follow a strategy of retaining more experienced employees because of the simple fact that they are more expensive. Senior employees that do not at all cost want (or can) climb the career ladder find themselves sometimes unwanted by there employer after a couple of years. But this senior staff enables professional service firms to perform complex services.

Of course a list of necessary adaption can never be complete without being tailor made to the specific situation a professional service company is in neither is there a one solution fits all approach. These ideas or adaptation can only be a guideline to making the necessary steps in order to be prepared for market challenges. Undertaking these steps early enough and implementing them consequently within the organization is important in order to participate further in the attractive field of professional services.

Literature:

Bouwman, H., Fiel, E.: Service Innovation and Business Models, in Bouwman, Harry; De Vos, Henny; Haaker, Timber: Mobile Service Innovation and Business Models, 1. Auflage, Berlin, 2008

Daniels, John, Radebaugh, Lee, Sullivan, Daniel: International Business, Environments and Operations, 13th edition, Upper Saddle River, 2011

Fitzsimmons, James A., Fitzsimmons, Mona: Service management: Operations, Strategy, Information Technology, 6th edition, New York, 2008

Georgi, Laura; Schuh, Günther: Kundenorientierte Konfiguration von Leistungsbündeln in Keuper, Frank; Hogenschurz, Bernhard: Sales & Service, 1. Auflage, Wiesbaden, 2008

Gotto, Alan: Procurement's Role in Buying Consultancy, in: O'Mahoney, John: Mangement consultancy, New York, 2010

Lee, Kiefer, Carter, Steve: Global Marketing Management, 2nd edition, Oxford, 2009

Lowendahl, Bente R.: Professional Service Firms, 3rd edition, Copenhagen, 2009

Masterson, Rosalind, Pickton, David: Marketing an introduction, 2nd edition, London, 2010

Ng, Irene C.L.: The pricing and revenue management of services, New York, 2009

O'Mahoney, John: Mangement consultancy, New York, 2010

Study: Economic Globalization Indicators, 2010, OECD

Study: Global Employment Trends Report, 2009, ILO

Study: Lünendonk Engineering Services Markt, 2009, Lünendonk

SOCIAL MEDIA MARKETING AS PART OF INTEGRATED MARKETING COMMUNICATION IN CREATING A BRAND

Mane Medić, Ph.D.¹, Mladen Pancić, univ.spec.oec.², Ivan Kelić, mag.oec.³

¹Full Professor, Faculty of Economics in Osijek, Croatia, mmedic@efos.hr

²Teacher assistant, Faculty of Economics in Osijek, Croatia, pancic@efos.hr

³Teacher assistant, Faculty of Economics in Osijek, Croatia, ikelic@efos.hr

ABSTRACT

No matter what field of activity a company belongs to, its task is always to be at the same place where its consumers are. Among other places, consumers can be nowadays found also on social networks. The development of social media marketing has led to new economy trends, new roles in business and new functions of business entities that did not exist until recently. The development of the Internet culture and technologies that created new communication channels using the Web 2.0 technology and tools has led to the evolution of the strategy for communication with buyers. Last statistical measurements show that average consumers spend more money on the product that they follow on social networks. Social network-sare places where clients can interact with brands. By sharing content with consumers and participating in the process of creating and selling brands, business entities develop long-term relationships with clients as they can be contacted by anyone from the organization.

The special interest of authors will be focused on exploring the role and potential of using social media marketing as a part of integrated marketing communication.

The aim of the paper is to give an overview and indicate the potential of using social networks in creating brands that have a great effect on our culture, which will consequently lead to their recognizability on the Internet.

JEL Classification: M31, M37

Keywords: Social media marketing, social networks, Brand, Web 2.0.

INTRODUCTION

Development of computer technology and information systems has made it possible for economic operators to improve business processes and has created prerequisites for communication with consumers through social networks. The task of any economic operator is to listen to its environment and always to be at the same place where its consumers are. Among other places, consumers can be nowadays found also on social networks. Development of Internet technologies has changed the way economic operators communicate with consumers. Free use of network, downloading and uploading of multimedia content and creation of interest groups – social networks have evolved as marketing means to achieve promotional goals on the internet. Social networks have become a hybrid element of the promotion mix (Mangold & Faulds; 2009, 359). *Social media marketing* is defined as part of *integrated marketing communication*, the purpose and objective of which is to connect elements of the promotion mix – advertising, public relations, direct marketing, etc., thus attracting consumers focused on promotional messages on the internet (Boone & Kurtz; 2007, 488). The authors' position is that the starting point in defining the term is the fact that social media marketing can be observed at various levels. Correlation can be established between the terms social media marketing and integrated marketing communication, thus showing their interdependence. Integrated marketing communication is a consistent plan of being present on the market and disseminating information toward consumers, whereas marketing on social networks makes it possible to involve users, start a relationship, attract, generate activities, encourage social interaction with an organization and other members of the community. Heading in this direction, the authors' aim was to find out to what extent the top brands use social networks, which is here the key research problem. Based on the problem definition, objectives of the research were defined. The key objective of the research was to gather and analyze data and to answer the question to what extent and what social networks are used by the top global brands and how marketing activities on social networks can influence brand strengthening.

Further, the objectives were to examine and determine

- The strength of brand penetration on social networks;
- The possibilities for promotion on social networks;
- Whether the brand value and brand size have impact on the number of followers, i.e. fans on social networks;

- Whether use of social networks can have positive effects on promotional activities.

Starting from the research problem and defined objectives of the research, the following hypothesis has been set:

- There is a statistically significant difference between the brand value and the number of fans on social networks and opportunities offered by these networks.

1. ANALYZING THE ASPECT OF SOCIAL NETWORK USE

One of the answers to the question why to be present on a network is the fact that consumers today are well-informed about products and services and they expect to obtain information in a real time representation. Exactly this has influenced strong expansion of the increasingly growing number of social network users. The number of internet users who visited a site for social networking or a blog is growing strongly. Surveys show that average users of a social network share about 30 million links and spend 700 million minutes a month on social networks, resulting in the fact that every 9th person in the world has a profile on a social network (Bullas; 2012). Key data indicate further growth of significance of social networks. The focus of the paper will be on analyzing the aspect of marketing activities on three social networks – Facebook, Twitter, Google+.











2. H1 – THERE IS A STATISTICALLY SIGNIFICANT DIFFERENCE BETWEEN THE BRAND VALUE AND THE NUMBER OF BRAND FOLLOWERS ON SOCIAL NETWORKS

Tangible assets were always considered the main source of business value. However, nowadays, in contemporary business, economic operators achieve competitive advantages and generate value of their products and services by investing in intangible components in order to position these components on the market as a brand. The term brand presents a name, term, sign, symbol, or design, or a combination of these that identifies goods or services of one or of a group of producers, and creates distinction from goods and services of their competitors (Kotler; 1996.) (Bennett; 1995, 85). Therefore brand presents company's quality and its way of doing business as well as communication within the company and interaction with the market. The key to successful business nowadays is organization of consumers. With development of social networks, brands started to systematically create a network

of corporate profiles on specialized platforms – Internet destinations that provide the possibility of networking, guiding consumers gathered around common interests toward company's profile, i.e. brands started to organize consumers. By having a profile on platforms, brands can interact with their consumers and, listening to their environment, gradually modify the strategy.

The aim of the paper was to examine to what extent the most valuable global brands communicate with their consumers on social networks (Table 1), i.e. whether there is a correlation between the brand value and the number of followers (fans) on social networks, where brand value influences the number of members gathered on their profiles. In accordance with the above premises, the research was conducted on the following platforms: Facebook: as the largest social network in the world. Twitter: a micro blog tool where users are limited to using 140 characters only, and Google+: the fastest growing social network. The research sample includes 10 top global brands in 2011, according to surveys previously conducted by Interbrand. The research consisted of following the number of fans on the above networks during the February 2012 and establishing a correlation between the total number of fans and the brand value. The obtained results were analyzed by means of the statistical tool for monitoring growth of social networks – SocialBakers.

Table 1. The ratio between the brand value and the number of followers (fans) on social networks

Top 10 Brands in 2011	Facebook Number of fans/ rating of brand on platform		Twitter Number of followers/ rating of brand on platform		Google+ Number of fans/rating of brand on platform	
1. 	40.619.600	1	507.060	28	498.311	8
2. 	104.437	2.621	15.403	62*	4.073	72
3. 	1728.108	240	410.086	33	-	-
4. 	9.062.473	39	4.464.170	1*	195.907	25
5. 	1.214	11.948	53.137	58*	1.396	100
6. 	18.095.322	11	370.338	35	5.434	66
7. 	7.549.633	54	188.832	49*	371.521	17
8. 	1.463.296	276	877.725	23	-	-
9. 	9.693.349	35	1.191.655	16	-	-
10. 	1.719.381	241	136.508	52*	-	-

*Possible
oscillations
in the
number of
followers

Source: Authors' research

The best global brands were assessed according to internal and external factors such as consistency, differentiation of products and services, etc. In accordance with data obtained according to Interbrand, the top global brands in 2011 are presented in the Table 1, column 1. According to Gobe (Gobe; 2001, 36-72), a brand can no longer be observed as a linear component with minimum investments. In addition to brand awareness or knowing of a brand, brand is nowadays more valuable when it shows expressed differentiation, authenticity, relevance, loyalty, and above all, emotional connection that can even have impact on the culture of a group, segments or people in general. The task of marketing activities of any brand is to create recognizability that will in long-term lead to creation of a strong brand. According to the gathered data, it can be noted that there is a difference between the global strength of a brand and its positioning on social networks. Disadvantage of the research is that it is difficult to assess the efforts of brands to make corporate profiles protected as official profiles of brand. Social networks have become fully-fledged media for promotion. Economic operators managing brands have recognized opportunities offered by social networks. The results of the conducted research show a shift toward communication with consumers and promotional activities on social networks. However, research results also show that only Coca-Cola has managed to maintain the leadership on the social network Facebook in terms of brand strength and total rating in the number of total fans, compared to other brands present on social networks. Other brands are positioned, as it is suggested by the hypothesis, with statistically significant difference in relation to the rating by the number of fans and the rating according to their strength. What is causing concern in the results obtained is that on Google+ social network as many as four out of 10 best global brands do not have their corporate profile. In this way they are reducing their positioning on search engines, primarily on the largest search engine – Google. This is not about economic operators providing information to consumers, but about previous experience that has been evaluated by users themselves and shared with others. By creating a corporate profile on social networks, brands make it possible for consumers to make a decision which channel to use to obtain information on their own instead of expectations of economic operators that consumers will visit the internet site of a brand voluntarily (Evans, McKee; 2010, 96 – 97).

The aim of each brand having a corporate profile on social networks is the strategy of attracting as many users as possible, thus creating the critical mass of audience to be able to develop communication with their fans and their friends with whom they are mutually connected in a network. Links and searching by means of search

engines have created a parallel world for obtaining information, a means in which information is found with a single click of a mouse and connected into a unit. By creating a *profile* on social networks, economic operators (brands) have established a starting point where search for information will start. The content published on the internet will create conditions for involvement and linking to other people – consumers. Development of multimedia enabled development of resources that organize consumers. In the beginning this was performed by media such as the television, newspapers and the radio. This was followed by the time period in which consumers used the internet and internet portals to find many ways and pieces of information. New generations of media are being created today – social networks. The research results show that the strongest brands have created their profiles. The next step should include organizing consumers and networking with them on social networks, thus creating the rating on social networks equal to the one that has been created in the global strength of a brand.

Due to a very changeable and complex environment, use of social networks without efficient marketing thinking is becoming increasingly hard. As the most significant technological phenomenon of today, with its growing user base, the internet provides an ideal way of providing, obtaining and transmitting information (Ružić et al; 2009, 20-27). As a result of the development of Web 2.0. technologies, a new trend in the world wide web technology, which creates two-way communication instead of a one-way flow of information – social networks, has created preconditions to reach its target audience. The audience refers to participation and has the possibility of being involved in the process, where they can contribute to content creation and, based on the above activities, create viral messages that will spread over various platforms – from platforms for sharing video content such as Youtube to platforms for social networking.

- Targeting and social reach of a consumer:

By using marketing activities on social networks it is possible to narrow down the target group of consumers that economic operators wish to attract. Segmentation of users makes it possible to determine the sex, location, activities, networking with other users, etc. The key purpose of studying consumers is to understand the way in which they make a decision about purchasing, and based on this knowledge suppliers can then develop marketing activities (Shiffman & Lanuk; 2004, 8). Today's *modern consumers* voluntarily share information about themselves by publishing photographs, opinions, contact information; they gather around inter-

est groups and filter information they want to be seen publicly. Brands should use the information received from consumers and attract consumers toward *themselves*. With the possibility of precisely targeting consumers, a significant opportunity is created for advertisers to completely change consumer's perception of advertising. Online strategy provides an insight for brands into what current, potential and future consumers want. Forms of marketing on social networks as well as on the internet in general are more or less hybrid solutions, where marketing possibilities of the internet are used in different ways and to a different extent, depending on specific qualities of an economic operator, which has impact on the volume of promotional activities.

- Support and user participation

Previous research showed that four out of five users will change their opinion about a product if they read a negative review on social networks (Lyris; 2012, 6). According to Wreden, Internet is not ruled by price, but by trust (Wreden; 2010, 18). Social network users (consumers) can directly contact a particular brand. They can write about previous experience in using products of a particular brand on a blog or start an Internet site devoted to these products, write on specialised forums to open the ways for information that will lead to that site. By opening a group on social networks it is possible to invite the like-minded gathered around the same group and share information: from writing a status (review) about a product to setting up multimedia content on specialized pages. This results in critics in form of *posts* of dissatisfied users positioning high on search engines and soon critics left by unsatisfied users are positioned at the top of the search results returned when searching for a company's product.

- Virality

Viral marketing is defined as a type of marketing that implies voluntary transfer of a promotional message by users themselves. In ideal case, every user sends it to a larger number of new users, thus spreading the promotional message at great speed (Scott; 2008, 9). By providing support through social networks and connecting to buyers at "personal" level, economic operators generate positive effects on consumers' awareness. Users then share the content among themselves and make it visible. The speed of sharing and sending to other users is rapid, and economic operators no longer have to wait for consumers to see a commercial on the TV on jumbo billboards, which is a great advantage compared to traditional advertising.

It can be said that marketing on social networks complements traditional marketing values.

Interaction with users does not require large investments, but it generates efficient promotional activities. Results of content sharing can reflect in increased traffic on internet sites of brands, which is created by users using the links found on social networks; improved brand perception – of quality, awareness and credibility; better positioning of a brand on search engines, and finally, the above activities result in sales (Tuten; 2008, 90). Marketing activities on social networks have become a strong generator of advertising. By creating content on envisaged platforms, the relationship between consumers – users of social networks and economic operators, i.e. brands is created. By positioning on social networks, economic operators raise the level of involvement toward their consumers, clients, partners, etc.

3. CONCLUSION

In the past few years we have witnessed great changes in global marketing trends. With appearance of social networks, consumers have gained a strong distribution channel for obtaining and disseminating information, whereas brands have gained a new promotional tool. Although both consumers and economic operators have accepted social networks as a fully-fledged media tool, from the above research results it can be concluded that consumers have accepted the use of social networks to a much greater extent, whereas brands are learning about potentials of using social networks by attracting consumers to their corporate profiles. Although present on social networks, brands have not equalized their global strength with positioning on social networks. By recognizing opportunities offered by social networks and investing in marketing activities on social networks, global brands will in future certainly create strong corporate profiles managed by professionals, as their concern for consumers and preservation of high positioning in relation to competition is part of their long-term organizational goal.

REFERENCES:

- Bennett, P., D. (1995), Dictionary of marketing terms, McGraw-Hill, Chicago
- Boone, L. E. & Kurtz, D. L. (2007), Contemporary marketing, Mason
- Bullas, J. (2012), 20 Stunning Social Media Statistics. Dostupno na <http://www.jeffbullas.com/2011/09/02/20-stunning-social-media-statistics/> (07.03.2012)

- Evans, D. & McKee, J. (2010), *Social Media Marketing: The Next Generation of Business Engagement*, Wiley publishing, ISBN: 978-0-470-63403-5, Indiana
- Gobe, M. (2001), *Emotional branding, The New Paradigm for Connecting Brands to People*, Allworth Press, New York
- Kotler, P. (1996), *Marketing for non-profit organizations*, Prentice Hall, New York
- Interbrand (2012), Best global brands in 2011. Dostupno na <http://www.interbrand.com/en/best-global-brands/best-global-brands-2008/best-global-brands-2011.aspx> (03.03.2012)
- Lyris, (2012), E.mail, Twitter, Facebook: 22 tips to cross-channel success, Marketing guide. Dostupno na <http://www.imnewswatch.com/2011/11/30/lyris-releases-email-twitter-facebook-22-tips-to-cross-channel-success-guide/> (01.03.2012)
- Mangold, W. & Faulds, D. (2009), Social media: The new hybrid element of the promotion mix, *Business Horizons* 52
- Ružić, D. & Biloš, A. & Turkalj, D. (2009), *E-marketing*, Ekonomski fakultet u Osijeku, ISBN 978-953-253-071-0, Osijek
- Scott, D., M. (2008), *The New Rules of Viral Marketing : How word-of-mouth spreads your ideas for free*. E-book, dostupno na http://www.davidmeermanscott.com/documents/Viral_Marketing.pdf (02.03.2012)
- Shiffman, L. & Lanuk, L. (2004), *Ponašanje potrošača*, Mate, ISBN 953-6070-79-0, Zagreb
- Tuten, T., L. (2008), *Advertising 2.0.*, Praeger, ISBN 978-0-313-35296-6, Westport
- Wreden, N. (2010), *Profitabilno brendiranje : Kako povećati profitabilnost, odgovornost i održivost imena proizvoda*, V.B.Z., ISBN: 978-953-304-019

SETTINGS OF DISTRIBUTIVE TRADE GROWTH INDICATOR USING FACTOR ANALYSIS METHOD

Dario Dunković, Ph.D.¹, Dinko Jukić, univ.spec.publ.admin.²

¹Research fellow Chief Financial Officer, SAME DEUTZ-FAHR GROUP, Croatia,
dunkovic.dario@gmail.com

²Ph.D.Candidate, Secondary school "Davor Milas", Croatia,
dinko.jukic@os.t-com.hr

ABSTRACT

The first goal of this paper is to identify all publicly available statistics such as number of employees, turnover, realized gross value added, value of stock and other data that are commonly used as a bench-mark to assess trends in the distributive trade sector. The purpose is to transmute those statistics into variables and subject them to dimensional reduction using factor analysis to determine which sequences of variables can be taken as the basis in the signaling fluctuations in the sector. On the one hand there is a decrease in the number of shops and businesses entities in the market due to strengthening of concentration and the occurrence of large stores but on other hand turnover and value of investment are increasing. This raises the question of statistical variable or few variables that may be in this case more or less significant and adequate to identify economic trends. The hypothesis that the variables analyzed in the paper can be classified into two or three groups within which there are approximately similar correlation features, which can in the whole facilitate and assist in investigating the causes of growth or decline of distributive trade activities in national economy. Croatia is nearly at the exit from the crisis, and on the horizon is the next financial and economic crisis in Europe. The importance of research of this problem stems from the great importance of the distributive trade sector which belongs to the third place by contributing to GDP. For this reason, closely following developments in this sector as intermediate between production and final consumption it is often taken as an indicator of the economic situation in the country and of the possible emergence of a crisis situation or its mitigation.

JEL Classification: F17

Keywords: distributive trade, growth, indicators, factor analysis

1. INTRODUCTION

Official statistical pieces of information used for following development and situation in economic sectors make efforts to include data that are marked by different trends. As a consequence, work efficacy increase often has a decrease of employed people accompanied by added value growth. With the precise categorisation of available data whose trends concord it is possible to avoid double standards caused by various trends. In progress, seven common time sequences of statistical data, which mark the state in the distributive trade, are analysed. It is essential to define relationship between data trends over a longer time period, that can be helpful in assessment of the distributive trade development. Sector growth is possible to be identified through enlargement, but also through decrease of statistical data value, what can cause a dilemma during state analysis and predicting.

Lately, statistical systems in most European countries are based on unified and centralized data organisation – Eurostat, and all in order to bring statistical modeling and predicting to a higher level. Statistical system of the Republic of Croatia is adjusted to Eurostat methodologies, which means that results of analysis in this paper can be applied to other statistical systems.

Development of indicators in the distributive trade is a consequence of growth or decline of economic activities of retail structure, retail technologies use, change of purchasing power of final buyers, strengthening of negotiating power of retailer in distribution canals and similar. For research and predicting effects of trade development, it is essential to understand relationships between basic indicators that can be used from statistical processing area as a growth indicator of the distributive trade. However, the question is what indicator or what combination of statistical indicators is to be taken into account when we want to establish growth or decline of activities in the distributive trade as one of the most important economic sectors in general. In order to solve this research problem there dominates a factor analysis method or one of aspects of this method –principal components analysis (PCA).

Investments in trade are stimulated with the growth of expected investors' return and they often implicitly include employment growth in recently built or expanded sales capacities. There are contemporary processes of concentration of leading retailers on the market that are present with application of developed logistic functions and information technology, what brings to the state in which making of gross value added relates to increasingly smaller number of subjects and stores. It is very important to observe trade movement in the Republic of Croatia,

with what correlations among relevant statistical data could be explored in a more detailed way.

2. RESEARCH DATA AND HYPOTHESIS

For the purpose of research key time series data are analysed, provided by Croatian bureau of statistics organized in Table 1. There are no proven automatic techniques to identify trend components in the time series data, however, as long as the trend is quite monotonous (consistently increasing or decreasing) that part of comprehensive data analysis is typically not very difficult.

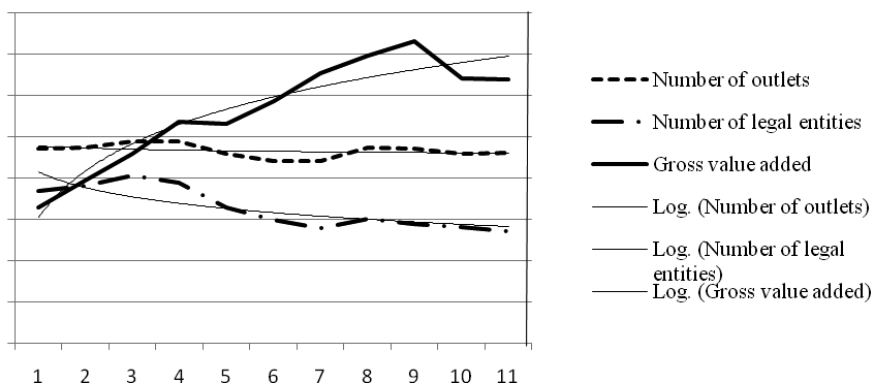
Table 1 Overview of key statistics trends in distributive trade sector in Croatia.

	Number of outlets	Number of legal entities	Number of employees	Goods on stock (in 000 HRK)	Turnover (in 000 HRK)	Investments (in 000 HRK)	Gross value added (in 000 HRK)
2000	23.479	18.533	146.298	18.798.267	143.141.925	3.023.910	16.405.000
2001	23.714	19.061	145.988	19.570.576	163.379.231	4.455.809	19.724.000
2002	24.406	20.367	163.879	23.280.160	191.760.820	6.618.350	22.941.000
2003	24.389	19.530	170.076	26.600.203	222.116.780	8.158.764	26.880.000
2004	22.920	16.507	164.515	25.992.796	230.261.062	8.131.214	26.603.000
2005	22.041	14.967	165.782	26.059.900	246.796.422	8.325.257	29.284.000
2006	22.022	13.905	170.630	27.679.164	263.256.432	8.941.267	32.757.000
2007	23.701	15.038	193.450	34.026.678	286.924.683	9.783.173	34.897.000
2008	23.546	14.490	197.760	36.787.236	298.690.926	9.363.635	36.626.000
2009	22.908	14.063	185.244	32.965.742	252.052.246	6.695.552	32.136.000
2010	23.009	13.573	182.728	32.990.389	251.277.135	3.689.287	31.939.000

Source: Data released in Statistical yearbooks 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, Statistical report No. 12.1.1/4 published in 2010 for estimated Gross value added in 2009 and 2010.

In case data series is marked with different trends, a logarithmic trend line is a best-fit curved line that is most useful when the rate of change in the data increases or decreases quickly (Jolliffe, 2002). The Graph 1 represents a scale-adjusted logarithmic trendline to illustrate different trends of distributive trade data series in the period 2000 – 2010 in Croatia.

Graph 1 Presentation of scale-adjusted logarithmic trend lines arising from distributive trade data series.



The hypothesis is that among seven indicated statistical data series there are no standardized trends which could with greater certainty be used as growth measurement of economic activity of the distributive trade. Moreover as part of the hypothesis, it is understood that analyzed data could be classified into three categories out of which two categories show high mutual correlation during growth. For example, trend of investments in the distributive trade does not correspond with turnover trend or trend of movement number of business subjects. Aim is, with the help of PCA method, to make a selection of higher quality of those statistical data series that can as reliable and objective as possible signal growth or fall of economic activities in this activity. Decrease in number of retail shops certainly denotes global developmental trend of concentration growth in retail, however, closing of shops can happen as a consequence of decrease in purchasing power of population what leads to retail fall. So, there are dilemmas about selection of adequate statistical criterion of general sector growth.

3. RESEARCH METHODOLOGY

The main applications of factor analytic techniques are: (1) to *reduce* the number of variables and (2) to *detect structure* in the relationships between variables, that is to *classify variables*. Therefore, factor analysis is applied as a data reduction or structure detection method. Factor analysis method summarizes the correlation between at least two or more variables like a regression line that represents the “best” summary of the linear relationship between the variables (Crafts, 2006:187). If one variable that would approximate the regression would capture most of the

“essence” of the two items it represents a new factor. In a sense the two variables have been reduced to one factor. The new factor is actually a linear combination of the two variables. If a two-variable model is extended to multiple variables, then the computations become more involved, but the basic principle of expressing two or more variables by a single factor remains the same. It is not purpose to go into the details about the computational aspects of principal components analysis here, which can be found elsewhere. However, basically, the extraction of principal components amounts to a *variance maximizing (varimax) rotation* of the original variable space. Computational strategies have been developed to rotate factors so as to best represent classes of variables, without the constraint of orthogonality of factors. However, the oblique factors produced by such rotations are often not easily interpreted.

4. RESEARCH RESULT

A major argument for using correlation matrix to define Principal component analysis is that the results of analyses for different sets of random variables are more directly comparable than for analyses based on covariance matrices. If there are large differences between the variances of the elements of series, then those variables whose variances are the largest, the latter will tend to dominate the first few components.

Table 2 Connecting data series with research variables.

Data series	Variable name
Number of outlets	OUTLET
Number of legal entities registered	SUBJECTS
Number of employees	EMPLOY
Goods on stock	STOCK
Turnover	TURNOVER
Gross investments	INVEST
Gross value added (GDP component)	GVA

In Table 3 there are several sizable correlations ($>.5$) determined. Factor examination is Kaiser-Meyer-Olkin test (KMO) equals 0.732. It is an index used to measure the appropriateness of factor analysis. High values (between 0.6 and 1.0) indicate that factor analysis is appropriate. Values below 0.5 imply that factor analysis may not be appropriate (Jensen, 1997).

Table 3 Correlation matrix of variables presented.

	OUTLETS	SUBJECTS	EMPLOY	STOCK	TURNOVER	INVEST	GVA
OUTLETS	1,000	,734	-,055	-,150	-,339	-,145	-,337
SUBJECTS	,734	1,000	-,671	-,750	-,781	-,302	-,805
EMPLOY	-,055	-,671	1,000	,988	,921	,577	,934
STOCK	-,150	-,750	,988	1,000	,928	,521	,947
TURNOVER	-,339	-,781	,921	,928	1,000	,745	,992
INVEST	-,145	-,302	,577	,521	,745	1,000	,682
GVA	-,337	-,805	,934	,947	,992	,682	1,000

Perhaps the most obvious criterion for choosing appropriate number of m components is to select a (cumulative) percentage of total variation which one desires that the selected PCs contribute, say 80% or 90%. The required number of PCs is then the smallest value for which this chosen percentage is exceeded. It remains to define what is meant by percentage of variation accounted for by the first m PCs,

Table 4 Total variance explained.

Principal Component (PC)	Extraction Sums of Squared Loadings			
	M	Total	% of Variance	Cumulative %
1		5,044	72,063	72,063
2		1,268	18,109	90,172
3		,649	9,275	99,447

Looking at the cumulative percentage of total variation presented in perhaps the most obvious criterion for choosing appropriate number of m components is to select a (cumulative) percentage of total variation which one desires that the selected PCs contribute, say 80% or 90%. The required number of PCs is then the smallest value for which this chosen percentage is exceeded. It remains to define what is meant by percentage of variation accounted for by the first m PCs,

Table 4, according to Jolliffe (2002:113) sensible cut-off is very often in the range from 70% to 90%, it can sometimes be higher or lower depending on the practical details of a particular data set. For example, a value greater than 90% will be appropriate when one or two PCs represent very dominant and rather obvious sources of variation which is the case here. Simple structure is pattern of results such that each variable loads highly onto one and only one factor.

The first rotation result offers three principal components. Such result shows that the existing statistical system can theoretically identify the growth of the distributive trade through three categories of statistical data, out of which every includes certain series of observed data. The first category can be described as “operational” which takes into account four highly correlated variables: value of goods on stock, number of employees, gross value added and turnover. Those series of data consequently have decrease and increase. The second principal component may describe “entities and outlets” i.e. number of outlets and number of business entities registered in the sector. Decrease in the number of shops on the market and business subjects in the distributive trade sector is obviously happening with concurrent increase of “operational” component data. On the other side, in case of increase of value of belonging variables “entities & outlets” component it can not be said that the economic activity in the distributive trade decreases, what can be said with certainty if it comes to fall of “operational” components.

The last one called “investment” component represents only value of investments undertaken in the sector. Trend of each principal components must be examined separately without cross-component examinations.

According to the first result, progress of investment values in the distributive trade sector should be observed isolated from other variables because movement of this variable is not unambiguous, that is in significant correlation with other two principal components. In Table 3 and Table 4 there should be given statistical importance to mutual relationship between investments and turnover in the distributive trade.

Table 5 Rotated three component matrix.

	Component		
	Operational	Entities & Outlets	Investment
STOCK	,972	-,106	,199
EMPLOY	,960	-,003	,268
GVA	,864	-,281	,404
TURNOVER	,827	-,277	,483
OUTLETS	-,027	,995	-,086
SUBJECTS	-,688	,720	-,029
INVEST	,337	-,056	,939
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization.			
a. Rotation converged in 5 iterations.			

The second result of factor analysis results from two variables fixing during varimax rotation (Table 6). Purpose of fixing on only two variables is to examine appropriateness of dual principal component system for distribution trade sector. In dual principal component matrix the first component marks “Value” and the other one “Quantitative” features of the distributive trade sector. The most important difference between three and dual principal component matrix is the treatment of investments.

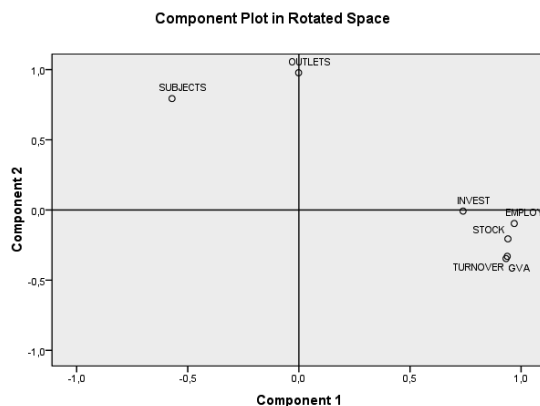
Table 6 Rotated dual principal component matrix.

Rotated Component Matrix ^a		
	Component	
	Value	Quantitative
EMPLOY	,969	-,096
STOCK	,941	-,206
TURNOVER	,938	-,330
GVA	,932	-,346
INVEST	,739	-,008
OUTLETS	-,001	,978
SUBJECTS	-,571	,794
Extraction Method: Principal Component Analysis.		
Rotation Method: Varimax with Kaiser Normalization.		

As previously explained the main objective of a PCA is to reduce the dimensionality of a set of data. This is particularly advantageous if a set of data with many variables lies, in reality, close to a two-dimensional subspace (plane). In this case the data can be plotted with respect to these two dimensions, thus giving a straightforward visual representation of what the data look like, instead of appearing as a large mass of numbers to be digested (Jensen, 1997:97). If the data fall close to a three-dimensional subspace it is still possible to gain a good visual impression.

In this research two-dimensional plot is particularly useful for detecting patterns in the two subsets of data (Graph 2). If the data lies close to a two-dimensional subspace then two-dimensional plot of the data together with the dual principal component matrix will provide an adequate representation. As the variable “subjects” do not correspond closely to the second principal component subspace that makes two-dimensional matrix as a second option result and three principal component analysis as a favorite result of the research.

Graph 2 Dual principal components plot rotated space.



5. CONCLUSION

Seven different distributive trade sector data series trends were examined by Principal Component Analysis with varimax rotation. “Value” and “Quantitative” categories of data arise out of two principal component matrices, in addition to favourable result of three principal components where “Operational”, “Entities and outlets” and “Investment” categories arise. Movement within each of those categories could be taken as an indicator of the distributive trade sector growth.

By using advanced statistical methodology this research proves that despite of different trends which rule in statistical tracking of distributive trade sector in Croatia, it is possible to determine which data categories can indicatively be used for establishing and predicting of the distributive trade growth in economy. “Operational” sector component can be taken as the most relevant setting in the current statistical system and statistical data organization to indicate growth of the distributive trade sector. Trade investments are not in a significant correlation with other six analysed statistical variables, what shows that increase or decrease of investments in trade is not quite appropriate growth indicator because it does not significantly have influence on income flow, gross value added and other components of the “Operational” component.

5. REFERENCES

- Boylaud, O. & G. Nicoletti (2001), Regulatory reform in Retail Distribution, OECD Economic Studies No.32/1.
- Crafts, N. (2006), Regulation and productivity performance, Oxford Review of Economic Policy, 22(2), 186-202.
- Jensen, D. R. (1997), Conditioning and concentration of principal components, Australian Journal of Statistics, 39(1), 93–104.
- Jolliffe, I. T. (2002), Principal component analysis, 2nd ed., Springer, New York.
- Statistical Yearbook, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, Croatian Bureau of Statistics, Zagreb.

RECOGNIZING OPPORTUNITIES FOR SUSTAINABLE DEVELOPMENT IN SMALL AND MEDIUM ENTERPRISES IN BRODSKO POSAVSKA COUNTY

Sanja Knežević, B.Sc.¹, Lena Sigurnjak, B.Sc.², Anita Kulaš, B.Sc.³

¹Assistant, Polytechnic of Slavonski Brod, Croatia, Sanja.Knezevic@vusb.hr

²Lecturer, Polytechnic of Slavonski Brod, Croatia, Lena.Sigurnjak@vusb.hr

³Assistant, Polytechnic of Slavonski Brod, Croatia, Anita.Kulas@vusb.hr

ABSTRACT

Sustainable development is perhaps the most prominent topic of our time and has drawn worldwide attention. It is an important pathway to tackle environmental challenges and represents improvement in the population's quality of life. Entrepreneurs should be more likely to discover sustainable development opportunities the greater their knowledge of natural and communal environments become, the more they perceive that the natural and communal environment in which they live is threatened.

In this paper the research included small and medium enterprises in Brodsko Posavska County. Analysis is based on primary research by questionnaire which was conducted in 20 enterprises in 2012 and it's based on indicators in measuring the sustainability of entrepreneurial ecology level. The aim of the paper is to present the current state, to identify number of indicators and also to determine the scores of achievement as well as to present its role for the sustainable development.

JEL Classification: L53, Q57

Keywords: sustainable development, indicators, enterprise, economic development, ecology

1. INTRODUCTION

Sustainable development refers to “development that meets the need of the present without compromising the ability of future generations to meet their own

needs” (Patzelt, H., Shepherd, D.A, 2011, p. 631). Sustainable development is crucial for the survival of world. Mankind is presently facing with very serious crises of ecological imbalances and its consequential adverse effects e.g. reflected to the global warming, thinning on ozone layer, vast changes in climatic pattern, melting of glaciers, losses of biodiversity, soil degradation, air and water pollution, acid rain and so on. Sustainable development is one of the strategic goals of any enterprise development, while it implies the process of improving the wealth of local community and its’ economics development. Entrepreneurial action can preserve ecosystems and counteract climate change, but many of them have been strong in words but not in action. Process of development is frequently identified with the notion of globalization. As every acceleration of economic process internationalization, accelerates economic growth and, as a consequence, the demand for functions fulfilled in that process by the environment. On the other hand, globalization also means rationalization of the economic process and protection of environment in the interest of present and future generations.

2. SUSTAINABLE DEVELOPMENT

“The idea of sustainable development appeared after World War two and since then its theoretical concept has been developing especially in the 60s” (Karahasanović, D. et al., 2010, p. 145). What does the concept sustainable development actually mean? The worldwide discussion on sustainable development has become a source of constant discussion. Economic literature offers over 100 definitions on sustainable development, mostly oriented towards separate sectors – environmental, economic, civilization – or emphasizing managerial, technical or philosophical and political decisions. We should take into consideration the fact that the concept of sustainable development may be difficult to understand and could have different meaning depending on the analyzed literature of the concept in which it is used. Considering the fact there is not a single reference presented a feasible definition of sustainable development which could incorporate all aspects of the concept under investigation and to provide ideal understanding of this concept.

The most appropriate definition published in 1987 by World Commission on Environment and Development provided in Brundtland commission’s report “Our Common Future” which discloses the idea of sustainable development best. It defined sustainable development as the kind of development which satisfies the current needs without endangering the future generations to satisfy their own. This

definition is the most frequently cited one and seems to be more exhaustive than the majority of others. “The essence of Brundtland’s statement is fair distribution of natural resources both among different generations and among the present generation of people from the first, the second, and the third world, and finding a positive consensus between the environmental, social, and economic dimensions of environment” (Ciegis, R. et al., 2009., p. 30). The definition presented in the report of the Brundtland commission contains two essential concepts: the concept of needs, especially the needs of the world’s poor, which should be given priority; the idea of limitations arising from the effect of technologies and social structures on the ability of the environment to satisfy present and future needs.

2.1. Main Dimensions of Sustainable Development

Economic efficiency and sustainable economic development are objectives which can be in a collision of different interests. The business interests can be in a conflict with efficient consumption and development which can have impacts on the environment and competitiveness. The three-dimensional model of sustainable development is widely spread in literature. Currently the institutional dimension is added frequently while sometimes the spatial, moral and awareness are treated as complementary dimensions.

As a general concept sustainable development encompasses three fundamental approaches: economic, environmental and social development which are interrelated and complementary.

Economic development such as employment, financial wealth, and consumption, improves the socioeconomic status of people (per capita income of future generations is not lower than that of the present generation) and leads to psychological and physical health. The economic sustainable development is based on theory of capital convertibility and concept of maximum income. Economic sustainability seeks to maximize the flow of income and consumption.

Environmental development is development that preserves the diversity of biological species, essential ecosystems, and ecological processes. The primary task of environmental development is the improvement of conditions of the natural environment. The main problems are that society is confronted with poor air quality and drinking water, overexploited soil and aquatic habitats, declining forests, and other diminished natural resources. Entrepreneurs may recognize opportunities to improve environmental conditions.

Social development preserves the community, i.e. maintains close social relationships in communities include child survival, life expectancy, education, equity, and equal opportunity. Social cultural sustainability concept reflects the interface between development dominating social norms and strives to maintain the stability of social systems. Social sustainability seeks to reduce vulnerability and maintain the health of social and cultural systems and their ability to withstand shocks.

Initially the need for considering just two dimensions: economic and ecological between which correlation and dependence occurred was promoted. Initially the social dimension was treated marginally. It was found out, however, that the social dimension might not be dismissed because it links to the improvement of human living, access to infrastructure and efficient operation of economic systems. In this article, we investigate the forms of opportunities that sustain environmental development.

2.1. Indicators of sustainable development

Sustainability indicators are one of measuring tools of monitoring and showing the sustainability of enterprise development. The indicators must be able to show the level of sustainability of a enterprise. Indicators have also been accepted as a prerequisite in designing and making more sustainable future in local and global level. The purpose of indicators is to provide a tool for guidance in sustainability policies, including monitoring of measures and their results. In this article will be used sustainability indicators defined by Strategy for Sustainable development of the Republic of Croatia.

The Strategy has identified key challenges of our research on which Brodsko Posavska enterprises has to work to achieve sustainable development: “encouraging population growth, environment and natural resources, promoting sustainable production and consumption, ensuring energy independence and increasing the efficiency of energy use” (Strategy for Sustainable Development of the Republic of Croatia, the Environmental Protection Act , OG 110/07)

3. SUSTAINABLE DEVELOPMENT IN BRODSKO POSAVSKA COUNTY

Brodsko Posavska County covers a total area of 2034 km², which makes 3.61% of the total area of the Croatia. Brodsko Posavska county has 176,765 inhabitants, which is 4 % of the total population of Croatia (51, 47% female and 48, 53% male). There are five international roads through which an enormous transit of

goods, people and services. “Rate of unemployment in Brodsko Posavska County in 2010 was 32%” (www.sbplus.hr). The importance of income is high because Brodsko Posavska County “in 2010 had lowest rate of GDP per person in Croatia, it was 6.183 Euros” (www.glas-slavonije.hr). Because of undevelopment it is behind of the other regions and it is hard to follow trends in business modernization.

3.1. Characteristics of the analyzed companies in Brodsko Posavska County

According to Croatia law acts, there is classification of small, medium and large enterprises. “Small businesses are those that do not exceed two elements from Criteria 1 from Table 1. Medium enterprises are those that exceed the two conditions from Criteria 1, but does not exceed two of Criteria 2. Large enterprises are those that exceed the two conditions of Criteria 2” (Accounting Law OG 109/07).

Table 1. Criteria for determining the size of the company

	Total Asset (kn)	Total Revenue (kn)	Average number of employees during the current year
Criteria 1	32.500.000,00	65.000.000,00	50
Criteria 2	130.000.000,00	260.000.000,00	250

Source: Made by authors (according to Accounting Law OG 109/07)

Also “in 2010 had been active 1.260 of enterprises with 14.317 employees - in city of Slavonski Brod was 771 enterprises with 10.072 employees” (www.hgk.hr). “According to Croatian Financial Agency in Brodsko Posavska in 2010 there has been 0,9% of large, 4,5% of medium-sized and 96,4% of small-sized enterprises, but more than 93% of them is in private sector” (www.bpz.hr). In this paper, survey was conducted in 20 enterprises (15 of small-sized and 5 on medium-sized; 16 located in city of Slavonski Brod and 4 in rest of Brodsko Posavska County). The goal is to make link between sustainable economic development and current state of small and medium-sized enterprises in one of the most undeveloped region in Croatia. In Brodsko Posavska County in “business sector of manufacturing industry there are 34%, in construction industry 14%, in wholesale and trade 33% and in energetic industry less than 7% of enterprises” (www.bpz.hr)

Table 2. Characteristics of enterprises

Business sector	%	Number of employees	%	Types of Business Entities	%	Age	%
Manufacturing	55	0-25	35	LLC	75	1-5	5
Construction	10	26-50	40	Joint-stock	25	5,1-10	10
Wholesale and trade	30	51-100	5			10,1-20	40
Energy	5	101-200	5			20,1-50	35
		201-500	15			50	10

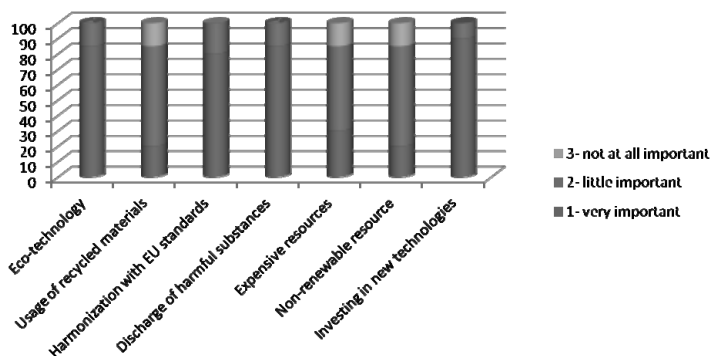
Source: Made by authors

According to survey (Table 2.) there are 55% in manufacturing, in construction industry 10%, in wholesale and trade 30% and in energetic industry less than 5% of enterprises. Most of enterprises, 75% of them, have less than 50 employees and operates from 10 to 50 years. Small sized enterprises are Limited Liability Company (LLC) and medium are Joint-Stock companies.

3.2. Environmental indicators of sustainable development

The environment is of specific interests for every region and it has special protection. The aim of environmental protection is to prevent the damage and pollution of the environment, to prevent environmental hazards, to reduce and eliminate damage to the environment and return the environment to the state before the occurrence of damage. The enterprises stabilities with rational material consumption can contribute to friendly sustainable economic development with the aim of achieving a higher level of living standard of the population. The influence of environmental activity on environmental performance has to do with the fact that the enterprises' environmental activity is interdisciplinary in nature.

Chart 1. Environmental indicators



Source: Made by authors

Chart 1. shows how much is an important for respondents that enterprises take care about the environment. 85% of enterprises considered eco-technology is very important for economic development, also as investing in new technology (90%). Usage of recycled materials is little important for 65% and not at all important for 15%, as well as non-renewable resource. Awareness discharges of harmful substances have very high level of importance, almost 90%. Expensive resources are not at all important for 15% and little important for 55%. Most of the enterprises (80%) seem that harmonization with EU standards is very important not only for sustainable development, but also for their progress.

Environmental indicators are important not only for sustainable development, but also for the competitiveness of enterprises. Who want to become a participant of the EU market have to harmonize business with legal regulation of EU. Most of enterprises in Brodsko Posavska County have ISO 9001 and ISO 14001. These certificates are proof of enterprenurial awareness of environment.

3.3. Waste disposal

Waste disposal is an ever-growing problem. It is directly connected to industrial development and population growth. The term usually relates to materials produced by human activity and is generally undertaken to reduce their effect on health and the environment. Since early modern times, disposing of waste has been an important concern for community and enterprises. "By 2020, the OECD estimates, we could be generating 45% more waste than we did in 1995" (<http://ec.europa.eu>).

In order to define waste management it needs to include several different processes such as collection, transport, processing, recycling, disposing, and monitoring of waste. In Table 3 are presented methods of waste disposal according to materials in the waste.

Table 3. Methods of waste disposal

	Method	% (possibility of multiple answers)
1.	Recycling	5
2.	Properly dispose of waste container	95
3.	Properly dispose of waste container (for each type of waste)	70
4.	Hazardous waste disposal container	25
5.	Eco-container	35
6.	No properly dispose of waste	0

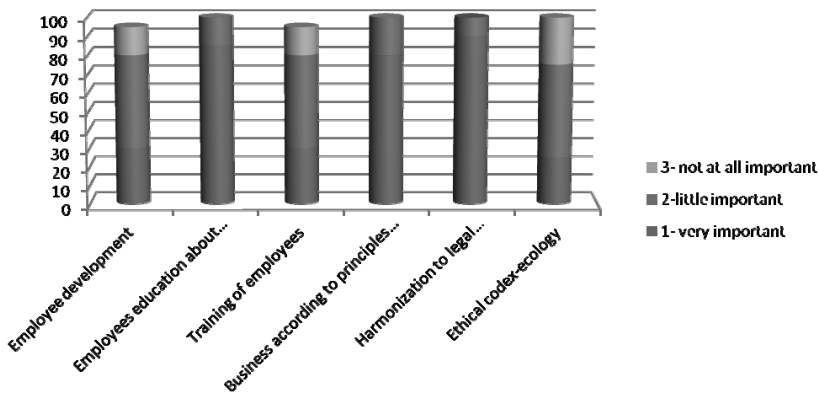
Source: Made by authors

Table 3. shows that 95% of enterprises in Brodsko Posavska County properly dispose their waste in container. 70% of them have separated containers according to the material of waste. Recycling is well known waste-disposal method that is becoming increasingly popular around the globe, but in Brodsko Posavska County only 5% of enterprises use recycling.

3.4. Human resource indicators of sustainable development

Human resource refers to the worker's ability that promotes the entire economy, social and environmental development, including the ability of the intellectual work and of the physical work. Understanding of the importance role of human resource in the modern organization provides an important context to understanding the environmental duties owed by human resource department. The most effective human resource adds value to their organization's environmental effectiveness, by linking people and environment. Human Resource is vital for utilization of scarce resources in an effective and efficient manner. Sustainable competitive advantage emerges more from teams than from individuals, so that the importance of employee involvement is basically manifested through the empowerment and teamwork. Enterprise implements sustainable development through human resource.

Chart 2. Human resource indicators



Source: Made by authors

Chart 2 shows how much is an important for respondents that enterprises take care about the human resource. 50% of enterprises considered employee development is little important for sustainable development, also as training of employees. Employees education about sustainable development is very important for 85%. Business according to principles of sustainable development has very high level of importance, almost 80%. Ethical codex-ecology is not at all important for 25% and little important for 50%. Most of the enterprises (90%) seem that harmonization with legal regulation is very important for their competitiveness and market success.

4. CONCLUSION

It is believed that the greatest polluters of the environment are mostly medium-sized enterprises, it has been noticed that the proportion of small - sized companies significantly exceeds proportion of medium enterprises and they also need to start specific environmental protection programs. Therefore, it is the duty of every enterprise to improve concern about the pollution, including activities of dangerous substances and about measures taken. Our results confirm that there are significant differences between small and medium sized enterprises in material consumption, waste disposal and in sustainable economic development between 20 analyzed enterprises in Brodsko Posavska County. Waste management significantly differs for developed and developing countries and some enterprises in Brodsko Posavska County are still many years away from developing proper waste management systems. Brodsko Posavska County is one of most undeveloped Counties in Republic of Croatia, but enterprises take consideration about sustainable development and should continuously improve its progress.

5. REFERENCES

- Udovičić, B., Čovjek i okoliš, Kigen, Zagreb, 2009.
- Cifrić, I., Okoliš i održivi razvoj –ugroženost okoliša i estetika krajolika, Sociološko društvo Hrvatske, Zagreb, 2002.
- Šimleša, D., Ekološki otisak, Tim press, Zagreb, 2010.
- Rogers, E., Kostigen, T.M., Zeleni priručnik, Planetopija d.o.o., Zagreb, 2008.
- Afrić, V. et. al., Mudra zajednica- Društvena odgovornost za životni prostor, Hrvatsko društvo za sustave, Zagreb, 2008.
- Goodstein, E.S., Ekonomika i okoliš, Mate, Zagreb, 2003.
- Patzelt, H., Shepherd, D.A; Recognizing Opportunities for Sustainable Development, Entrepreneurship Theory and Practice, Volume 35, Issue 4, Baylor University, July 2011, pp.631-652
- Karahasanović, D., Tatić, K., Avdić, A., Sustainable development indicators, Ekonomska revija, Godina VIII, Broj 16, Sarajevo, 2010. pp.143-156.
- Ciegis, R., Ramanauskienė, J., Martinkus, B.; The Concept of Sustainable Development and its Use for Sustainability Scenarios, The economic conditions of enterprise functioning, Vol.2, March 2009., pp.28-37
- Strategy for Sustainable Development of the Republic of Croatia, the Environmental Protection Act , OG 110/07
- Accounting Law OG 109/07
- http://www.hgk.hr/wps/portal!/ut/p/_s.7_0_A/7_0_PR?legacyWcmClippingUrl=http%3A%2F%2Fhgk.biznet.hr%2Fhgk%2Ftekst3.php%3Fa%3Db%26page%3Dtekst%26id%3D557%26kid%3D738 (15.01.2012.)
- http://www.sbplus.hr/brodskoposavska_zupanija/gospodarstvo/n18067_32_nezaposlenih_-_rekord_u_hr/default.aspx (30.01.2012.)
- http://www.glas-slavonije.hr/vijest.asp?rub=1&ID_VIJESTI=137046 (07.01.2012.)
- http://www.bpz.hr/opci_podaci/gospodarstvo/default.aspx (02.02.2012)
- http://www.bpz.hr/opci_podaci/gospodarstvo_i_poljoprivreda/default.aspx (31.01.2012)
- <http://ec.europa.eu/environment/waste/index.htm> (08.02.2012.)

ROAD NETWORK AND REGIONAL DEVELOPMENT - CROATIAN EXPERIENCE OF THE LAST DECADE

Pupavac Drago, Ph.D.¹

¹Polytechnic of Rijeka, Croatia, drago.pupavac@veleri.hr

ABSTRACT

The basic objective of this research paper is to explore the contribution of road networks to regional development. The results of the study are based on Croatian experience. The study of variations in GDP and the total length of the road network will determine if there is a statistically significant positive correlation between movements in GDP and the total length of the road network at the level of national economy as a whole, but also at the level of county/ region. The impact of the road network on regional development will be determined by comparing the growth of GDP, between those regions/counties that significantly increase the overall length of the road network, and those regions/counties that do not. This research will be subdued to different scientific methods, including the method of induction and deduction and the method of regression analysis.

JEL Classification: R41, R42

Keywords: road networks, regions, GDP

1. INTRODUCTION

Like many economic activities that require strong infrastructure, the transport sector is an important component of the economy with impact on development and welfare of population. Economic opportunities are likely to arise where transportation infrastructure is able to satisfy mobility needs and to insure access to markets and resources. When transport systems are efficient, they provide economic and social opportunities and benefits that result in positive multiplying effects, such as better accessibility to markets, employment and additional investments. When transport systems are deficient in terms of capacity or reliability, they may result with an economic cost such as reduced or missed opportunities. Thus, gener-

ally, there are five potential relationships between transport and economic development: the first (1) is a **weak relationship**, the second (2) concerns a **positive / lead impacts** of transportation, the third (3) occurs when there is a **lag in the development of transport systems** relative to economic development, the fourth (4) relationship commonly involves an attempt at infrastructure investment in hope to **trigger development** and/or to attract traffic, the fifth (5) represents the worst case scenario. In addition to the negative consequences of transportation investments on the economy, these investments are occurring after the downward spiral began and may even accelerate the process (Rodrigue, J-P et al, 2009).

As the Croatian transport policy since 1999 has been exclusively oriented on infrastructure (Pupavac, 2009), aiming to integration of Croatian territory, the fundamental task of this scientific paper is to investigate the effects of investment in road transport infrastructure over the past decade and to explore the correlation between the development of road networks and regional development.

2. THE LEVEL OF DEVELOPMENT OF CROATIAN ROAD NETWORK

The immanent approach to development of road networks consists of phase one - investment in the length of the road network up to a certain, optimal level of development, followed by phase two – investment in the quality of the road network. Table 1 shows the position of Croatia (the given data refer to 2008) compared to selected European countries.

Table 1: Comparison of the level of development of road networks between Croatia and the selected European countries

Country	BDP p.c. \$	Length of road network	Km of road per 1.000km ² land area	Km of road per 1,000 population	Number of cars per 1,000 population	Number of vehicles per km of road network
Croatia	8 370	29 248	*517	6,59	302	57,7
Austria	37 330	133 901	1597	16,33	507	36,5
France	35 150	951 220	1749	15,72	495	37,9
Greece	20 290	114 931	871	10,35	407	45,8
Italy	30 340	484 688	1609	8,34	597	72,7
Germany	33 800	650 000	1816	7,86	566	206,9

*only the land surface has been taken into consideration

Source: The Economist, Pocket World in Figures, 2008. Edition, p. 70-72

Indicators on GDP per capita in Table 1 show that Croatia has the lowest level of development in relation to selected European economies. Quantitative data on development of road networks confirm that Croatia, with 29248 km of constructed roads and the road network density of 517 km/1000 km², is the least developed country in relation to the five selected countries of the European Union. In relation to population number, Croatia, with 6,59 km/1000 inhabitants, is also located at the rear. The same conclusion applies to the level of motorization.

As indicators of development of a road network (cf. Table 2), the following can be singled out: 1) the percentage of length of motorways in the total length of road network, 2) the length of motorways per 1000 km², 3) the length of motorways per 1 million inhabitants.

Table 2: Comparison of development of the Croatian motorway network and selected European countries

Country	Length of motorways	% share in total length of road network	Km of motorways per 1,000 km ² land area	Km of motorways per 000,000 population
Croatia	959	3,28	10,95	216,11
Austria	1696	1,27	20,23	206,83
France	*10800	1,14	19,85	178,51
Greece	1030	0,90	7,81	92,79
Italy	**6478	1,34	21,50	111,50
Germany	12594	1,94	35,19	152,29

*Data for 2005

** Data for 1999

Considering data from Table 2 it is clear that Croatia in comparison to the selected countries from the European Union has the largest percentage of motorways in the total length of road network. As for the length of motorways per 1000 km², Croatia is positioned as the last but one, and for the length of motorways per 1 million inhabitants is in the lead.

3. THE DEVELOPMENT OF ROAD INFRASTRUCTURE BY COUNTIES

Common indicators to measure the development of road network are: 1) the length of the road network, 2) the number of kilometers of roads per 1000 km² of the national territory, 3) the number of kilometers of roads per 1000 inhabitants,

4) the degree of motorization, 5) the number of traffic accidents (Ladavac 2000, 360.). The first three indicators are quantitative attributes of development, and the last two are qualitative.

The Croatian territory is divided administratively into 20 counties and the City of Zagreb. Starting point of the analysis of supply of road infrastructure is based on the representation of the length of road network by counties (cf. Table 3).

Table 3: Length of road network by counties in 2008

R.br.	County	Length of roads, km by road ranking group				Density of road network m/km ²
		Total	State roads	County roads	Local roads	
1.	Zagrebačka	1896	353	833	710	620
2.	Krapinsko-zagorska	948	262	444	242	771
3.	Sisačko-moslavačka	1919	449	818	652	430
4.	Karlovačka	1707	436	587	684	471
5.	Varaždinska	1196	254	473	469	948
6.	Koprivničko-križevačka	1126	212	400	514	644
7.	Bjelovarsko-bilogorska	1460	288	565	607	553
8.	Primorsko-goranska	1603	648	597	358	447
9.	Ličko-senjska	2033	673	575	785	380
10.	Virovitičko-podravska	881	181	371	329	435
11.	Požeško-slavonska	731	218	234	279	401
12.	Brodsko-posavska	928	256	477	195	457
13.	Zadarska	1847	665	527	655	507
14.	Osječko-baranjska	1711	492	664	555	412
15.	Šibensko-kninska	1294	410	470	414	434
16.	Vukovarsko-srijemska	1015	306	479	230	413
17.	Splitsko-dalmatinska	2668	872	854	942	588
18.	Istarska	1866	455	682	729	663
19.	Dubrovačko-neretvanska	1007	394	274	339	566
20.	Međimurska	637	111	266	260	874
21.	Grad Zagreb	775	74	314	387	1208
22.	Republic of Croatia	29248	8009	10904	10335	517

Source: <http://www.dzs.hr> (accessed on 14/10/2009)

At the end of 2008, the Croatian road network consists of 29 248 km of roads, of which 8009 km of national roads (27,38%), 10 904 km of county roads (37,28%) and 10 335 km of local roads (35,33%). The total road network in comparison to 1997 has increased by 1408 km or 5%. Length of national roads in comparison to

1997 has increased by 631 km (8,55%), of county roads by 711 km (6,97%) and local roads by only 66 km (0,6%). Broken down by counties, Splitsko-dalmatinska and Ličko-senjska have the greatest number of kilometers of roads (a total of 4701 km or 16,07% of the total road network in Croatia. Throughout Međimurska county there is 534 km of roads or 2,17% of the total road network in Croatia.

By applying methodology for grouping regions/counties by quantitative indicators, primarily by density of road network, there are three main groups:

I - road network density higher than 600 km per 1000 km²: Zagrebačka, the City of Zagreb, Koprivničko-križevačka, Istarska, and Međimurska county.

II - road network density between 517,28 and 600 km per 1000 km²: Bjelovarsko-bilogorska, Splitsko-dalmatinska i Dubrovačko-neretvanska county.

III - road network density less than 517,28 per 1000 km²: Sisačko-moslavačka, Karlovačka, Primorsko-goranska, Ličko-senjska, Virovitičko-podravska, Požeško-slavonska, Brodsko-posavska, Zadarska, Osječko-baranjska, Šibensko-kninska and Vukovarsko-srijemska county.

Regions of group I (Baletic, 1999) are considered as counties with road network density significantly higher than the national average. Regions of group II are of slightly higher road network density than the national average, and the regions of group III are those of road network density below the national average. To draw conclusions on correlation between the development of traffic network and regional development, there is the representation of movements in GDP by county, as follows (cf. Table 4):

Table 4: Movements in GDP by county

County	GDP p.c. in € 2001.	2005.	2006.	2007.	2007./2001.
Grad Zagreb	8811	13036	14208	16766	190,28487
Istarska	6726	9133	9768	12463	185,29587
Primorsko-goranska	5872	8388	9149	11177	190,34401
Koprivničko-križevačka	5163	6331	7454	9142	177,0676
AVERAGE CRO	4997	7036	7705	9656	193,23594
Varaždinska	4784	5856	6621	8223	171,88545
Dubrovačko-neretvanska	4513	6648	7309	10042	222,51274
Sisačko-moslavačka	4331	5420	6374	7200	166,24336
Karlovačka	4235	5273	5986	7825	184,76978
Međimurska	4153	5227	6099	7581	182,54274
Ličko-senjska	4005	6374	6849	8039	200,72409
Virovitičko-podravska	3990	4703	5634	6923	173,50877
Krapinsko-zagorska	3942	5123	5424	7144	181,2278
Bjelovarsko-bilogorska	3916	5060	5780	6691	170,86313
Osječko-baranjska	3874	5287	5836	7875	203,27827
Splitsko-dalmatinska	3795	5421	5977	8003	210,88274
Požeško-slavonska	3691	4775	4904	6505	176,2395
Zadarska	3612	5575	5680	7980	220,93023
Zagrebačka	3399	5375	5425	7360	216,53427
Šibensko-kninska	3187	5355	5432	7799	244,7129
Brodsko-posavska	3049	3741	4167	5345	175,30338
Vukovarsko-srijemska	2899	3991	4627	5756	198,55122

Source: <http://dzs.hr> (accessed on 14/10/2009) and author's calculations

With the exception of Istarska, all the other counties classified in group I and the City of Zagreb belong to the statistical region of northwestern Croatia which generates about a half of the national GDP. Istarska is the only one from this group, with the City of Zagreb, with a GDP per capita in 2007 higher than the national average, which in 2007 stood at € 9,656.

Regions of group II have a slightly higher road network density than the national average, and the regions of group III have a lower road network density than the national average. Of all the counties listed in regions of group II and III, only Primorsko-goranska (€ 11,177) and Dubrovačko-neretvanska (€ 10,042) in 2007 had a GDP per capita higher than the national average.

Application of an identical methodological procedure to qualitative indicators of road network development (number of inhabitants per motor vehicle) confirms grouping of counties into following:

I (number of inhabitants per motor vehicle less than 2,00): Primorsko-goranska and Istarska county.

II (number of inhabitants per motor vehicle between 2,00 to 2,17): the City of Zagreb and Zagrebačka županija, Varaždinska, Koprivničko-križevačka, Dubrovačko-neretvanska and Međimurska county.

III (number of inhabitants per motor vehicle more than 2,17): Bjelovarsko-bilogorska, Ličko-senjska, Virovitičko-podravska, Požeško-slavonska, Brodsko-posavska, Zadarska, Osječko-baranjska, Šibensko-kninska, Vukovarsko-srijemska, Splitsko-dalmatinska, Krapinsko-zagorska, Sisačko-moslavačka and Karlovačka county.

Data for Primorsko-goranska (1,88), Istarska (1,60), the City of Zagreb and Zagrebačka county (2,01) show a strong correlation between a small number of inhabitants per motor vehicle and the economic development of the county. This is also confirmed by the fact that the City of Zagreb, Istarska and Primorsko-goranska county were the only counties in 2007 with a GDP per capita higher than the national average. The lowest GDP per capita was in Brodsko-posavska county with 5,345 euros, which was 44,6% below the national average. It is followed by Vukovarsko-srijemska county with 5,756 euros, that is 40,38% below the national average. Exactly these two counties have the largest number of inhabitants per motor vehicle: Vukovarsko-srijemska 3,09 and Brodsko-posavska 2,87.

4. EXAMINATION OF GDP VARIATIONS AND THE LENGTH OF ROAD NETWORK IN CROATIA

The aim of the following part of this paper is to establish if there is a connection between the length of road network and GDP in modern Croatia in the period since 1996 to 2010 in order to obtain a basis, as real as possible, for evaluating the effects of building road infrastructure, in particular of motorway construction, in economic development.

Examination of GDP variations and the length of road network in Croatia is based on data presented in Table 5.

Table 5: GDP movement, lengths of road network and lengths of motorway network

Year	Length of road network	Length of motorways	GDP (mIn HRK at constant prices 1990)
1996.	26928	318	215,5
1997.	27840	330	229,5
1998.	27840	330	235,2
1999.	28009	382	233,1
2000.	28123	411	239,9
2001.	28275	429	250,4
2002.	28344	455	263,5
2003.	28344	554	274,8
2004.	28344	742	285,2
2005.	28436	792	297,5
2006.	28788	877	311,8
2007.	29038	959	329,8
2008.	29248	1043	344,1
2009.	29343	1097	324,1
2010.	29333	1126	320,2

Source: Statistics year-books of the Republic of Croatia – various issues and author's calculations.

Based on statistical data, Pearson's coefficient of correlation has been calculated to determine if there is a correlation between GDP and the length of road network, ie the length of motorway network (cf. Table 6).

Table 6: Correlation between GDP, the length of road network and the length of motorway network

Correlations (Ceste.sta)					
Marked correlations are significant at $p < ,05000$					
N=15 (Casewise deletion of missing data)					
Variable	Means	Std.Dev.	LRN	LNM	GDP
LRN	28415,53	659,1517	1,000000	0,906322	0,925386
LNM	656,33	304,2463	0,906322	1,000000	0,966799
GDP	276,97	42,3062	0,925386	0,966799	1,000000

Based on data from table 6, it is clear that there is a statistically significant positive correlation between movements in GDP and the length of motorway network measured in kilometers ($r=0,96$; $p < 0,5$), ie between movements in GDP and the total length of road network ($r=0,92$; $p < 0,5$).

The intense investment in development of motorway network in Croatia resulted in a series of economic problems of which the following stand out (cf Table 7).

Table 7: Selected economic indicators of Croatian economy

Current account balance (million EUR)										
1999.	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.	2009.
-1.429	-568	-821	-2.099	-1.889	-1.434	-1.976	-2.717	-3.238	-4.371	-2.361
External debt (million EUR, end of year)										
1999.	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.	2009.
10.175	12.264	13.609	15.144 *	19.884	22.933	25.761*	29.274	32.929	39.125	43.076
External debt (as of % GDP)										
1999.	2000.	2001.	2002.	2003.	2004.	2005.	2006.	2007.	2008.	2009.
47,0	53,0	53,3	53,9	66,3	70,0	72,1	74,9	76,9	82,6	94,9

Source: Croatian National Bank (<http://www.hnb.hr>)

By confirming the statistically significant positive correlation between movements in GDP and the total length of road network, below is established - by comparing the growth of GDP, between those regions/counties which have, and those which have not significantly increased the total length of road network in the observed period - the impact of road network to regional development (cf Table 8).

Table 8: The impact of road network to regional development

Significant increase of road network 1997-2008			GDP growth 2000-2007	
County	km	%	County	%
Zadarska	784	73,7	Zadarska	120,9
Ličko-senjska	223	12,3	Ličko-senjska	100,7
Splitsko-dalmatinska	221	9,0	Splitsko-dalmatinska	110,8
Varaždinska	136	12,8	Varaždinska	71,8
Slight increase of road network in 1997-2008			GDP growth 2000-2007	
County	km	%	County	%
Koprivničko-križevačka	28	2,5	Koprivničko-križevačka	77,1
Bjelovarsko-bilogorska	24	1,6	Bjelovarsko-bilogorska	70,8
Virovitičko-podravska	-19	-2,2	Virovitičko-podravska	73,5
Požeško-slavonska	10	1,3	Požeško-slavonska	76,2

Source: author's calculations

Based on data from Table 8, all the counties that did not significantly increase the length of road network have clearly recorded below average growth rates of GDP per capita. The average growth rate of GDP per capita in the observed period in Croatia

was 93,2%. It also seems appropriate to point out that these counties (Koprivničko-križevačka withstanding) at the rear of GDP per capita in 2007. Lagging behind them are only Brodsko-posavska and Vukovarsko-srijemska, both with slight increase of the total length of road network in the given period by 25 and 4 km respectively. Counties with significant increase in the length of road network (except Varaždinska county) achieved above-average growth rates of GDP per capita confirming the thesis on the biggest contribution to the development of infrastructure in economically disadvantaged counties where a construction of a traffic link between them (section Bosiljevo-Sv. Rok-Split), greatly affected the development of gravitational field.

5. CONCLUSION

This paper has proven the statistically significant positive correlation between movements in GDP and the length of road network in Croatia over the last decade. It has also proven that counties with increase in the total length of road network recorded above-average growth of GDP. Unfortunately, the result of intense investment in building a road infrastructure – primarily motorways – escalated with gigantic growth of foreign debt with threatening debt crisis. Further investment in building road infrastructure in the existing model could lead to the worst possible scenario whereby the traffic is transformed from the generator of development into the accelerator of recession.

LITERATURE

Baletić, Z. (ur.): *Koncepcija regionalnog gospodarskog razvitka Republike Hrvatske*, Zagreb, Ekonomski institut, 1999.

Statistics year-books of the Republic of Croatia, various issues

Pocket World in Figures, 2008 Edition, The Economist, London, 2008.

Ladavac, J.: *Analiza razvijenosti cestovne mreže u Republici Hrvatskoj: pregled po županijama*, Ekonomski pregled, Hrvatsko društvo ekonomista, Zagreb, Vol. 51, 2000., 3-4.

Pupavac, D.: *Načela ekonomike prometa*, Veleučilište u Rijeci, Rijeka, 2009.

Rodrigue, J-P et al. (2009) *The Geography of Transport Systems*, Hofstra University, Department of Global Studies & Geography, <http://people.hofstra.edu/geotrans>.

Croatian National Bank (<http://www.hnb.hr>)

IMPACT OF LABOUR MOBILITY AND USE OF BUSINESS INTELLIGENCE IN ORDER TO CREASE THE COMPANY EFFICIENCY IN THE EU MARKET

I. Miklošević, S. Ravlić, P. Turić

ABSTRACT

Information, although intangible resource, became one of the most strategically important resource for any company. For business owners and managers it is no longer sufficient to have at their disposal some of the information, but the right information, accurate and verified information at a time when such information is necessary to make important strategic decisions in the company. Delayed information is almost without value, however accurate and reliable information can significantly contribute to the achievement of positive business performance. Many managers and business owners are not aware of the importance of intangible resources, and often ignore its value. Information and its value can also be observed from the standpoint of the workforce, because they are collectors, processors and analysts of collected information and data, and ultimately the users. Based on this, we come to the conclusion that the quality of the workforce is a necessary prerequisite for quality data collection, processing and analysis of information and data. Business Intelligence (Business Intelligence) is a tool through which information and data from the environment is systematically collected, processed and analyzed in order to improve competitive position of companies on the market, but the prerequisite is a quality workforce in companies that knows how to use BI can help reduce of operating costs, better targeting of the desired direction, better care for clients, relation to competition, etc. The easiest way to increase the quality of the workforce, but also the most unused, is the mobility of the workforce, which in recent years was primarily presented as exchange of students and study visits for work force in higher education in order to establish connections with similar institutions in European Union. Sending labor force to education and training to countries in European Union is very unexplored and unused sector but the opportunities provided by work force mobility are great. In the process of accession the EU we got

the possibility to use funds for work force mobility in the market that are designed to encourage the development of knowledge, skills and qualifications that mobility participants and the institutions they come from and which the worker is coming can achieve. Persons employed in any sector and with all levels of qualifications can contribute to their professional and personal development through People on the Labour market projects. In this way employee can significantly contribute to developing his own skills and acquiring new knowledge, which will ultimately bring benefits to his employer, the branch they are in and overall the whole economy. Mobility program allows the transfer of good practice and innovation between participating countries and companies participating in mobility, and coordination with technological progress, innovations and trends in EU leading countries . By joining the European Union we will become the workforce in this great market, but companies will have to be competitive in that same market if they want to stay on the market. Better workforce that is familiar with trends in the market where we want to position ourselves is one of the ways in which we can increase the level of our competitiveness. In the example of Blue Media d.o.o., small company with relatively short period of existence on the market, We will see is it possible to increase and create significant advantages by applying Business Intelligence (BI) and what are the gaps and also by giving recommendations for future operations. Primarily by emphasizing the resources - time, costs and human resources management..

Keywords: Business Intelligence application, Information, mobility of labor force, Human Resources

1. THE IMPORTANCE OF BUSINESS INTELLIGENCE FOR COMPANY

Information is today an indispensable and irreplaceable resource in organization and even though it is constantly being in use it can not be spend or reduced in value. However, over time may become obsolete. (Lamza-Maronić, Glavaš, 2008, p 11). For business owners and managers it is no longer sufficient to have some information, but to have the right information; accurate and reliable information at a time when such information is required so that it is possible to make important strategic decisions in the company. Delayed information have almost no value, but timely, accurate and reliable information can significantly contribute to achieving positive operating results in the company. Every business entity, government body or public institution, that supports their business operations with information system can also use business intelligence as a support tool in making decisions. Also,

nowadays there are many definitions that explain the concept of business intelligence, and some of them are: Business intelligence is the hidden knowledge that can be revealed from operational and business data that is routinely collected by applying appropriate arithmetic-logic method, usually supported by information technology. (Panian, Klepac, 2003, pg 1).

Business intelligence is an upgrade of information systems to support business and keep important information and knowledge about competitors, customers and suppliers. Business information that these systems generate can be used in order to improve business results, but their structure is far from being ideal.

2. MOBILITY OF LABOR FORCE - UNDERUSED RESOURCE IN COMPANY FOR INCREASING PERFORMANCE

In today's uncertain times in which business has to be done a large number of small and medium enterprises, the source of data, timely information and data, and quality human resource that will be in a condition to create added value for the company, may be crucial in achieving the desired business results, and to maintain their position on the market. The information is knowledge, the knowledge is power. One must draw information from the knowledge in order to make an impact on their future, the future of the society, to live and to work, to create and do business, to resolve problems, evolved and realize himself in micro and macroenvironment. (Javorović, Bilandžić, 2007, p 9). Many managers and business owners today are not aware of the importance of this resource and its value is often being ignored. Technological Development, "explosion" of knowledge and knowledge industry brought us to the point that the information became a fundamental development potential; share of knowledge and access to knowledge, might not be the most important potential, but it is for sure as important as the development potential as material and energy natural resources. (Tuđman, 1986, p 3). Having a quality human resource in the company nowadays is certainly an advantage in the market, but the fact is that entrepreneurs rarely see this advantage and invest in their personnel. Keeping up with the trends in the market, the exchange of knowledge and innovation should be one of the major imperatives when talking about investments because it is one of the main ways in which the company can keep pace with local and more importantly, foreign competition. But very often, the reason for low investment in human resources is the high cost, lack of ability to return those investments through future operations and the fear that the worker will, after education or training, have a better chance of finding a better job and

leave the company. The solution is perhaps the labor mobility that is not a classic labour force mobility due to insufficient job possibilities, but labor mobility for development and acquisition of new knowledge and skills so that the enterprise can obtain its position in the market. Today only 2% of the working population in the EU work in another EU country (COM 2004., p 37). Thus, guaranteed freedom of movement for workers and professionals is not fully utilized. Since the low level of labor mobility in the EU has a negative impact on economic growth, employment and vocational training of the labor force, the European Union, aware of this problem, is trying to remove these barriers through various measures aimed at improving the employment situation and to encourage labor mobility. Adoption of the Action Plan on qualifications and mobility and the establishment of the portal with information on the labour mobility within the EU for employment are just some of the measures that are being taken. In addition, this great challenge of the EU is trying to solve the Lifelong Learning Programme, which is the largest EU program in the field of education, covering all sectors of education, encourage mobility and international cooperation and except for those involved in the process of education at all levels and those that are already present the labor market, employed in various businesses or are currently active job seekers (<http://www.mobilnost.hr/index.php?id=272>). This program covers the period 2007. - 2013., and for its implementation is provided an impressive budget of 6.9 billion €. (<http://www.mobilnost.hr/index.php?id=9>) By participating in the Leonardo da Vinci, which is most appropriate programme because it includes vocational education and training, vocational schools, businesses/Chamber and businesses; users have the ability to gain new life experiences in other environments, cultures and operating environments and application of acquired knowledge, contribute significantly to his institution, but also employability in the labor market and the economy. Leonardo da Vinci allows the transfer of good practice and innovation in the economy between the participating countries, harmonization of the education system with technological advances and the labor market as well as personal and professional development of each person participating in the programme.

Labor mobility is extremely important segment of economic development of regions and countries. Promoting opportunities and benefits brought by the mobility of the workforce will contribute to strengthening relations and economic development within the country and ultimately increase employment also in the EU.

3. BUSINESS INTELLIGENCE IN BLUE MEDIA LTD

Blue Media Ltd., small and young company, has substantial advantages over the competition, by using Business Intelligence application (BI) in its business. This company is proof that sometimes company size is not crucial for the success, but knowledge and active monitoring of trends on the market. Through enviable IT knowledge gained in the country and abroad, company has created a Business Intelligence application that greatly affects the success of a positive business enterprises.

The key question of doing business today is: What is the most important prerequisite of survival in today's turbulent market? The answer is relatively simple - information, or, more precisely, information which enables appropriate action. This equally applies to all industries and activities, from agriculture, energy and mechanical engineering, through commerce and banking, to insurance and education (Panian, Klepac, 2003, p 27). As we can see from Picture 1, all employees of the company Blue Media Ltd. insert in the Business Intelligence application information using codes known only to them, and that brings a variety of useful information to business owners and managers of the company. By using these data management draws conclusions that are crucial for the company and by using this information the company is able to go in the desired direction.

Figure 1 Business Intelligence application

Source: Blue Media Ltd.

However, in addition to these savings Blue Media Ltd. also achieved intangible benefits by applying BI as follows:

1. Blue Media company d.o.o. increased control of their employees
2. Human resources are becoming more organized, with clear tasks, goals and a clear presentation of the achieved results
3. Objectively evaluate the success of each employee (a modern operating system, where an ambitious and successful employees protected while the system is minimally tolerating any attempt to avoid tasks)
4. BI presents results and conclusions to employees and directors and give them explicit instructions and tasks on a daily basis, taking into account the entire past history of operations on the basis of which is the conclusion made (This is to minimize errors in business)
5. Increase productivity of enterprises and defining the company strategy together with market performance
6. BI offers a proposal of organization structure (for example, the best staff in the team after analyzing the data and conclusions on the X period of time proposed for the team leader)
7. BI is not subject to emotions and mitigating circumstances, certain employees in the business (for example, the mean employment of emotionally based on looks, but under extenuating circumstances, for example single mother need higher wages, etc.)

It is, however to me emphasized that for the company's success is crucial the ability of its owner to collected information about customer needs and to transform it into knowledge that can be used for making business decisions. (Goldstein, 2009, p 53). Through the application of BI in enterprises, systematic review of human resources is achieved, better organization of the enterprise, employees are becoming more organized, with clear tasks and goals ahead of them and business owners and managers in this way can objectively evaluate the operation and success of each employee, and reward their employees based on actual merit.

5. CONCLUSION

Many managers and business owners today are not aware of the importance of gathering information, their use and the value it can bring if used by a high quality human resource. It is the quality of human resources in company that can be

greatly affected by mobility of labor force. Mobility of labor force is indispensable when it comes to leading a successful business based on knowledge and efficient functioning within the EU market, increasing employment and economic progress at the level of each member state and EU as a whole.

Challenges and problems in companies that can be successfully eliminated or mitigated are the reduction in business costs and increasing profits, which means that owners and managers will have more time on their hands to perform routine operations, but also for strategic planning in the company. Also, the implementation of BI applications enhances the control of employees, and it becomes systematic, objective and commonplace, and the owners and managers can objectively evaluate the success of each employee. If the company decides upon quality labor force in which is often invested, business owners and managers will have more time at their disposal, which is absolutely necessary if they want their operations and activities to run smoothly.

6. REFERENCES

1. Lamza-Maronić, Glavaš, (2008). str. 11., Poslovno komuniciranje, Sveučilište J.J.Strossmayera u Osijeku, Ekonomski fakultet u Osijeku, Osijek
2. Javorović, Bilandžić, (2007). str. 9., Poslovne informacije i business intelligence, Golden marketing-Tehnička knjiga, Zagreb
3. M. Tuđman, (1986). str. 3., Teorija informacijske znanosti, Informator, Zagreb
4. Panian, Klepac, (2003). str. 1., Poslovna inteligencija, MASMEDIA, Zagreb
5. Prezentacija prof.dr.sc. Maja Lamza-Maronić, Jerko Glavaš, dipl.oec: Business Intelligence, Osijek 2007.
6. Panian, Klepac, (2003). str. 27., Poslovna inteligencija, MASMEDIA, Zagreb
7. N. Osmanagić Bedenik, (1998). str. 13., Kontroling, Abeceda poslovnog uspjeha, Školska knjiga, Zagreb
8. B. Goldstein, (2009). Str. 53., Najbolji marketinški alati za male poduzetnike, Algoritam, Zagreb
9. Report on the implementation of the Commission's Action Plan for Skills and Mobility, COM(2004) 66 Final, p 37.
10. <http://www.mobilnost.hr/index.php?id=272> (Accessed 11.03.2012.)
11. <http://www.mobilnost.hr/index.php?id=9> (Accessed 12.03.2012)

ECONOMIC
DEVELOPMENT,
TECHNOLOGICAL
CHANGE
AND GROWTH

THE SECTOR DISTRIBUTION OF COMMUNAL ECONOMY OF CITIES IN CROATIA

Domagoj Karačić, Ph.D.¹

¹Senior assistant, Faculty of Economics in Osijek, Croatia, karacic@efos.hr

ABSTRACT

The city population in Croatia is in line with post-transition period, and before the transition, over the past two decades, was faced with a new understanding of re-defining the function of local public services and the concept of choosing your own requirements, but is in complete accordance with the democratic rights related to the selection and creation of further functioning of the activities of local public services in the local area. In this way, the city population, during the period of creation and customization of the entire organization and functioning of cities in Croatia, got the opportunity to participate in the creation of further prospects of communal economy of cities in Croatia. This paper seeks to define the basic theoretical and practical features of the functioning of the communal economy of cities in Croatia at the aggregate level of cities. Communal economy of cities on an aggregate level, and observed by the sectoral distribution, can be measured in differentiated individual communal industries (transportation, garbage, water, etc.) and thus easier to identify and position the advantages and disadvantages in particular in terms of noticeable differences in the organizations among the towns in Croatia, where the smaller towns and the city of Zagreb have a similar structure and functioning in relation to the secondary cities, which is not to compare, if we analyze the number of population size and structure of utility activities.

JEL Classification: P35

Keywords: communal economy, cities, sectors of communal economy.

1. INTRODUCTION

Communal economy of cities on aggregate level, observed through a sector division, can differentiate better individual industries (transport, waste, water, etc.)

and identify the position of their own advantages and disadvantages in relation to the viewing and positioning in terms of integrated communal economy. Also, this document seeks to explore and establish a framework and model of the functioning of communal economy of cities in the financing activities, since there are differences in the structure and organization between the cities in Republic of Croatia. Smaller cities and the city of Zagreb have a similar structure and mode of functioning in relation to the medium cities, where the functioning and organization of communal activities is left to local public entities. Communal activities of smaller cities and city of Zagreb are directed towards the central local companies.

2. THE SECTOR DISTRIBUTION OF COMMUNAL ECONOMY OF CITIES

Accordingly, the functioning of the communal economy at the city level in Republic of Croatia can be divided into the following key sectors.

Picture 1: The main divisions - the sectors of communal economy of cities in Republic of Croatia



Source: Author division subscribed by Law of communal economy.

The primary division of the communal sector of cities stems from the fact that the number and the framework of communal services, in relation to other local

activities and functions, increased and it falls under one of the primary forms of organization of the city activities, while the substitution of lower local government units presents one and only basic form of organization activity within the achieving overall form of organizational activities that meet local public needs. Reasons and efforts of defining the activities of communal economy of cities within the sector division are directed toward the idea to display series of actions and activities of the communal economy of cities and also to create a classification framework of analysis that would standardize representations of communal activities of small, medium and major cities in Republic of Croatia. Within the analysis of cities it would be easier to agree on future trends and related sources of financing communal activities, issues of cost of each individual communal service and thereby define the current and future trends of functioning of city activities that can be expected within the city government units.

In this case, according to the range and importance of the economic viability, communal services can be divided into:

- *existential*
- *nonexistential*.

Existential communal services are services that have a vital importance in the functioning of a standard criteria of basic human needs, where significant communal service in the whole is left entirely to the public sector. *Nonexistential communal* services are services that have some form of importance for the living, but are less significant by the criteria of basic human needs and as such can exist between public and private sectors.

3. SECTOR OF BASIC COMMUNAL SERVICES OF CITIES

3.1. Sector of waste, waste disposal and waste

This sector represents most significant segment of the communal economy of cities, since cities in the Republic of Croatia are facing significant problems with the deposit, storage and disposal of waste. Within this sector cities fully take care of transporting waste, since that is basic form of communal service. Defining the process of storage and disposal of communal waste is not within the domain of autonomous cities. This process includes other levels of government from lower local government units, regional units to central government units. Projects of landfills and communal waste, as well as sorting and processing of waste, are very

costly and consequently need horizontal and vertical merger of more units of local government.

As priority, this form of public good and service has a broader framework to regulate the activities between the various levels of government. Lack of modern communal waste landfills is the biggest issue in the concept of solving the problem of waste management because it represents one of the most important investment projects. In solving this problem all levels of government, public subjects and most of local and regional authorities are involved. Most regional units of government expressed the need for development of modern communal waste landfill with renovation of the existing official or "wild" landfills. Although in most cases more cost effective is development of coherent new solutions for communal and other waste, instead of redefining existing communal landfills. Since this is a strategic capital investment and investment of particular interest and since the basic funding of regional and local authorities is not sufficient, it is necessary to find the funds through financing assistance from the central government and within the project through pre-accession EU funds, which can be used in accordance with the IPE components. Several years ago most cities in the Republic of Croatia applied the above mentioned measures in the segment of separate collection and sorting of waste and communal waste and by that cities rationalized the process of directing waste and communal waste during transport and storage, which had significant influence on rationalization of costs. The main problem that occurred associated with cities arises from the fact that cooperation and effectiveness among all units of government is not at its optimum level, so there are still active and present problems in the area of defining the rights and powers over landfills and dumps, especially in the financial section.

3.2. Sector of water supply, drainage and sewage

Water supply and sewerage sector is the second most important segment of the communal services. Main reason is importance and function of water for the population and thus this type of communal service is one of the primary forms and of the utmost importance for every unit of local and the central government. Given that the number of the world population increases and demand for water is increasing, strategic management framework over the water on both local and central level should be directed to the care of the water in the exclusive interest of the public. In the cities, care and activities considering water and sanitation services, fall under

local water communal companies owned by cities. On the other hand segment of sewage in cities in the Republic of Croatia may be interpreted as ambiguous since sewer and drainage activities are fully separated from the water segment, while in the cities, water segment and sewer and drainage activities falls under local communal company. Sewage, within the communal services, is a form of communal services of the utmost importance for the normal functioning of cities since sewage system regulates the transport of all types of water, most types of waste and atmospheric waters. The biggest issue in the future activities of the construction of waterworks, sewerage and drainage is a problem of obsolete water and sewer infrastructure networks. Issue is also dissemination of households, which led to the need to redefinition the functions and capabilities of current water and sewer systems, which are in most cities outdated and not adjusted to modern needs of today's standards arising from the needs of individuals and local environment. The processes of reconstruction of water supply and sewerage systems cannot be funded from existing resources of local government units and local communal companies. In operational context, funding is long and demands and requires long-term planning of funding sources, which can ultimately affect the price of regular communal costs of water, drainage and sewerage.

3.3. Sector of environment maintainace (nature, parks, roads)

Sector of environment maintainace which includes forms of nature, parks and roads, is considered as secondary public interest, and therefore all the activities of local and regional units of government directed at shaping of the priorities of these different forms of communal services are not first priority. When it comes to the environment of cities, it includes the nature, parks and roads that make the basic area of the cities and can be seen by the human eye. Also it includes dynamic development of parallel influences and implies dynamic overall development of cities. Implementation of the activities of communal services is in the domain of the local communal companies, where the roads are integrated in cooperation between units of local government and local communal companies, since the road infrastructure, due to the modern conditions and in accordance with the trend of increasing traffic, require greater attention and financial expenditures. The largest number of roads in the Republic of Croatia consists of local and county roads, which shows the importance of these communal activities and also points to the fact that roads in the Republic of Croatia are priority activities. But in financing road infrastructure authority is divided between multiple levels of government. Segment of maintain-

ing parks is entirely in the domain of cities and local government units, while most care about parks is the responsibility of local communal companies. Symbiosis of economic development of the cities and the high level of awareness of local population towards environmental issues has the effect of defining the three different stages of development of major cities (Stiperski, Z. & Fuerst-Bjeliš, B. 2003.) and is in accordance with the genesis of development of all environmental factors:

1. first phase of development of major cities are characterized by low income (<\$ 1,000), main environmental problems and risks of traditional quality of life.
2. second phase of development refers to the median income level (\$ 1000-10000), the “first generation” of environmental problems and the transition from traditional to modern risks.
3. Third phase of city development implies a high level of income (> \$ 10,000) and includes solution for many environmental problems.

In that way the problem of financing is the one which determines the answers to the problems of the environment and is in accordance with all explanations and facts relating to the environment of cities in Republic of Croatia. In conclusion, future flow of financing activities and environmental development should be directed to all levels of government within the national level.

3.4. Sector of public transport

This type of communal service constitutes an important segment of the functioning of city, since these services are used by population of all ages and the subjects who used it largely dependent on transport and it indirectly affects the activity of cities and its population. The function of maintaining of public transport in middle cities and big city have local communal companies, which can not entirely finance the activities of public transport, so local unit of government have to partially participate in funding. Smaller cities in the Republic of Croatia provide the service of local transport, which is rarely the domain of activities of the local communal company, and is more focused on local transport concessions given by private enterprise. Further activities of local authorities and local communal companies are focused on the modernization of public transport vehicles, the restructuring of the tram infrastructure, defining the problem of parking by exclusion of certain public areas of the parking, construction of new parking spaces and modulation of public transport by indirect attempts to reduce the transport of the population with or their own personal car.

4. SECTOR OF OTHER SMALLER COMMUNAL SERVICES

Sector of other smaller communal services includes a small communal services such as cemetery, retail markets and wholesale, lighting and housing services. These communal services within their activities are not at all similar, but given the volume of activity and importance of the income criteria, represent materially less significant segments of the communal activities and within the framework of economies of cities in Croatia. It is clear that utilities such as lighting and cemetery have great significance because they have a direct impact on defining the dynamics of city living. On the other hand the dynamics of the functioning of retail markets and housing are aimed to meet needs of the individuals in accordance with the preferences and financial capabilities and also depend on the conditions of market mechanisms regulation which are defined by the authority and activities of public and private subjects in the market. Cost of small communal services have no dominant influence on the defining of the activities of communal economy since these activities have to exist, but fundamentally do not participate in creation communal economy.

4.1. Cemetery – small communal service

Segment of cemeteries, described through frameworks of communal economy, and in terms of revenue and the overall analysis issues of communal economy of cities in the Republic of Croatia, belongs to the small communal services. But in terms of communal services, cemeteries have one of the most important functions of communal activities. In fact, in major and medium cities this communal service occurs through the operation of communal enterprises, while in small cities carriers of this activity and performance of services are units of local government. In the Republic of Croatia, cities that have well established communal service in general, have also well defined structure and functioning of the utility companies that perform funeral services. The involvement of the private sector comes from subjects engaged in activities of funeral services which do not include the service of selling public areas.

4.2 Retail and wholesale markets – small communal service

Functioning of the retail markets and wholesale markets falls in the form of a less significant segment of small communal services, with the note that the structure of retail and wholesale markets is different than other forms small communal

services. Given that the market is not the only place where they sell groceries and that there are other forms of commercial sales in other places, it is clear that retail and wholesale markets are not a significant form of community service. In this case, it is acceptable to change the ownership structure of these activities, since subjects from private sector are much more effective in regulating of the market model of supply and demand.

4.3. Public lightening – small communal service

Active maintenance of public lighting and developing a new street lighting in cities and many smaller places is necessary and requires continuity. This communal service is usually, in accordance with the proportions of business segments, left in the functioning of the private ownership, and service is determined by a concession which is defined and provided by local units of government. Also there are cases where this community service is added to more significant communal activities, since public lighting as a communal service is organizationally less complex process compared to other major utilities and industries. Many cities in the Republic of Croatia defined public lighting service by transferring the rights of easement from public to private sector.

4.4. Housing – small communal service

Subjects participating in the segment of housing appear to be subjects that are primarily engaged in the maintenance of the property that was owned by local authorities. Companies that perform activities in the sphere of communal housing economy are still owned by local authorities, but they are largely focused on the extended functions of this service which includes maintenance activities for housing. This communal service has a potential diversion of subjects from the domain of public sector to the domain of the private sector, where the restructuring of organizational units would have a positive effect for the further advancement of these services.

5. FUNCTIONING OF CITY COMMUNAL SERVICES - ASSOCIATION OF LOCAL COMMUNAL COMPANIES INTO A SINGLE COMPANY

City communal economy in the Republic of Croatia in the prospects of further operation and when it comes to organizational and functional structure, can be seen from the whole aspect and mode of operation that assumes concentration

of all communal services into a single enterprise on the city level, which would thus include all the advantages and disadvantages in the functioning of fragmented communal economy, compared to the advantages and disadvantages offered by the concept of a single enterprise. The company, perceived from the organizational level, must integrate several criteria for successful operation. Organizational structure of each company is determined by three key criteria functioning, and they represent (Donnelly, J.H.; Gibson, J.L.; Ivancevich, J.M. : 1995):

- a) complexity*
- b) formalisation*
- c) centralisation.*

In this case, a unique enterprise that brings together the activities of its holdings and has the characteristics of the publicity must meet the criteria and be able to successfully integrate the internal structure with methods and forms of operation. The complexity of the company in the classical context of an enterprise presents the company that can be divided by vertical and horizontal level of functioning. The framework of formality of action is largely determined by company size, which in the case of local communal companies in the Republic of Croatia is reflected in the disparity between the small number of large cities and large number of small cities. Thus, the local communal companies are forced to deal with diversity in defining the optimal level of functioning according to the organizational and functional scheme that would ultimately attempt to meet optimal goal of achieving human needs in accordance with the actual preferences and capabilities of the population, taking into account the cost of communal services and social sensitivity. It is very difficult to identify the optimal structure of organizational and functional levels of the local communal company, but the fact that a large number of small cities have a centralized system of functioning and that the centralization of communal activities in large cities have achieved much better effects such as lower costs (rational structure of employees, cohesive implementation of operations and other ancillary activities), the realization of faster access to community services, organizational links (related and unrelated communal services) and creating a unified company with a larger balance sheet potential. Business organizations defined as a holding in the segment of defining of the organizational structure of local communal companies could be applicable, particularly because organizational structure in the form of holding is taken over from the private sector, where companies of that shape have achieved significant positive results. In this way, companies that come from communal and public sectors could reorient its fundamental mode of action and

organize themselves independently of political influence. Given that the legislation gives certain advantages to local communal services, it should be taken as advantage and through a different organizational structure and management improve the prospects for further growth and development of local communal companies in the Republic of Croatia. The role of politics in the Republic of Croatia does not only depend on core interpretation of the politics, it also arises from the fact that the local communal companies are forced to adapt their business activities to progressive trend of development of political ideology. Smallest role on influence of functioning of local communal companies has economic market development trend where is insufficiently taken into account the potential losses that each local communal company in the Republic of Croatia has. The actual economic solutions regarding further functioning of the local communal companies represent a secondary framework of functioning and thus do not give a better insight into the perspective of further development of larger and smaller communal services in the Republic of Croatia.

REFERENCE

- Anić, V. (2003). *Veliki rječnik hrvatskog jezika - četvrto izdanje*. Zagreb: Novi liber.
- Bajo, A., & Primorac, M. (2010). *Financijsko poslovanje lokalnih komunalnih trgovačkih društava*. Newsletter br.52, Zagreb: Institut za javne financije.
- Donnelly, J.H., Gibson, J.L., & Ivancevich, J.M. (1995). *Fundamentals of Management*. Irwin –Ninth Edition, Chicago
- Stiperski, Z. & Fuerst-Bjeliš, B. (2003). *Problemi i modeli upravljanja okolišem u mega-gradovima zemalja u razvoju*. Društvena istraživanja (1330-0288) 12 (2003), 6. str. 1051-1068., Zagreb: Institut Ivo Pilar.
- Šimunović, V. (2007). *Urbana ekonomika*. Zagreb: Školska knjiga.
- Zakon o komunalnom gospodarstvu. (36/1995, 109/1995, 70/1997, 128/1999, 59/2001, 150/2002, 26/2003, 82/2004, 82/2004, 178/2004, 38/2009, 79/2009). Narodne novine.

GLOBALIZATION AND AGROTOURISM DEVELOPMENT: THE CASE OF SLAVONIA AND BARANIA

Irena Bosnić, mag.oec., Dejan Tubić, B.Sc.

ABSTRACT

Tourism has become a global phenomenon in the last fifty years. Changes caused by globalization processes have led to increased interest of an increasing number of tourists to get to know different countries, new cultures, local customs and way of life. On the other hand, competitive game is steadily intensifying between tourist destinations which in order to survive on global tourism market have to constantly create new, innovative and quality tourism products based on autochthony of local resources, tradition and in accordance with the principles of sustainable development. Therefore, the purpose of this work is to show the relationship of globalization and tourism, with reference to which are the positive and negative consequences of globalization processes unfolding in the tourism market and to analyze the development of agro-tourism in Slavonia and Barania as a form of tourism that can offer new and different type of holiday that will be competitive in the global tourism market.

JEL Classification: L83

Keywords: globalization, tourism market, agro-tourism, Slavonia and Barania

1 PREFACE

Globalization represents a megatrend of modern tourism market, and it is a process that causes inevitable changes on a global scale that can not be avoided. Global economic trends have pooled the market of local, regional and national borders in to global by deleting the integrity of the country and imposing a new game, new rules of conduct and business. Tourism can be said that it is a precursor, the stimulus and driving force of globalization which primarily comes from travel and stay of tourists outside of domicile areas as well as association and integration of tourists, tourism workers and local residents. Under the influence of globalization processes

most wanted tourist destinations are ones that enable tourists to engage in different activities and traditions that nourish and adjust the offer, interests and needs of increasingly demanding tourist demand. Therefore, agro-tourism, as a form of rural tourism has all the predispositions to respond to these market challenges and offer innovative travel product with indigenous traditional elements that will ensure its recognition on the tourism market.

2 RELATION BETWEEN TOURISM AND GLOBALIZATION

Globalization is a general trend that marked the development of tourism in the past 20 years and affects all destinations in the world. Globalizacija can be defined as the growing integration of economies and societies around the world and a complex process that affects many or even all aspects of life (Blažević&Perić; 2009, 7). In economic terms, globalization is defined as an increase in the interdependence of markets and production in different countries through trade in goods and services, free movement of capital, international strategic agreements and various forms of association and exchange of technology (Vukonić & Čavlek; 2001,107). Thus, globalization is a process of economic, social, cultural, political and technical actions that transcend the boundaries of nation states and the consequences of exceeding the individual interests of individual states.

The globalization process has contributed to the easy availability of all relevant information, new and ever more innovative ways of market communication and new and innovative sales channels resulting in the need for constant change and rapid adjustments in almost all spheres of life and work, including the sphere of tourism and tourism business (Čorak et al.;2011). Globalization function of tourism not only stems from the fact that tourism is the world's leading industry, but its power to influence the processes of globalization stems from the increasing rate of exchange of economic and cultural influences between tourists and local communities. Therefore, as one of the manifestations of globalization highlights the growing interest of a growing number of people not only for learning about different countries and cultures, but also about local customs and ways of life. Global interacts with local, creating a peculiar important new situations and structures. Therefore, the effects of globalization can not be seen in the mere adding up of local and global, but in their mutual interpenetration which qualitatively changes the life of the local points and thus in turn defines a global framework (Magaš; 2003, 3).

Modern trends in global tourism driven by globalization processes are primarily driven by changes in tourism demand. Improvement of living standards and globalization processes that take place on the tourism market have significantly influenced the changes in travel behavior of consumers that are subject to affirmation of additional new needs and changes in their attitudes towards the quality of tourism product (Vrtiprah; 2006). Modern tourists are becoming more demanding, they travel more frequently, but trips are shorter and are increasingly turning to the specific forms of tourism in search of new experiences (Čavlek;2011, 75), They are well informed, seeking more individual approach to travel organization, are unpredictable, spontaneous, sensitive to the quality of service, they want more comprehensive tourism experiences and with the holidays are looking for other contents (Vrtiprah; 2006).

Globalization affects the appearance of trends that dominate the tourism market offers such a competitive struggle, Substitutability of destinations, *brandig*, last minute booking and strengthening the process of horizontal and vertical integration. The globalization of the tourism market is the most evident through Integration of carriers of tourism activities, which seek to integrate their business activities to better respond to complex and diverse requirements of tourism demand, and establish a certain degree of coordination among the various entities participating in the provision of complex services to tourists. Processes of horizontal and vertical integrations have widely affected the tourism and now the global tourism market is dominated by large groups of horizontally and vertically related subjects in various segments of tourism, which increasingly affects the globalization of tourism market (Čavlek;2011,76). In this process of integration, large systems have swallowed a large number of small and medium businesses. Therefore it is necessary to connect small businesses to business associations, in order to protect and enhance their business with a joint performance on the market.

When we talk about tourism and tourism economy, it is important to emphasize the negative implications of globalization processes that are manifested in the indiscriminate acceptance of standards in content of offers that are incompatible with the good intentions of globalization. Tourism demand has assumed global proportions, and its growing mobility influences the growing tourism matching of preferences of consumers and on the creation of global lifestyle, similar preferences in choosing tourism products, which all leads to the growing trend of standardization and homogenization of tourism market (Vanhove ;2005, prema Čavlek; 2011). This is directly reflected on the tourism market where offers are occurring standardized products and strives to create brands in order to meet the demanding

tourism demand and the trend of relatively high loyalty of tourists towards brands because tourism consumers attach most importance to the pleasant atmosphere and experience at the seaside, and seek richer and higher quality services regardless of the destination. Unfortunately, the concept of quality in the global system so far has been identified with the notion of standardized content, leading to loss of national, regional and local characteristics, which is one of the most common objections to globalization as a phenomenon (Magaš; 2003,7). However, on the other hand an increasing number of standardized travel products are leading to their gradual “commodization” with the inevitable negative implications on the level of tourist interest (Čorak et al.; 2011). Therefore, the production of these standardized products and services will be less attractive, while the value of authentic products will grow, especially personalized and emotion-filled experiences.

Furthermore, the progressive technological advancement, which is also a prerequisite for the emergence of the globalization processes, has caused that one of the basic conditions for developing tourism in a particular destination (distance of tourist destinations) is increasingly losing its meaning (Pavlić;2004,225). The possibility of substituting one destination to another is very high so destinations are trying to diversify their offer by developing new services to meet the needs of tourism demand (Čavlek; 2011). In such circumstances, originality, authenticity and diversity that are possessed by specific tourist region represents the basic prerequisite for maintaining a competitive advantage in the market and it is necessary to build all the destinations in their own image, which will include along with technically standardized offer, some elements of indigenous character (Magaš; 2003). Namely, in terms of competitive advantages of globalization specific tourist destinations come precisely from the authenticity of the resource base and the attractiveness of creative and innovative solutions in sustainable tourism destination management.

Thus the main effects arising from the impact of globalization processes on the tourism is a sudden increase in potential of demand for numerous tourist destinations, extremely strong competition between destinations, which causes the need for specialization, innovation and higher quality products and services, but also the presence of globalized corporations that SME’s must struggle against in order to survive on the tourist market.

3 DEFINITION OF THE TERM AGROTOURISM

Agrotourism is one of the most important forms of rural tourism, which is defined as an immediate tourist activity which is organized by family farms and farmers, while other aspects of rural tourism, mainly organized by entities outside of rural area and / or entities that are not included in the agricultural activity (Brščić et. al.; 2010). So when we talk about agrotourism, it is a vacation on rural economy (registered family farms, agricultural trades, agricultural trading company Ltd. or Inc.) with the arrival of food, beverages, entertainment, recreation and other services in private buildings or other facilities of accommodation (camping, lodging, hotels) in the rural economy (Demonja & Ružić; 2010). Under the Law on tourism industry agrotourism / rural tourism is defined as a stay of tourists in the household, which was organized as a rural tourist economy (rural households) for rest and recreation (NN br. 8/1996). Furthermore, the Croatian Chamber of Commerce defines the tourism rural family farm as a small business unit located in the touristic attractive area that makes the original product or service of business, and whose work includes all family members. Therefore, agricultural, domestic, farm, which provides tourism product or service acquires the status of “tourist rural family farm” (TSOG) (Brščić, et al.; 2010,33).

The development of agrotourism is primarily stimulated by the need for adventurous contemporary consumers (tourists) that resides in a rural setting, experiencing the regional cuisine, asking that his inner spiritual harmony and integrity are lost to a deep contrast of big city life and small traditional environment (Šergo&Tomić;1998,315). Vacation on rural households is particularly popular among residents of large urban centers that are desirous of the natural ambience and want to use the preserved environment and fresh air to engage in recreation (hiking, biking, horseback riding), tours of natural and cultural landmarks, participate in cultural and / or sporting events and join in agricultural activities. Every well-organized family farm can develop specific forms of tourism services and offer accommodation to tourists in their own economy, their own agricultural and processed food products, serve them food and drinks from their own kitchens and cellars, organize wine and/or brandy tastings for tourists, excursions, camping on the property and all for the purpose of enrichment of family farm's offer in order to meet the complex needs of tourists and achieve better economic performance of the economy (Ćurić; 2010).

Consequently, agrotourism is being developed in to increasingly important sector of tourism. It is both modern and traditional form of tourism rooted in the local tradition and based on it's geographical characteristics, traditions, culture and customs. Thus, agrotourism as a specific form of tourism enables the maintenance and revitalization of rural areas and contributes to the preservation of natural and cultural heritage, preservation and presentation of the customs, folklore events and then stimulates, revives the traditional trades, production of traditional products and affects employment in jobs primarily related to agriculture, tourism and services and generally contributes to preventing emigration.

4 AGROTOURISM OF SLAVONIJA AND BARANJA IN GLOBALIZATION PROCESSES

Slavonija and Baranja comprise the tourist site or a region consisting of five counties (Osijek-Baranja, Vukovar- Srijem, Pozega-Slavonia, Brod-Posavina and Virovitica-Podravina) located between the rivers Sava, Drava and Danube. Area of Slavonia and Baranja has good predispositions for tourism development (especially forms of rural tourism) relating to the rich cultural - historical heritage, natural beauty and preservation of natural areas (Nature Park Kopački rit and Papuk, Regional Park Mura - Drava), then known manifestations (Đakovački vezovi and Vinkovačke jeseni), a traditional enological and gastronomic offer and folklore. There are around 60 tourist rural family farms in the area of Slavonia and Baranja, which generally provide accommodation with rich cuisine and a large number of wineries as significant drivers of economic development.

4.1. Methodological framework

Survey study was carried out for the purpose of this paper in order to obtain relevant information on business of tourism rural family farms (TRFF) in terms of globalization, or the products that are offered by TRFF and the manner in which they are placed on the market. It is necessary to manage the development of agrotourism under the conditions of globalization in order for it to become a distinctive and competitive form of tourism based on sustainable development, preservation of tradition and cultural identity, and TRFF represents the agrotourism business unit within which to place the main agrotourism activities. According to the Croatian Chamber of Commerce, Division of Tourism, 2007. in the area of Slavonia and Baranja only two counties have registered tourism rural family farms (TRFF), Osijek-Baranja with 56 registered and Vukovar-Srijem with 2 registered

TRFF(Miškin, L.& Mader, B.; 2008). Consequently, research was conducted during the period of 5th of March 2012. to 12th of March 2012. on a random sample of 10.7% registered TRFF from Osijek-Baranja and on both TRFF of Vukovar-Srijem. For data collection telephone test method was used. On tested sample was investigated which products and services are offered by TRFF to tourists, then in what way their economy is regulated, how they advertise, and whether they are cooperating with the tourist boards, local governments and other TRFF the area of Slavonija and Baranja.

4.2. Results and discussion

Under modern conditions on the tourism market, content tourism experiences are sought, new forms of leisure time, desire to participate in many sports and recreations, entertainment, cultural and educational activities, indigenous and authentic values are becoming more attractive as well as forgotten ways of life. Agrotourism is a specific form of rural tourism, the tourist market can qualify for a unique, distinctive and high quality product that will be interesting in the flood of offers and be able to meet the increasingly demanding tourist consumers. Results showed that 71% of surveyed TRFF offered food and drink, 42% offered accommodation, but only 28% offered Overnight accommodation and breakfast. Furthermore, as additional services on its farm 14% of them offers services of wine tasting, 28% offered local food from own production and 42% of them are organizing thematic trips.

TRFF except with tourist offer, attract visitors with appearance, ambience of interior and environmental facilities and commercial buildings, with the important role of well-preserved traditional architecture of rural area. Of the TRFF surveyed 85.7% have traditionally governed estate, while 71,4 have at its own property old traditional farm buildings, 14,3% have partly traditional buildings and newly built buildings with traditional elements. Therefore it can be concluded that TRFF in Slavonija and Baranja pay special attention to the traditional looks, rebuilding and restoration of traditional farms, villages and hamlets.

Analisis of advertising activities shows that 85% of surveyed are advertising over the internet, 57% are using leaflets, 71% through traveling agencies, 14% over television, 42% over radio, 14% on fairs, 57% through tourism communities and 42% through friends. Also, 57,1% of surveyed are promoting alone while 71,4% are promoting in cooperation with other TRFF. From results it can be noted that there is a connected promotion and advertising of TRFF on the area of Slavonija-

Baranja, but it is necessary to further and continuously enhance networking and cooperation of TRFF in marketing activities and to find marketing areas where they can gain advantages and success on market since TRFF are often too small to implement their own marketing system.

Also in order to effectively respond to ever more complex and diverse demands on tourism market, and that in terms of increased competition TRFF can survive on the market and to have a successful business, integration of TRFF and other carriers of tourism activities (tourism communities, local government, other TRFF) is necessary. Results have shown that 57,1% of TRFF have a very good cooperation with tourism community of an area and 42,9% only partially cooperates or does not cooperate at all with tourism community. Also, 42,8% of TRFF have very good cooperation with local government while 57,2% only partially or does not cooperate with local government at all. Furthermore 71,4% of TRFF are connected and have a very good cooperation with other TRFF in the area while 28,6% do not cooperate with other TRFF. According to results, cooperation of TRFF with other carriers of tourism activities can be rated as satisfactory. This is of special value since integration and cooperation is at local level where particular marketing and tourism activities are defined, especially on a level of tourism clusters¹ within which base tourism product is formed through which the cluster develops its own reputation on the market, especially on the area of a county, and on a state level on which a total (integrated) tourism product is defined for a country as a whole. Therefore, connecting of TRFF in this way is necessary to protect and improve their business through group presentation on the market because in terms of globalization there is a risk of big systems that are in position to threaten a large number of small and medium businesses.

5. CONCLUSION

Globalization and progressive technological advances have enabled the entire world to potentially become a tourist destination that significantly increased competition between tourist destinations. In order to remain on the market, destinations must strive to highlight the authenticity of the attractiveness, or autochthony,

¹ Hajdaš Dončić, Horvat and Šmid say there are different definitions of clusters (Porter, 2000, Moran, 2001, Horvat, 2004.). But common to them is to support the development of relations between companies, creating the possibility of creating a critical mass, reduce costs, improve productivity, the division human and physical resources, information, knowledge and technical expertise (Hajdaš Dončić et.al.2007:103).

tradition and build their own image while respecting the principles of sustainable development. Agrotourism, which occurs in response to new market challenges, capitalizes on the rural culture of the tourist attraction and is based on the landscape, tradition and family, and forms a complete, competitive and quality tourism product distinctive in relation to the competition. The results showed that TRFF as holders of tourist activities in the agrotourism, have recognized the necessity of integration and cooperation in order to become competitive in the global market dominated by large groups of horizontally and vertically related entities in the tourism. Also, the formation of clusters as a possible way of association and coordination among entities that participate in providing services to tourists, especially with the goal of the successful promotion of agrotourism, this integration would be even stronger and would contribute to the overall regional tourism development of Slavonia and Baranja.

REFERENCES:

Blažević, B. & Peršić, M. (2009). Turistička regionalizacija u globalnim procesima, Fakultet za menadžment u turizmu i ugostiteljstvu, ISBN 978-953-6198-71-9, Opatija

Brščić, K. et al. (2010) Why Agrotourism – owner's opinion, Journal of Central European Agriculture

Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=84642
(Access: 10-1-2012)

Čavlek, N. et al. (2011). Turizam: ekonomske osnove i organizacijska kultura, Školska knjiga, ISBN 978-953-0-30392-8, Zagreb

Čorak, S. et al. (2011). Izazovi upravljanja turizmom, Znanstvena edicija Instituta za turizam, ISBN 978-953-6145-24, Zagreb

Čurić, K. (2010) Agroturizam kao dodatne djelatnosti na obiteljskim poljoprivrednim gospodarstvima, Praktični menadžment

Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=101261

(Access: 20-9-2011)

Demonja, D.&Ružić, P. (2010). Ruralni turizam u Hrvatskoj s hrvatskim primjerima dobre prakse i europskim iskustvima, Meridijani, ISBN: 978-953-239-129-9, Zagreb

Hajdaš Dončić, et.al. (2007) Klaster – model za interregionalno povezivanje kontinentalnih agroturističkih odredišta, Acta Turistica Nova, Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=43722 (Access: 20-9-2011)

Magaš, D. (2003). Management turističke organizacije i destinacije, Fakultet za turistički i hotelski menadžment Opatija, ISBN: 953-6198-39-8, Opatija

Miškin, L.& Mađer, B. (2008): Aktualno stanje turizma na ruralnom prostoru Hrvatske 2008, Sektor za turizam, HGK, Available at:

<http://hgk.biznet.hr/hgk/tekst.php?a=b&page=tekst&id=1219>, (8.12.2010)

Pavlič, I. (2004.) Suvremene tendencije u razvoju svjetskog turizma i globalizacijski procesi, Naše more 51, 214 – 226, ISSN 0469-6255

Riječnik turizma, (2001). Vukonić, B. & Čavlek, N. (editors), Masmedia, ISBN 953-157-111-2, Zagreb

Šegro, Z. & Tomičić, Z. (1998). Kreiranje turističkih potreba u selektivnom turizmu, Zbornik radova Međunarodnog kongresa „Hotelska kuća“ ‘98, Hotel u turističkoj destinaciji, Peršić, M. (ur), str. 311 – 320, Hotelijerski fakultet, Opatija

Vrtiprah, V. (2006) Kulturni resursi kao činitelji ponude u 21. stoljeću, Ekonomska misao i praksa

Available at: http://hrcak.srce.hr/index.php?show=clanak&id_clanak_jezik=16373 (Access: 8-12-2010)

Zakon o turističkoj djelatnosti, Narodne novine, 8/1996

CONCEPT OF INTELLIGENT REGION IN USE OF EUROPEAN UNION FUNDS

Anton Devčić

ABSTRACT

In scientific literature, authors were writing about intelligent management of the region in various ways and in various contexts: from the intelligent management in sense of intelligent use of energy, in sense of sustainable development, saving the environment and many other ways. This article is based on research of current potential of the most underdeveloped Croatian region- Eastern (Pannonian) Croatia, to become intelligent region in the aspect of use of the available funds from various donors: European Commission, World Bank, United Nations Development Fund and others. Namely, from the period after Homeland war in 1990's, to the period of pre-accession to the European Union, Croatia as a country, as well as its regions, had opportunity to use various donors' funds. The usual approach in providing the funds is that less developed regions, have opportunity to use more funds than those on higher level of development. Therefore, for Pannonian Region and for other regions in similar situation, this could stay only unreached opportunity- or just opposite, it could become reality in which rules intelligent management with intelligent use of the own potentials, together with intelligent use of available funds, with a final result, the higher level of regional development.

JEL Classification: R58

Key words: Intelligent region, European Union funds, Regional development, strategy, project

1. INTRODUCTION

Naturally, each donor through donating the own funds, has some general aim to which want to contribute, or has more specific aims which want to fulfil. On the other side, the main presumption is that those applicants who are competing for getting the donors funding, has limited resources. First of all, resources in the

sense of available staff skilled to prepare and conduct the projects, and second, in the sense of having the available own funds, needed for co-financing of the projects. The co-financing is necessary in the most cases, and it may vary from the donator, from the area in which project will be implemented, in which sector and similar.

The developed regions are in position to mobilize more resources, on more efficient way, to have better equipped teams for project preparation and implementation. They are in position to deal with bigger budgets for co-financing of the project.

From the aspect of the planning, or making the good or less good development strategies, they are in equal situation. Because, the quality of the planning is not depending about the how rich some municipality, town, or region is, it is more depending on the level of engaging the representatives of the various society stakeholders: companies, NGO's, farmers, craftsmen and all the other members or representatives of society. In some of the next few chapters, there will be said more about factors, which could make some area more or less successful, in getting and implementing of various funds, mainly in the aspect on how intelligent they are in management of its own resources, and related to that, in using of available funds. What each of the region has to do, is tend to be a intelligent in using of its own resources, especially if those resources that are very limited. Whereas, at the same time those resources could be "multiplied", by participating as co-financing in the bigger projects partly or fully funded from various donors.

2. VARIATION OF INTELLIGENT REGION CONCEPT

As we already mention, the term intelligent in the sense of regional development or regional management, is existing in literature in various ways. Regardless of the context in which this term is used, it is always related to use of improved management of existing resources or potentials, and afterwards to reach of something additional to the existing own resources.

The term "intelligent cities/regions" has been used in two different meanings. In the project Intelligent region, the regions with high institutional capacity for technological innovation and development – which emerge from relationships of cooperation between regional development agencies and the universities are characterized as intelligent (Morgan 1998, Kafkalas et al. 1998 in Komninos; 2002, 11).

A different interpretation is found in many publications on digital cities, which characterize intelligent (smart) cities as those that have applied information technologies and virtual spaces to urban functions and activities (Caves and Walshok 1999; Downey and McGuian 1999, Mahizhnan in Komninos; 2002, 11).

Nevertheless, there are examples of intelligent cities, intelligent regions, and even intelligent nations. Very good example is Singapore. Singapore is only one out of many countries that are attempting to develop themselves as intelligent nations, equipped and empowered by advanced info-communications technology (ICT). Singapore attempted to develop an intelligent nation under its umbrella vision and strategy of Intelligent Nation 2015 (iN2015). Launched in 2006, the iN2015 vision is a 10-year master-plan to grow the info-communications sector and build a well-connected society, thus fulfilling the aim of becoming an intelligent nation, empowered by the latest technologies. According to the Info-communications Development Authority of Singapore (iDA), iN2015 will propel Singapore into the ICT forefront to ensure continued international competitiveness (iDA, 2006). This 10-year master-plan culminates in 2015, which coincides with Singapore's 50th anniversary of its independence and nation-building. The iN2015 is a story of a wired intelligent nation engineered by the government. The Singapore government is the single most influential body to realise the iN2015 vision, playing the roles of: 1) Visionary; 2) Investor; 3) Developer or 4) Regulator (Tee; 2011, 15)

In any case, the term "*intelligent*" is widely used, and in most cases is related with something which means better use of tools, skills, knowledge or other resources, all in order to reach better and improved results in which this resources are used.

3. INTELLIGENT REGION IN USE OF EUROPEAN UNION FUNDS

In the context of the intelligent use of the European Union funds, there is very good concept, used in neighbourhood, in Poland. There is the model of EU structural funds implementing, developed by Cornelius Pylak (2007) which would help to transpose Polish less developed regions (their administration) into intelligent regions – implementing European Funds in a prodevelopmental way (not prosocial), focusing on strategic synergy projects realisation based on proper timetable, adjusted to specific regional factors (enhancing regional investment attractiveness), enabling individual approach to major developmental projects (increasing their effectiveness) and absorbing less financial sources on good purposes (not more – on bad purposes).

Talking about situation in Croatia, or to be more specific in Pannonian region, there are some determinants that put this region in the row of regions that have lots of potential to become intelligent, but in the same time that means that this region is not organized and managed as it could be. Because of that, we have the situation that the available funds are used more-less effective, but not efficient.

These terms, the efficiency and effectiveness are existing in the scientific literature for many years. They are based on the concept of “Scientific Management”. Author of this concept is Frederick Winslow Taylor (1856-1915), the concept is coined sometime around 1920 year.

The aim of scientific management was to take advantage of available, mostly statistical, knowledge to work of manual workers made more productive. There is even a thesis that the F.W. Taylor, because this increase in productivity, did more for the position of manual workers, than a good part of all left-wing theorists and philosophers together. Scientific management is deeply affected the way we now operate a modern enterprise (Popović; 2010).

In “The Concept of the Corporation”, Drucker (1946) defined difference between the efficiency and effectiveness. He argued strongly in favour of decentralised decision-making at a time when corporate role models such as General Motors were concentrating more and more power in their headquarters. He argued that the assembly line, so embedded at the heart of industrial efficiency, was in fact very inefficient because it only allowed things to be done in sequence. He also introduced the idea of management by objectives, aiming for long-term goals by setting a series of short-term ones. In 1969 he coined the phrase “knowledge worker” (The Economist, 2008).

The researches in the area of efficiency and effectiveness in use of the European Union funds, and in the area of use the own potential for that purposes, is not existing at all in Croatian scientific literature. It will be the subject of some future researches, that will be continuation of this paper. Finally, these terms of efficiency and effectiveness are very deeply mutually connected with the concept of intelligent region.

The existence or absence of so called “factors of intelligency” determines some region as intelligent or not intelligent. These “factors of intelligency” can be defined as follows:

1. Quality in planning-Quality in strategies
2. Intelligent/good projects

3. Intelligent resource management (or Intelligent management of resources)
4. Development of partnership
5. Multiplication of knowledge
6. Measuring of costs and benefits
7. Measuring the efficiency and effectiveness

In the next chapters, there will be more precisely defined position of the Pannonian region related to some of the factors of intelligency. Namely, since this area is very wide, this research on factors of intelligency is continuing, and it will be part of future scientific works. The next chapters of this paper are based on various researches and interviews made with employees of local development institutions, so as on the active participation in preparation of some strategic development documents, programmes, projects and similar documents.

1. Resources are limited, therefore the Intelligent management of resources is necessary

The governments that are rich with resources have tendency to extravagance. Easy earned money leads to easy spending. Of course, all governments have problem of how to ensure that the money will be spent in proper way. The government expenditures for projects of local improvement, that are mainly aimed that through them local politicians please their electors, is a regular occurrence in many democracies, if not in the most of them. Political regimes exist and work the same, in the developing countries as in developed countries, but developing countries simply

can not afford to waste money: Besides the issue of spending a good money, there is the unpredictability of income, prices of resources are volatile (Stiglitz; 2009, 165). The Pannonian region, in this sense, naturally belongs to the group of developing regions.

Strong links between public goods provision and economic development make the case for the provision of public goods at national, regional, and international levels. The provision of public goods is a key element of the quality of life and environmental sustainability. Their undersupply may affect prospects for economic development, threatening global economic stability, peace and prosperity. Mechanisms for the effective delivery of public goods and services should therefore be central to any poverty eradication strategy.

However, the role of public goods in economic development has been neglected in the mainstream literature. Current views of economic development (macroeconomic stability, market-oriented reforms, good governance) need to be enriched and complemented by considerations of global public goods to achieve sustained high-quality economic growth and to ensure that growth translates effectively into poverty eradication. This is essential to achieve the Millennium Development Goals (UNIDO; 2009, 1).

In the process of projects preparation, if the whole logistics preconditions are fulfilled, there are still several groups of resources needed for preparation of the projects, but surely, the main two are human resources and financial resources.

Human resources are crucial for preparation and implementation of the strategies, through preparation and implementation of the projects, financed from various donors. How important they are, especially as employees of the development institutions or institutions that support development, is defined in many researches and various scientific literature. Most of them show that educated and well skilled employees are first precondition for preparation of good strategies, and good projects. The analysis also showed that previous success in using European Union funds is not linked to the size of the county (in population), namely the number of employees is critical to the preparation and implementation of projects.

The level of development is very little associated with success in the use of European Union funds. This means that the less developed counties can expect significant results, if they decide to invest more in development of human resources. On the other hand, it is obvious that the size of some territorial units had not any significance in terms of the level of absorptive capacity (Puljiz; 2011, 32)

Financial resources are also very important in many aspects. For example if some municipality wants to get some funding for infrastructure project, then it must have huge documentation prepared. This usually means lot of money needed for preparation and getting of that documentation. In this case, they have to have this money in municipality budget, but since some counties have 12, 20, or more municipalities, and most of them have very small budget, this part of project management could be problematic. Especially if we talk in the sense of future Cohesion and Structural funds, that will need own financing in advance. The existing problem with the number of the municipalities and towns, or to be more precisely, problem with their poor budget, will surely, in such circumstances become more and more important.

For example Portugal, one of the members of European Union, which is currently passing through period with problems with deficit and raising debt, also perceive how important and expensive is problem with the huge number of regional government units. Namely, currently in Portugal exists 318 municipal governments (The Economist; 2012, 28).

In Table 2 is shown the number of the municipalities/towns in counties of the East (Pannonian) Croatia.

Table 1 Number of municipalities and towns/per County in Pannonian region

COUNTY	Number of towns	Number of municipalities	Total number of municipalities + towns
Bjelovarsko Bilogorska	5	18	23
Viroviticko Podravska	3	13	16
Pozega Slavonia	5	5	10
Brodsko Posavska	2	26	28
Osjecko Baranjska	7	35	42
Vukovarsko Srijemska	5	26	31
Karlovacka	5	17	22
Sisak Moslavina	6	13	19
Total	38	153	191

Source: Law on areas of counties, towns and municipalities in Croatia (NN 086/2006)

As you can see, the region has 8 counties, 153 municipalities, and 38 towns. In that way on the area four times smaller than Portugal, exists nearly 2/3 of the number of Portugal's local government units. If these figures are perceived in Portugal as problematic, for Pannonian Croatia is this issue with number of regional units, more than a problematic. The number of the municipalities and towns is not problem for itself, namely the problem is that such a small units have symbolic capacities, and the bigger project are still unreachable for most of them. They are too weak on this way. For example, the most underdeveloped municipality in Pozega Slavonia County, municipality of Čaglin, has budget of 5,2 millions of Croatian kunas, which is less than 700 thousands of Euros. This is symbolic, and insufficient even for part of documentation of any serious project. In such situation, any strategy and long term plans are useless.

Beside that, there is always possibility to get a help from the government level, and without that help many of the projects will stay fiction. In the sense of

support from national level, we have to mention some example, or the model of behaviour existing also in some cases in Croatia. For example, the country can have construction projects for two roads; the purpose of one of them is to help the President to reach his summer residence, and purpose of the second is to enable a large group of farmers, to bring their products to the nearby airport. The country may have enough money for only one of these projects. The Bank may request that its money is spent on a project that will increase the income of poor rural people, but by giving the money to the government, they will enable the government to fund another project (Stiglitz; 2004, 99).

However, the use of EU funds involves meeting a number of conditions related to the ability to use financial resources in a proper and effective way, in the aspect of regional development. Furthermore, Croatia as a member of the European Union will have to pay a certain amount in the budget of the European Union, whereby it is important that the amount of such payment is less than the amount that is coming from a fund. In the first year of membership Croatia is a net recipient of funds, which means that planned revenues from the fund are higher than our payments to the European Union budget. Maintaining of such a position in the coming years depends primarily on the readiness of countries to withdraw funds (Tišma et al.; 2012, 16).

In one of the new European Union countries, in Bulgaria, also exist problem related to the restrictions on the application for projects from the EU funds due to the lack of co-financing money. The experience of some other EU member states indicates that a commitment on the regional level to manage the EU funds absorption process is a key to success.

In order to resolve all these problems there is a need for:

1. Funding should be secured for every activity that is assigned as an obligation to the regional governors. Any activity where no such funding is guaranteed should be cancelled.
2. The oblast administrations should become more autonomous. A special budget program for the oblasts should be incorporated into the budget of the Council of Ministers. As it is impossible to take into account the specific features of each and every region, the regional governors should compete for implementation of oblast initiatives.

3. A specific fund should be allowed in the national budget to guarantee the co-financing on the part of oblast administrations when projects are funded from the EU Structural Funds. This money should be allocated only in the event that a project has been approved for funding from an operational program under which the relevant oblast administration can be a beneficiary (Ivanov; 2009, 76).

Preparation and conduction or implementation of the projects is completely different thing. Nevertheless, the preparation of the project needs one sort of costs to be covered, and implementation of the project brings another sort of costs. For Croatian stakeholders, in this part of costs that are existing during the project implementation, this situation will be changed completely. Namely, in the past stakeholders could get as a funding in advance 50-60 or even up to 95% of total value of the project, but now, in the period of the preaccession, they also could get this funds, but only after they implement of the whole project. So in another words, the stakeholders must finance the whole project, and after they report donor about the finalization of the project, they get money predicted for the project. The situation with obligate financing of the project in advance, put all stakeholders in delicate situation; does not matter if they are farmers, companies, associations, crafts or even municipality or a town. So each of them have to be very clever and to make plans very carefully, to decide on which open call for project proposal, they will apply their project, and on which they will not.

The resources are limited in the most cases, and that is the situation at the most stakeholders. In this period, when rules this way of financing of the project, there is no time for wishes, there is time to be realistic, to operate with resources very carefully, and very intelligent. In such situation, the stakeholders could and should have to find another ways to apply on the open call for proposals, companies like clusters, various sectors stakeholders in various ways of cooperation like Local action groups (LAGS), clusters, triple helix concept stakeholders, various associations, and others. About this and another shapes of cooperation of various partners, will be said more after some future researches in this area.

4. CONCLUSION

The basic concept of intelligent management of the region in sense of using the opportunities to get funding from various donors is as direct result of good planning. Therefore we can perceive it as a combination of right or intelligent strategies,

intelligent management of own resources, and intelligent use of those resources to reach the available funds. Nevertheless, there is very important thing, the way how funds are used. Intelligent way of use the available funds, put in the first place, as a crucial thing, the level of the efficiency and effectiveness of use the reached funds, and finally as a result, the contribution to the efficiency and effectiveness of fulfilling the previous defined general or specific aims. The part of good, or so to say intelligent approach in project preparation, have include on realistic base defined autonomic decisions, whether to go on some open call for project proposals or not. Because, if the resources are limited, than those who are preparing projects now, they have to count in advance, which project they have to conduct or which they have to avoid, or with which project they have to wait on better time, when it will be higher in the list of priorities.

In order to now in advance which project has better potential to use our resources in more efficient, more effective and more intelligent way it is good to use some of the available tools, which are used for this purposes for a years. From the very known and widely used Cost Benefit Analyses, to the new methods of measuring the efficiency and effectiveness of the various funds like HERMES, HERMIN, QUEST, EcoMod and others. These models are also used in measuring impact on the macro economical level in the region where the project is implemented.

In intelligent way of project preparation, it is not only important to impress evaluation committee with figures and relevant reports, just opposite, we can perceive this as a more formal and usual part of each project. However, on the other side, it is crucial that potential project applicant know, what project is good for him, or to be precisely for its municipality, town, company or for any other stakeholder which interest the project supports. So, better project will be project which will better achieve our aim, which will bring more added value than the other project, which will produce multiplication effect, which will have useful results and similar.

The strategies that are prepared on intelligent way, the projects that are prepared and implemented in intelligent way, the intelligent resource management, development of partnership, multiplication of knowledge, measuring of costs and benefits and the efficiency and effectiveness of own resources and reached funds, are just some of many determinants of the intelligent region.

The final concept of this intelligent region will be product of the consultancy with available literature and product of the next researches that are planned to be made in the Republic of Croatia, and in the countries in the wider region.

BIBLIOGRAPHY

- Ivanov, P. (2009). *Efficient Membership and Successful Preparation for EU Accession: Fostering Democratic governance*. (pp.176-193). Sofia
- Komninos, N. (2002). *Intelligent cities: innovation, knowledge systems, and digital spaces*. New York: Spon Press.
- Law on areas of counties, towns and municipalities in Republic of Croatia, Official gazette No. 086/2006, Zagreb
- Popović, D. (2010). *Taylorov Scientific Management - Odvajanje bitnog od nebitnog*. Available at <http://posao.tportal.hr/texts/career.php?id=304> [7th December 2011]
- Puljiz J. (2011). *Analysis of regional capacities for absorption of EU funds*. Zagreb: Institute for International Relations (IMO).
- Pylak, C. (2007). *Intelligent region management-Intelligent absorption of EU funds*, Romanian journal of regional science, 1(1), 70-80
- Stiglitz, J. (2004). *Globalizacija i dvojbe koje izaziva*. Zagreb: Algoritam.
- Stiglitz, J. (2009). *Uspjeh globalizacije: Novi koraci do pravednoga svijeta*. Zagreb: Algoritam.
- Tee Ng, P. (2011) *Embracing, Emerging Tehnologies. The Case of the Singapore Intelligent Nation 2015 vision*. In *Regional (Ed) Innovation Systems and Sustainable Development, Emerging Technologies* (pp.115-124). Hershey
- The Economist (2008) *Guru:Peter Drucker*. Available at: <http://www.economist.com/node/12429448>. [5th December 2011]
- The Economist (2012). *Portugal and the Euro: The uncertainty society*.402(8774), 28.
- Tišma S. et al. (2012). *Hrvatska i Europska unija: Prednosti i izazovi članstva*. Zagreb: Institute for International Relations (IMO).

United Nations Industrial Development Organization (2009). Public goods for economic development: Overcoming market failures for economic development (pp. 1-5)

URBAN,
RURAL
AND REGIONAL
ECONOMICS

ECONOMIC INFLUENCES ON MEDIA NEWS PRODUCTION – NEWS AS A MARKET GOOD

Ivan Ferenčak, Ph.D.¹, Marina Đukić, uni.spec. of European Studies²

¹Full Professor, Faculty of Economics in Osijek, Croatia, ivan@efos.hr

²Assistant, Department of Cultural Studies, University of Osijek, Croatia

ABSTRACT

New technology development, media globalization and global media expansion on local markets puts before media institutions in small countries, like Croatia, numerous challenges for which it is necessary to find adequate measures of adjustment. Among media industry global trends which aren't just the case on Croatian media landscape, but as well in European countries, particularly notable are economic influences on media news production. Accordingly, the paper will indicate that specific determinants of Croatian journalism are characterized exactly with ascending presence of global media players' that, along with profit as a justification, considerably influence on presentation of media created social image of reality. The paper's main goal is to indicate the omnipresent trend in media environment where instead of public, economic interests prevail, and according to them the media news production is carried out. The results are news as market goods where the faith of publishing the news depends on pure economics laws of supply and demand. The paper doesn't have pretensions to offer overall knowledge about research problem, but has pretensions to show the aspects of apparently just media process in order to encourage further scientific research on this interesting topic.

JEL Classification: L82

Keywords: news, news production, economic influences, news market, media

INTRODUCTION

It is an undisputable fact that globalization, which nowadays affects every segment of the society, including media, presents new challenges for the media industry which require reaction and adjustment to modern trends. Dominant character-

istic of media globalization which connects very different societies and integrates them into “one World” (Jovović, 2010, p.115) puts on the agenda the question of multiple and multiplied influences that today’s media face with, all with the purpose of adjusting to the needs of new generations of news consumers. On the other hand, our belief is that key decisions and events that reflect the situation in our social environment is exactly what the public interest is concerned with. However, often the image presented in the media, under influence of production mechanisms and news selection, changes its grimy side from which the strongest members of society make profit, such as politicians and economic operators. In other words, processes of news production and reporting are constantly under pressure of various entities who are interested in the way in which certain stories will be established and told (Kurčić, 2006, p.32). In this kind of media, context of the key orientation of news is its status where news “becomes a commodity to fit the market demands of a collection of special interests” (McManus, 1994, cited in Poler Kovačić, 2001, p. 29). The model of Pamela Shoemaker and Stephen Rees, who analyzed different influences on media production, identified five spheres of influence. At the first level there are journalists who produce news, followed by the second level - work routine aimed at objective reporting and public interest as the criterion in news selection and production. The third level comprises institutional imperatives of an organization where a journalist is employed, and the fourth level, which is very important for this context, presents special media influences consisting of influence of technology, institutional sources of news, revenue from advertising, regulatory and legal frameworks as well as audience. The last level refers to the influence of ideology. Although there are many influences, factors of influence that will be analyzed within our context here refer to economic factors of influence (School of Communication at Simon Fraser University, 2011, p. 5).

When comparing specific determinants of Croatian journalism, it can be observed that the Croatian media scene follows global trends that are characterized exactly with ascending presence of global media players’ that, along with profit as a justification, considerably influence presentation of media created social image of reality. Therefore paper’s main goal is to indicate the omnipresent trend in media environment, where economic interests prevail over public interests, and according to them the media news production is carried out. This transforms news in market goods where destiny of publishing depends on purely economic principles of supply and demand. The paper does not have pretensions to offer rounded knowledge on the research problem, but it has pretensions to point to aspects of this only

seemingly media process, i.e. to encourage further scientific research on this interesting subject.

INFORMATION (NEWS) AS A MARKET GOOD

To be able to say that in terms of journalism news can be perceived as a market good, definitions will be used as the starting point. The framework of this paper will refer to the information in journalism context as a process of transferring particular knowledge, i.e. as a notice, news or novelty (Sapunar, 2004, p. 44), that is, as a content about an event, a term or novelty, which eliminates some vagueness, thus increasing our knowledge (Kostić, 1985, cited in Sapunar, 2004, p. 43). Information evolves as a result of processing, manipulation and data organization and accordingly adds knowledge to recipient (Lamza – Maronić, Glavaš and Novaković, 2007, p. 3). The ancillary stated framework, information as a market good, i.e. as object of economic transactions can be observed through three basic characteristics that can make market transactions more difficult if we compare them to other goods. Namely, Hal R. Varian defines information as a public good so that it includes everything that can be digitalized, but it does not require the information to be really digitalized (1998, p. 2). Therefore the news can be understood as a market good which has been digitalized and which transfers particular knowledge and increases our overall knowledge. However, the problem arises with elements of market transaction – experience of a good, scale of returns and public good. To know that information is good (increases our knowledge about something), it should be met, that is, one should know what it is (Varian, 1998, str. 3). In other words, to make a decision about purchase of a good (information as market goods), it has to be experienced, met, but it's already too late. In our context the news first has to be read/seen/listened to know what it is about, but by that moment we have already perceived and this process is irreversible. One of the ways to overcome this is to rely on reputation of a particular medium which is, according to professional standards in journalism, expected to provide objective reports with public interest as the key criterion for evaluation of the news value. The second element is the scale of returns referring to what was invested in the production of information itself. Information as well as news have typically high fixed production cost, but low margin cost of reproduction, which means that information is expensive to produce, but cheap to reproduce (Varian, 1998, p.3). As it will be further analyzed in the paper, consequences of this process are two-fold. On one hand it has impact on reduction of the costs for reduction of news production, which in the context of journalism is re-

flected in less money invested into deeper analysis, themes and research journalism. Low marginal cost of reproduction is, on the other hand, reflected in reduction of reporting to short statements and news taken over from the Internet, but also from global media according to the system copy – paste with uniform approach that does not adjust and interpret global issues. Public good in economy, public good, and in our context we consider information as public good, which should typically be uncompetitive and non-excluding. This means that consumption of information or news by a single person does not reduce the possibility of receiving this information for others, and that consumption by a single person cannot turn off receiving information for another person (Varian, 1998, p.4). Due to nature of news and information, they do not provide reduced use for other news consumers, but, being the public good, consumers can be disconnected from receiving information in the event that monthly prescription or subscription for national television and radio programmes, or cable TV, or Internet connection has not been paid, or they simply did not buy newspapers.

A conclusion can be made that news, i.e. information can be perceived as a market good in some sectors and it can work according to the principles of market transactions with certain difficulties that can be easily overcome in today's media world, guided by profit.

ECONOMIC IMPERATIVES OF MEDIA AS BUSINESS

At times of economic neoliberalism and corporate capitalism, the media industry is under growing influence of dominant private and global conglomerates whose key goal is to acquire profit (School of Communication at Simon Fraser University, 2011, p.6). In addition to globalization processes, changes in the media space put emphasis not only on media as a source of information, but also media as economic operators. In other words, economic behaviour of these subjects becomes a key to their success and survival (Jovović, 2010, p. 116). Although we have seen that news can be understood as market goods, we should also examine the very communication process for which we claim that it is under dominant economic influences. On one side there are media consumers or spenders to whom news are served in such a way that they do not meet information needs of citizens of the public sphere in public discourse, but the needs of advertiser for consumers (Kurčić, 2006, p.89). News was included in servicing of the commercial market that demands doing business according to economic principles and in this way media become business

(Jovović, 2010, p.116). The second component of this process is news selection, i.e. editing policy which evaluates events on daily basis and selects news that will be presented to the public. Although media do not tell us how to think and process certain information, they tell us what to think about (Hackett and Gruneau, 2000, cited at School of Communication at Simon Fraser University, 2011, p. 4), and put particular themes in media discourse that are adequate for particular subject, thus creating the agenda. However, decisions that should be made by – according to their professional competences – journalists (and editors) are nowadays more and more made by other people: media owners, advertisers, sources of financing (Poler Kovačić, 2001, p.26). So, evaluation of something new, unexpected and unpredictable as primary source of information moves away from editors and journalist and goes into hands of those who (successfully) impose their interest; those who “directly (as owner) or indirectly (as the most influential sources of information and opinion, as advertisers and sponsors) rule media” (Splichal, 1997, cited in Poler Kovačić, 2001, p.26). Such instrumentalization of news with the goal of satisfying commercial interests fills news with new content. As already pointed out, new production is very expensive and all efforts are directed at achieving the cheapest possible production of news that will attract audience, lure advertiser and ensure profit. Therefore dominant forms in today’s media include short illustrated stories, info entertainment and easy social topics, thus skilfully avoiding important questions and traditional public themes. Also, if one wishes to remain in the market, simply it is not feasible to spend resources on deep analysis of event backgrounds. Everything is reduced to market efficiency; sensation, drama and conflicts prevail as primary values of news that are sold. With domination of easy topics and those that do not affect interests of off stage structures that influence news production and selection, what contributes to reduced news production costs is also closing of foreign reporter’s bureau, reduced number of journalists, and above mentioned taking over of news from global players that are published in media without adequate interpretation relevant for local environment. This has resulted in unification of news, where all so-called hard news in mainstream media look and sound the same, which can easily be confirmed by a simple overview of front pages or announcements. Economic logic of the Croatian media scene will be described in more details in the following chapter, and in this context a conclusion can be made that media who wants to provide information that are cheap for production, and have maximum effect (read: profit), use different means. Among other, emphasis is put on routine journalist practice that is oriented towards sensationalism when

covering events with clear images of tabloid journalism in which sensation and drama are of greatest importance in news. If price is one of the important factors, then media competition will be reduced to those products that are the cheapest and the most attractive, with access to extensive global distribution and best capabilities for promotion in the market where there are no space for small players, and global private interests dominate and lead communication processes.

INSTEAD OF A CONCLUSION – MERCILESS MARKET COMPETITION OF THE CROATIAN JOURNALISM

A phenomenon that can be observed in European countries is also evident in our media space – development of multimedia groups and emergence of new participants from other branches of economic activities, covering the process of media production and distribution from the beginning to the end. It has a two-fold impact on openness and freedom of media. Although media ownership is one of the most guarded secrets in the Croatian media scene, it is known that our media are mostly in foreign ownership, with currently two state (public) media (Hrvatska radio televizija (Croatian National TV and radio) and Hrvatska informativna novinska agencija) (Croatian News Agency). Professor of journalism studies at the Faculty of Political Science in Zagreb, Stjepan Malović, points out that the prevailing type of journalism is corporate journalism “where a good part of editorial offices has 4 global corporations, having their own logic, own understanding and who, in a way, some people still determine what would be known in this country and what will not”. (Barbir-Mladinović, 2010). In this merciless fight for profit, media space is guided by the yellow press according to which novelties should be sold at any price, ratings should be increased. According to owners, this can be achieved only through well-tried methods, says professor Malović (Karabeg, 2009). These methods include drama, scandals, light topics without real life content and values. According to this, all media organizations have a sort of an economic imperative to increase the audience. Because the higher circulation and the wider audience there is/.../, more can be required for advertising, which is the economic circulation of the media. Sensational news – news that affects privacy, exaggerates or is delicate – attract attention and increase the volume of the audience (Lambeth, 1997, cited in Poler Kovačić, 2001, p. 30). Thus the real role of journalism is getting lost, profit comes first, and news is wrapped in shiny package of entertainment and fun at minimum production costs. Accordingly, the key orientation is the status of news that “becomes a commodity to fit the market demands of a collection of special in-

terests” (McManus, 1994, cited in Poler Kovačić, 2001, p. 29). Although it can be said that this is a global trend which was introduced by large players such as CNN with its 24-hour news broadcasting, the main characteristic of news – to serve public interests as public good - is getting lost. The absurdity takes place that key social issues are being concealed under justification that the public is served information that it requested, at times of the crisis and economic instability, reflecting the influence of politics to which entertaining topics that do not tackle real issues and problems are suitable. In this segment it is then possible to talk about common interests of political and economic influences, i.e. indirect and non-public influence that politics achieves through media owners and advertisers on production and reporting in the media, which is a topic for a separate paper.

Ultimately, the role of the audience must not be neglected, which, despite difficult social position, has the desire and the need to believe that only those topics broadcast through the content of mass media are relevant, and as long as the voice of the public is not changed in this regard, the media scene shall continue its market competition in which those who are best win. However, what gives hope in such processes are certainly the new media that encourage two-way communication and who can, in addition to the dimension of comments and social networks, influence media agenda at least partially and the presentation of social image of reality created by the media.

REFERENCES:

- Barbir-Mladinović, A. (2010) Hrvatski novinari pod cenzurom, Radio Slobodna Evropa, [online] Available on: http://www.slobodnaevropa.org/content/rwb_los_plasman/1856866.html
Retrieved (3-3-2012)
- Jovović, R. (2010) Ekonomska dimenzija globalizacije medija, Medijski dijalozi No6, Vol.3, 115-122, ISSN 1800-7074
- Karabeg, O. (2009) Mediji pod opaskom vlasti i tajkuna, Radio Slobodna Evropa, [online] Available on: http://www.slobodnaevropa.org/content/most_mediji/1563367.html
Retrieved (3-3-2012)
- Kurtić, N. (2006) Kod novinarstva, Media Plan Institut, ISBN 9958-9736-5-0, Sarajevo

Lamza – Maronić, M.; Glavaš, J.; Novaković, A. (2007) Content management system (CM) as part of E-logistics, VII. international scientific conference Business logistics in modern management : conference proceedings / Barković, Dražen ; Dernoscheg, Karl-Heinz ; Lamza - Maronić, Maja ; Matic, Branko ; Pap, Norbert ; Runzheimer, Bodo ; Wentzel Dirk (ur.), Osijek : Faculty of economics, p. 61-74, Available on: http://www.google.hr/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&ved=0CCEQFjAA&url=http%3A%2F%2Fbib.irb.hr%2Fdatoteka%2F349901.RadLogistika.doc.doc&ei=PXpxT5THDCnxsgaNsIXIDQ&usg=AFQjCNHxU4QE4T7JFyfy1ndNhjlxeYtpqA&sig2=N6kOMJ1g_7TVRSkj2kZrAA

Accessed: (27-3-2012)

Poler Kovačić, M. (2001) Kriza novinarstva kao kriza etike: tko je novinarski subjekt?, *Medijska istraživanja* god.7, br.1-2, 25-44, ISSN 1330-6928, Available on: <http://www.mediaresearch.cro.net/clanak.aspx?l=hr&id=177>

Accessed: (1-3-2012)

Sapunar, M. (2004) *Osnove znanosti o novinarstvu*, Vlast.nakl., ISBN 953-95565-0-3, Zagreb

School of Communication at Simon Fraser University (2011) *NewsWatch Canada SFU Seminar Research: Underreported Stories for Sept. 2010 – Aug. 2011*, Burnaby, Canada: Simon Fraser University School of Communication Available on: <http://pages.cmns.sfu.ca/newswatch/newswatch-research-seminars/fall-2011-missing-news-in-canada/>

Accessed: (27-2-2012)

Varian, R.H. (1998) *Markets for Information Goods*, Berkeley: University of California Available on: <http://www.nzbspots.org/tpb2/nph-tpb.cgi/00/http/people.ischool.berkeley.edu/~hal/Papers/japan/japan.pdf>

Accessed: (27-2-2012)

TOWARD THE NEW CONSTRUCT; ENTREPRENEURIAL CURIOSITY

Mitja Jeraj¹

¹Faculty of Economics, University of Ljubljana, Slovenia, mijejen@gmail.com

ABSTRACT

Some entrepreneurs are more successful in their activities than others. The reason for that still remains unexplored. In order to research impact of different determinants on entrepreneurs it must be recognized what establishes the best platform for an entrepreneurial success among entrepreneurs. In this paper I focus on curiosity among entrepreneurs, as a powerful driving force and choose it for research from the literature review based model, consisted from different determinants that could be important elements for entrepreneurial success. There is a literature gap in relation to entrepreneurial curiosity and with this paper I would like to fill it.

JEL Classification: L53, O4

Keywords: Entrepreneurial curiosity, Entrepreneurship, Entrepreneur, Economic growth, Curiosity

1 INTRODUCTION

The purpose of this paper is to present importance of entrepreneurs for enterprises and for economy and to show the construct development process of entrepreneurial curiosity as one of the most powerful determinant for entrepreneurs. Other purpose is to present how the construct development process is structured and to which steps it is important to take into consideration, and to present an entrepreneurial curiosity questionnaire. The purpose is also to promote entrepreneurship and stimulate readers to involve in entrepreneurial process or even to start with their own business.

In recent years renewed attention has been given to the role of entrepreneurship in economic development (Wennekers & Thurik; 1999). It is further recognized that the entrepreneurial process should lead to economic growth with the creation

of successful growing companies like Microsoft, Intel and Sun Microsystems among others (Acs & Varga; 2005). In Europe as also in other parts of developed world entrepreneurship becomes one of the explicit parts of the economy.

But what exactly is entrepreneurship? Entrepreneurship is an emerging and evolving field of inquiry (Antoncic&Hisrich; 2003) and the pursuit of a discontinuous opportunity involving the creation of an organization (or sub-organization) with the expectation of value creation to the participants (Carton et al.; 1998). Entrepreneurship, specifically, is defined as an “economic system” that consists of three components: (1) entrepreneurs, who desire to achieve their goals of economic survival and advancement; (2) the social constitution, that the entrepreneur’s right of free enterprise is granted; and (3) the government, that has the ability to adjust the economic institutions that can work to protect each individual entrepreneur and to stimulate entrepreneurs’ motive to achieve toward fostering of economic development and growth (Lowrey; 2003). Autio (2007) stressed entrepreneurship is a complex phenomenon that spans a variety of contexts.

2 ENTREPRENEURS

King & Levine (1993) assume that some individuals in society intrinsically possess the skills to be potentially capable entrepreneurs and according to Frydman et al. (1998) entrepreneurship is clearly in part a matter of human ability. “The entrepreneur,” said the French economist J. B. Say around 1800, “shifts economic resources out of an area of lower and into an area of higher productivity and greater yield.” But Say’s definition does not tell us who this “entrepreneur” is. And since Say coined the term almost two hundred years ago, there has been total confusion over the definitions of “entrepreneur” and “entrepreneurship” (Drucker; 2007). And there is another important segment in the economy as a consequence of entrepreneurs. Entrepreneurs, in turn, provide unique services to the general economy: they hire workers with threshold human capital and provide an environment within which human capital can be efficiently accumulated (Dias & McDermott; 2006).

But what defines an entrepreneur, how can we define that one have a good potential for entrepreneurial carrier and the other not? In the modern literature on entrepreneurship we sometimes come across the term ‘entrepreneurial hero’, suggesting that successful entrepreneurial behavior presupposes jumps leading to high performance (Baycan-Levent&Nijkamp; 2009). The concept of entrepreneurial behavior has become better known and there is a need to develop entrepreneurial skills

and abilities in order to deal with current challenges and the uncertain future in any country (Safari & Gholamrezaei; 2011).

Entrepreneurs have their own live style and observe everyday things different like non entrepreneurs. After Ward (2004) entrepreneurs face many significant challenges and tend to think in non-conventional ways and according to Kirby (2004) they try to challenge existing assumptions and to be flexible and adaptable in their problem-solving. Despite increasing studies of the family and career backgrounds of entrepreneurs, little is known of their personality and motivations (Roberts; 1989). In continuation I mention some studies regarding to that. According to Schumpeter (1976) the function of entrepreneur is to reform or revolutionize the pattern of production by exploiting an invention. Venkataraman (2004) claims that a change is important in the set of interrelated intangibles that allow the development of the kind of entrepreneurs who are, as Joseph Schumpeter described them, agents of profound economic and social change.

By innovating, entrepreneurs drive less productive firms out of the market and advance the production frontier. Innovation is therefore an important means by which entrepreneurial firms contribute to economic growth (Autio; 2007). But what influence entrepreneurs, how can we define that one have a good potential for foundation of successful enterprise and his carrier and the other not? Baron (1997) also wonders himself: Why do some people, but not others, recognize or create new opportunities? Why do some, but not others, try to convert their ideas and dreams into business ventures? And why, ultimately, are some entrepreneurs successful and others not?

There is the fact that entrepreneurs are the first and cardinal division in establishing new businesses. Schumpeter (1976) was the first to place the entrepreneur in the center of economic progress. Shane & Venkataraman (2000) defined an entrepreneur as a person who establishes a new organization. Many other researchers (e.g. McGrath et al.; 1992; Palich & Bagby; 1995,) ask themselves why some people start with their own business and the other do not even if they have the same possibilities. Entrepreneurship scholars are seeking to understand 'why' and 'how' some individuals, and not others, identify more opportunities and opportunities with superior wealth-creating benefits (Baron; 2004). Because entrepreneurship is a relatively poorly researched field (Shane & Venkataraman; 2004) in my research I discover background and determinants that enable entrepreneurs to be successful in their activities and to be able to realize their aims.

In order to research determinants that influence entrepreneurs it must be recognize which determinants establish the best platform for an entrepreneurial success. According to my literature review of scientific literature, more specifically of the field of entrepreneurship, business, psychology, economy, sociology, marketing and other areas I identified links between determinants that influence individuals and created the possible research areas model within the entrepreneurship frame (**appendix 1**) and choose entrepreneurial curiosity as my main research field presented in this paper.

3 ENTREPRENEURIAL CURIOSITY

It has long been the tradition to distinguish among various facets of curiosity rather than viewing it as a monolithic construct (Kashdan et al.;2009; Mikulincer; 1997; Renner; 2006). For example, Berlyne(1954) drew a distinction between perceptual curiosity (the desire for intellectual information or facts) and epistemic curiosity (the desire to acquire experiences through the senses), Litman&Pezzo(2007) operationalized interpersonal curiosity as a desire for new information about people, LaBar et al. (2000) defined emotional curiosity, Bondu&Lemaire(2007) operationalized adaptive curiosity, etc. On one side research of curiosity suggests that different types of curiosity exist and on the other side there seems to be scholarly interest in several entrepreneurship-psychology related topics, e.g. entrepreneurial passion (Cardon et al.; 2009), entrepreneurial self-efficacy (Prodan et al.; 2009), entrepreneurial intentions (Douglas & Shepherd; 2002), entrepreneurial motivation (Shane et al.; 2003), but entrepreneurial curiosity still remains unexplored.

In order to define entrepreneurial curiosity I first posit curiosity in entrepreneurship context.

While epistemic curiosity is defined as the desire that motivates individuals to learn new ideas, eliminate information gaps, and solve intellectual problems Litman (2008) and Loewenstein(1994) argue that epistemic curiosity is stimulated by intellectual uncertainty, and motivates behaviors such as asking questions in order to acquire knowledge I propose that epistemic curiosity is too broad type of curiosity for the entrepreneurship context and therefore it is necessary to narrow it in the framework of the entrepreneurial curiosity. From this point of view the definition of entrepreneurial curiosity should include a desire that motivates individuals to learn how to perform tasks which are related to entrepreneurship (e.g. conduct a

market analysis, develop new ideas, find new markets, perform financial analysis, set and attain sales goals, use new marketing methods, etc.).

Entrepreneurial curiosity is defined as the positive emotional–motivational system oriented towards investigation in the entrepreneurial frame, to learn tasks related to entrepreneurship and to incorporate new experiences in order to improve business. Entrepreneurial curiosity is awake, when an entrepreneur is facing different stimulus related to the entrepreneurship in the environment.

Thagard(2002) argued that emotions such as curiosity, interest, and wonder play a crucial role in the pursuit of scientific ideas. Thus I argue that entrepreneurial curiosity is a powerful engine in generation of business ideas. Entrepreneurs face situations that tend to overload their information-processing capacity and are characterized by high levels of uncertainty, novelty, emotion, and time pressure (Baron; 1998). Because curiosity is a desire for acquiring new knowledge (Litman & Pezzo; 2007) curious entrepreneurs obtain appropriate data and make decisions based on them.

Based on the literature review and different types of curiosity as mentioned before, interviews with entrepreneurs, scholars and other experts from the entrepreneurship, I argue that different types of curiosity exist and that there is a need for a distinct entrepreneurial curiosity in relation to general curiosity. Entrepreneurial curiosity is an independent type of curiosity because it is specialized only in the field of entrepreneurship. For example, it is not necessarily that one is curious in entrepreneurial matters if one's e.g. social curiosity is on high level.

Based on the above discussion the following hypothesis is postulated:

Hypothesis: ***Entrepreneurial curiosity is an independent construct dimension in relation to other types of curiosity.***

4 METHOD

4.1 Construct development process

Based on my literature review and interviews with entrepreneurs and experts from entrepreneurial field I show that there is a distinction between different types of curiosity and entrepreneurial curiosity and posit parts of other types of curiosity in to the entrepreneurial frame. In the next part entrepreneurs, professors of entrepreneurship and other experts have proven that distinction between these curiosi-

ties is grounded. I am further persuaded that curiosity is one of the most powerful motivators in process of entrepreneurship.

After literature review I went to 28 entrepreneurs, entrepreneurship professors, and other entrepreneurship experts and made in-depth interviews with them. Many of them (12) think entrepreneurial curiosity is about new ideas, innovations or new business opportunities and the second most common opinion (9) is that entrepreneurial curiosity is guidance to your understanding of costumers or competition or about understanding your business. Other entrepreneurs argue entrepreneurial curiosity is information gathering in order to improve business and one that entrepreneurial curiosity is openness to new opportunities. Additionally some entrepreneurs and experts think that entrepreneurial curiosity is a mix of different categories e.g. innovativeness and market analysis or information gathering and their implementing in practice and others.

Therefore, I forward defined entrepreneurial curiosity as the positive emotional-motivational system oriented toward investigation in the entrepreneurial frame, to learn tasks related to entrepreneurship and to incorporate new experiences in order to improve business. Entrepreneurial curiosity is an interest for novelties or observation of the society and tendency for searching answers that tell you which demands should be fulfill. It also represents guidance and competitive advantages in co-relation to competition. An entrepreneur with a high level of entrepreneurial curiosity wants to know how certain system works; wants to know how his business, economy works... and use all available parameters thus convert them into knowledge in order to improve his business.

The purpose of measurement in theory testing and development research is to provide an empirical estimate of each theoretical construct of interest (Gerbing & Anderson; 1988). Construct and scale development process in this study follows recommendations from different authors competent in science (Churchill Jr; 1979; Dawis; 1987; DeVellis; 2003; Hinkin; 1995). Scale development consists of collecting data with the use of a preliminary form and analyzing the data in order to select items for more final form

At the beginning of scale development process I specified the domain of the construct, clearly determined what it is that I want to measure and what is the purpose of my construct-entrepreneurial curiosity. I based entrepreneurial curiosity predispositions on the theory and made an in depth literature review of entrepreneurship, organizational sciences, and psychology literature. I was specific and

focused just on the dealing measure in order to avoid certain misunderstandings and misinterpretations about the construct. Then I chose items that reflect the entrepreneurial curiosity scale's purpose and use multiple and seemingly redundant items in order to capture the phenomenon of interest; therefore I have included a large number of items. Further I went to entrepreneurs and other experts from that field and made 28 depth interviews with them in order to gather items from first hand and to ask them about their thinking of my aims. The process of writing items was the next step where I was more focused in merely expressing relevant ideas than on item quality. Then I evaluated items and exclude ones that did not represent clearly the meaning of my entrepreneurial curiosity measure. In next step I used a five point Likert scale (e.g. from strongly disagree to strongly agree) for measurement. At the beginning there was the pool that consisted from 105 items with entrepreneurial curiosity connotation, but after revision 49 items remained. Some items based on items of other curiosity scales and were modified in order to express exclusively entrepreneurial meaning. Then the 35 experts from entrepreneurship reviewed the initial pool of items. Additionally they have evaluated the items' clarity and conciseness and pointed out ways of tapping the phenomenon that I have failed to include till then. For the content validity of the scale I included the validation items; social curiosity (Renner; 2006), epistemic curiosity (Litman; 2008), curiosity and exploration inventory (Kashdan et al.; 2004), and sensory curiosity (Litman et al.; 2005). At the beginning of the next step I distributed surveys to Slovenian entrepreneurs and made a pilot study. Entrepreneurs returned 51 completed surveys. The construct of entrepreneurial curiosity consisted from 32 items. In the first part regarding to entrepreneurial curiosity there were 17 items on a Likert scale from 1 (never) to 7 (always) and in the second part there were 15 items on a Likert scale from 1 (strongly disagree) to 7 (strongly agree). Pearson correlation coefficients were used to show which items correlate more between the entrepreneurial curiosity construct. 32 items of entrepreneurial curiosity questionnaire were used in correlation. The results have shown that 16 items are convenient for questionnaire because they have high correlations within a construct of entrepreneurial curiosity. Other 16 items were excluded.

In the questionnaire I distinguished items according possible answers on two categories. In first category potential answers were on 7 point Likert scale from Never to always and on the second cluster there were potential answers on 7 point Likert scale from strongly disagree to strongly agree. In first cluster chronological items fit in and in the other cluster items that base on agreeableness.

4.2 Questionnaire of Entrepreneurial Curiosity

Table 1: Entrepreneurial curiosity measure

Statement ENTREPRENEURIAL CURIOSITY	Frequency of occurrence						
	Never	Hardly ever	Rarely	Sometimes	Often	Very often	Always
While doing market research, I focus on the work so much that I lose track of time.	1	2	3	4	5	6	7
When I notice an abandoned building, I think about what business potential it represents for me.	1	2	3	4	5	6	7
It bores me to always watch the same products; therefore, I think about improving and offering them to the market.	1	2	3	4	5	6	7
I enjoy conversations about obtaining capital for the firm.	1	2	3	4	5	6	7
I spend hours working on a business-related problem as I am not at ease without an answer.	1	2	3	4	5	6	7
Conceptual problems related to entrepreneurship encourage me to look for solutions.	1	2	3	4	5	6	7
When I have some free time, I spend it researching new markets.	1	2	3	4	5	6	7
Statement ENTREPRENEURIAL CURIOSITY	Level of Agreement						
	Strongly disagree	Moderately disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Moderately agree	Strongly agree
I explore new things that could create additional profit.	1	2	3	4	5	6	7
I am interested in other entrepreneurs' interests.	1	2	3	4	5	6	7
In entrepreneurial work, I am mostly interested in competition.	1	2	3	4	5	6	7
In my business, I must have information about marketing that is as complete as possible.	1	2	3	4	5	6	7
I am very interested in knowing the needs I can meet in society.	1	2	3	4	5	6	7
I simply must know how a certain business system works.	1	2	3	4	5	6	7
I am able to create added value from my observations of the environment.	1	2	3	4	5	6	7

I continuously delve into entrepreneurship matters.	1	2	3	4	5	6	7
I spend most of my time thinking about company improvements.	1	2	3	4	5	6	7

Source: Authors research; 2009 - 2012

5 FINDINGS

Positive fit back was received in all process from expert, entrepreneurial curiosity was defined, and literature review suggest, that entrepreneurial curiosity could be and independent measure in relation to other curiosity types. But what is the construct if it is impossible to compare it. In order to do so, based on many theory suggestions and protocols I created the entrepreneurial curiosity measure and test it two pilot samples. According to my investigation, *hypothesis: Entrepreneurial curiosity is an independent construct dimension in relation to other types of curiosity* is confirmed and research in entrepreneurial curiosity field goes forward.

6 BIBLIOGRAPHY

- Acs, Z. J., & Varga, A. (2005). Entrepreneurship, agglomeration and technological change. *Small Business Economics*, 24(3), 323-334
- Antoncic, B., & Hisrich, R. D. (2003). Clarifying the intrapreneurship concept. *Journal of small business and enterprise development*, 10(1), 7-24
- Autio, E. (2007). GEM 2007 report on high-growth entrepreneurship. London: GERA
- Baron, R. (1997). Cognitive mechanisms in the decision to become an entrepreneur: the role of counterfactual thinking and the experience of regret. *Frontiers of Entrepreneurship Research*, 1-3
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13(4), 275-294
- Baron, R. A. (2004). The cognitive perspective: a valuable tool for answering entrepreneurship's basic why questions. *Journal of Business Venturing*, 19(2), 221-239
- Baycan-Levent, T., & Nijkamp, P. (2009). Characteristics of migrant entrepreneurship in Europe. *Entrepreneurship and regional development*, 21(4), 375-397.
- Carton, R. B., Hofer, C. W., & Meeks, M. D. (1997). The entrepreneur and entrepreneurship: operational definitions of their role in society

- Berlyne, D. E. (1954). "A theory of human curiosity", *British Journal of Psychology*, Vol. 45 No. 3, pp. 180-191
- Bondu, A., and Lemaire, V. (2007), Active learning using adaptive curiosity, Paper presented at the International Conference on Epigenetic Robotics, Lund University
- Cardon, M. S., Wincent, J., Singh, J., and Drnovsek, M. (2009), "The nature and experience of entrepreneurial passion", *The Academy of Management Review (AMR)*, Vol. 34 No. 3, pp. 511-532
- Carton, R. B., Hofer, C. W., & Meeks, M. D. (1998). *The entrepreneur and entrepreneurship: Operational definitions of their role in society*
- Churchill Jr, G. A. (1979). "A paradigm for developing better measures of marketing constructs", *Journal of marketing research*, Vol. 16 No. 1, pp. 64-73
- Dawis, R. V. (1987). "Scale construction", *Journal of Counseling Psychology*, Vol. 34 No. 4, pp. 481-489
- DeVellis, R. F. (2003). *Scale development: theory and applications*, Sage Publications, California
- Dias, J., & McDermott, J. (2006). Institutions, education, and development: The role of entrepreneurs. *Journal of Development Economics*, 80(2), 299-328
- Douglas, E. J., and Shepherd, D. A. (2002). "Self-employment as a career choice: attitudes, entrepreneurial intentions, and utility maximization", *Entrepreneurship: Theory and Practice*, Vol. 26 No. 3, pp. 81-90
- Drucker, P. F. (2007). *Innovation and entrepreneurship*: Butterworth-Heinemann
- Frydman, R., Hessel, M. P., & Rapaczynski, A. (1998). *Why Ownership Matters? Entrepreneurship and the Restructuring of Enterprises in Central Europe*
- Hinkin, T. R. (1995). "A review of scale development practices in the study of organizations", *Journal of Management*, Vol. 21 No. 5, pp. 967-988
- Jeraj, M. (2009). *Influence of entrepreneur's emotions and behaviors on entrepreneurial activities and entrepreneurial challenge*, Doctoral Dissertation Proposal. Faculty of Economics, University Of Ljubljana
- Kashdan, T. B., Rose, P., and Fincham, F. D. (2004), "Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities", *Journal of Personality Assessment*, Vol. 82 No. 3, pp. 291-305
- Kashdan, T. B., Gallagher, M. W., Silvia, P. J., Winterstein, B. P., Breen, W. E., Terhar, D., et al. (2009), "The curiosity and exploration inventory-II: Development,

- factor structure, and psychometrics”, *Journal of Research in Personality*, Vol. 43 No. 6, pp. 987-998
- King, R. G., & Levine, R. (1993). Finance, entrepreneurship and growth. *Journal of Monetary economics*, 32(3), 513-542
- Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge? *Education+ training* 46(8/9): 510-19
- LaBar, K. S., Mesulam, M. M., Gitelman, D. R., and Weintraub, S. (2000), “Emotional curiosity: modulation of visuospatial attention by arousal is preserved in aging and early-stage Alzheimer’s disease”, *Neuropsychologia*, Vol. 38 No. 13, pp. 1734-1740
- Litman, J. A., Collins, R. P., and Spielberger, C. D. (2005), “The nature and measurement of sensory curiosity”, *Personality and Individual Differences*, Vol. 39 No. 6, pp. 1123-1133
- Litman, J. A., and Pezzo, M. V. (2007), “Dimensionality of interpersonal curiosity”, *Personality and Individual Differences*, Vol. 43 No. 6, pp. 1448-1459
- Litman, J. A. (2008), “Interest and deprivation factors of epistemic curiosity”, *Personality and Individual Differences*, Vol. 44 No. 7, pp. 1585-1595
- Loewenstein, G. (1994), “The Psychology of Curiosity: A Review and reinterpretation”, *Psychological Bulletin*, Vol. 116 No. 1, pp. 75-98
- Lowrey, Y. (2003), *The Entrepreneur and Entrepreneurship: A neoclassical approach*, Paper presented at the Office of advocacy U.S. small business administration, Denver.
- McGrath, R. G., MacMillan, I. C., & Scheinberg, S. (1992). Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), 115-136
- Mikulincer, M. (1997), “Adult Attachment Style and Information Processing: Individual Differences in Curiosity and Cognitive Closure”, *Journal of Personality and Social Psychology*, Vol. 72 No. 5, pp. 1217-1230
- Palich, L. E., & Ray Bagby, D. (1995). Using cognitive theory to explain entrepreneurial risk-taking: Challenging conventional wisdom. *Journal of Business Venturing*, 10(6), 425-438
- Prodan, I., Drnovsek, M., and Ulijn, J. (2009), “A conceptual framework for studying a technology transfer from academia to new firms”, In R. Oakey, A. Groen, G.

Cook and P. van Der Sijde (Eds.), *New Technology-Based Firms in the New Millennium* (pp. 185-203), Emerald Group Publishing

Renner, B. (2006), "Curiosity About People: The Development of a Social Curiosity Measure in Adults", *Journal of Personality Assessment*, Vol. 87 No. 3, pp. 305-316

Roberts, E. B. (1989). The personality and motivations of technological entrepreneurs. *Journal of Engineering and Technology Management*, 6(1), 5-23

Safari, S., & Gholamrezaei, D. (2011). Analysis and evaluation of alumni's entrepreneurial potential: A comparative study of public and private universities of Tehran. *African Journal of Business Management*, 6(1), 258-265

Schumpeter, J. A. (1976). *Capitalism, socialism, and democracy*. New York: Harper & Row.

Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13(2), 257-279

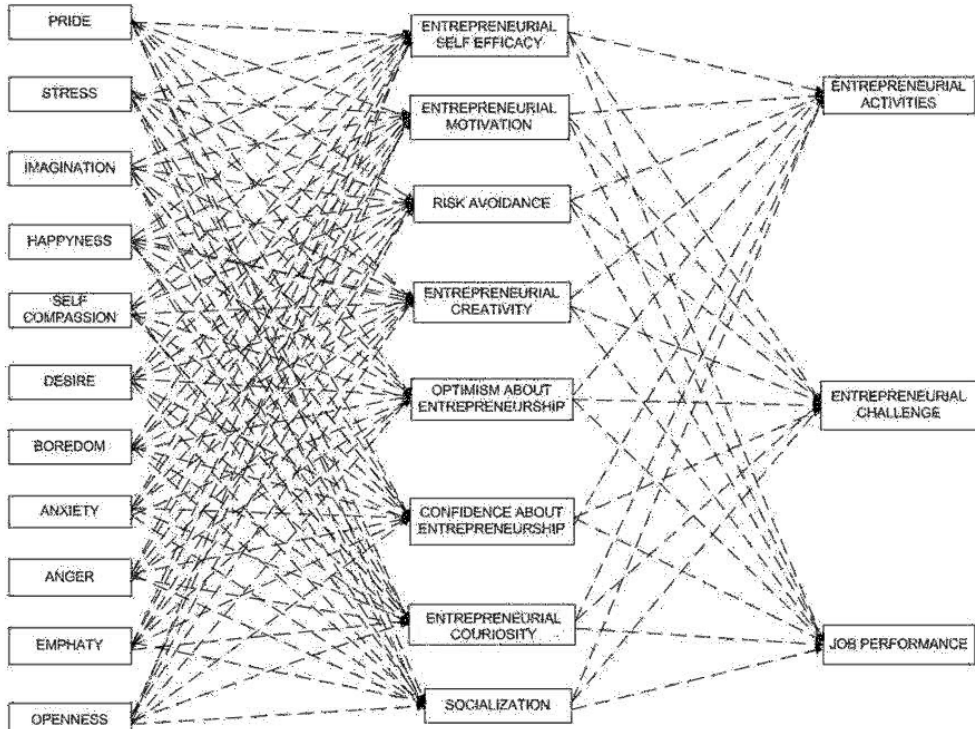
Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226

Thagard, P. (Ed.). (2002), *The passionate scientist: emotion in scientific cognition*, Cambridge University Press, Cambridge

Venkataraman, S. (2004), "Regional transformation through technological entrepreneurship", *Journal of Business Venturing*, Vol. 19 No. 1, pp. 153-167

Ward, T. B. (2004). Cognition, creativity, and entrepreneurship. *Journal of Business Venturing* 19(2): 173-188

Wennekers, S., & Thurik, R. (1999). Linking entrepreneurship and economic growth. *Small business economics*, 13(1), 27-56

APPENDIX 1: POSSIBLE RESEARCH ARIAS MODEL (BASED ON LITERATURE REVIEW)

Source: MitjaJeraj, 2009

REVIEW OF THE FACTORS AFFECTING FINANCIAL REPORTING SYSTEM COMPETITIVENESS

Ivo Mijoč, Ph.D.¹, Dubravka Pekanov Starčević, univ.spec.oec.², Marija Mihaljević, mag.oec.³

¹Josip Juraj Strossmayer University of Osijek,
Faculty of Economics in Osijek, Croatia, imijoc@efos.hr

²Josip Juraj Strossmayer University of Osijek,
Faculty of Economics in Osijek, Croatia, dpekan@efos.hr

³Josip Juraj Strossmayer University of Osijek,
Department of Culturology, Croatia, mmihalje1@unios.hr

ABSTRACT

Accounting has a long and rich tradition of activities and existence but various environmental factors resulted in distortion of accounting system. That additionally caused inconsistent accounting practices. Apart from internal factors, external factors affect accounting system more intensively. External factors intensity is disproportional and is influenced by historical heritage, cultural factors and by interrelationship between tax and accounting authorities. Factors interaction and interdependence affect business entities as they are forced to prepare a dual set of financial statements. That causes reduced information quality. Parallel reporting system reduces business competitiveness and increases capital costs which ultimately increase information redundancy. This paper presents diversity of environmental factors and connection with competitiveness calculation methodology.

JEL Classification: M41

Key words: accounting system, environmental factors, internal and external factors, competitiveness calculation methodology.

1. QFACTORS AFFECTING ORGANIZATIONAL STRUCTURE OF THE ACCOUNTING SYSTEM AND SYSTEM OF FINANCIAL REPORTING

National accounting systems are variously systemated, primarily because they are affected by many factors that increase or decrease possibility of accounting

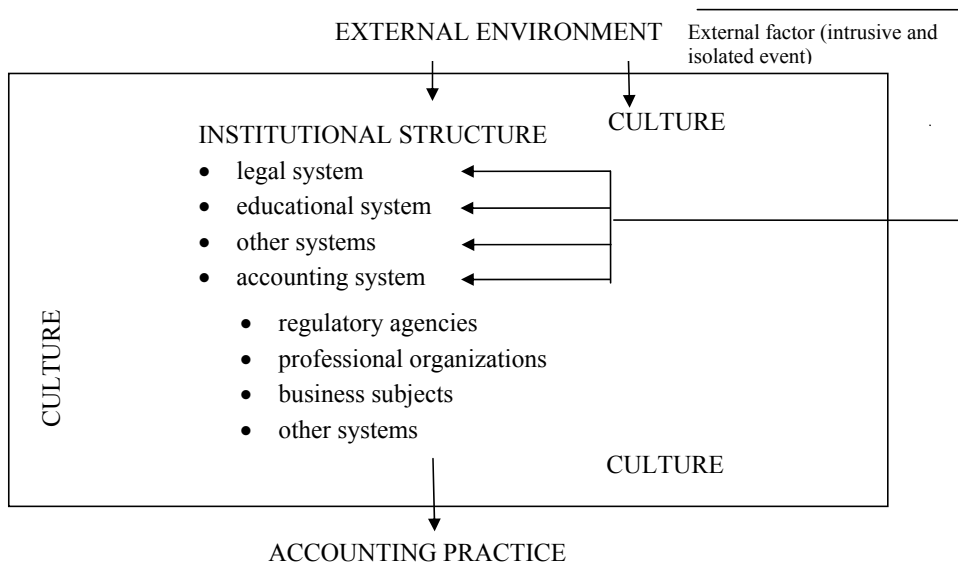
standards application. Basic characteristics of accounting systems are based on Accounting Standards, but the adoption and application of universal accounting solutions are not unique, as evidenced by many authors.

Methods of International Accounting Standards adoption in different countries have always been the subject of dispute in the accounting literature (Zeghal and Mhedhbi, 2006:375-376). Based on various opinions on International Accounting Standards, two schools emerged. According to Zeghal and Mhedhbi, the first school is committed to the harmonization of international standards as to improve the quality of financial information, to enable the comparability of accounting information which facilitates international financial transactions, enables globalization of capital markets and contributes, in particular for developing countries, to strengthening the competitiveness and a greater degree of financial markets integration. Another school holds the view that when establishing a national accounting system; certain factors should be taken into account. Such factors include economic and social factors, legal system, culture and political system, level of country wealth, inflation levels, education levels, the size and complexity of business entities, the degree of financial markets development, sources of financing and investment, accounting profession, language, etc..

Before introducing an IAS/IFRS accounting set, some difficulties have been noticed in national accounting systems. Those difficulties include uneven regulation legislation and legislative frameworks which resulted in different accounting systems. However, differences between international accounting systems have emerged and have been developed under the influence of various factors, primarily environmental factors. Because of the superiority of external factors, specific differences between national accounting systems emerged. They were necessary to remove as they represented a barrier to the process of international accounting harmonization. Some national accounting systems have found a solution in the development of national accounting standards with the aim of joining the ongoing process of international accounting harmonization (IAH). With the growing trade and economic globalization internationalization of business and financial markets, financial information prepared in accordance with national accounting systems no longer meets the needs of users (Zeghal & Mhedhbi, 2006:373). That is because the systems under the influence of different factors may have an ambivalent effect of showing a distorted value of information available, which in turn causes distortion of the accounting system.

Walton et al. (2003:2) argue that reasons for the resulting differences in international accounting must be sought in communication, that is, the general phenomenon of communication generated by misunderstandings that arise from differences of information sent and from different connection between perceptions and interpretations of information by recipient. Therefore, the accounting differences (differences in presentation, recognition and measurement, and differences in perception and interpretation) are conducted in two areas. The phenomenon of miscommunication stems precisely from the specific environment, which leaves the possibility of existing diverse objectives of financial reporting and the application of different accounting principles.

Figure 1. General model of international accounting development



Source: Doupnik and Salter (1995), External environment, culture, and accounting practice: a preliminary test of a general model of international accounting development, *The International Journal of Accounting*, 30(3), p. 192.

However, Doupnik and Salter (1995:192) suggest three elements that determine the development of national accounting: (1) the external environment affects the culture of society and the institutional structure and allows an external stimulus (intrusive event) and requires changes, (2) cultural values affect the institutional structure controlling interactions between components of the institutional structure to external stimuli, and (3) institutional structures. Based on these elements general model of accounting development has been established (Figure 1).

In developing the proposed model, Doupnik and Salter (1995:193) took into account the following assumptions:

1. in every country there are institutional structures made of various systems (accounting, legal, educational),
2. accounting system is comprised of various subsystems (regulatory agencies, professional organizations, corporations). The accounting practice of each country arises from the accounting system,
3. institutional structure of society, including the accounting system, determines the external environment and the cultural norms and values,
4. cultural norms and values of society are affected by the external environment,
5. external environment creates intrusive events, as an incentive for the action of institutional structures,
6. events relevant to the accounting are transferred to the “adjacent” accounting system,
7. interaction of accounting subsystems develop in response to intrusive event. Cultural norms and values affect the interaction between different subsystems,
8. accounting system does not operate in a vacuum, but interacts with other systems developing an appropriate cultural responses to intrusive events. Culture influences the interaction between different systems,
9. intrusive events are divided into two categories: (1) pervasive impositions like colonization, the EU Directives, inflation that change the economy from a planned one to a market, demanding extensive changes in the financial reporting system and (2) isolated impositions like foreign currency fluctuations, banking scandals, which require some changes in reporting practices.

Thus, analyzing the impact of various factors on the structure of accounting systems and the system of financial reporting should be based on mutual distinguishing between two components - the accounting system and the environment.

International Auditing Standards (IAS, 1993:25) describe the accounting system as a set of tasks within the entity which are used to process certain transactions based on financial records that need to be recognized, calculated, organized, published, summarized and reported. One of the important features of the accounting system is a deep connection with the environment. Therefore, in all countries it is prescribed

by law to maintain accounting, and countries successfully negotiate on uniform accounting methods (Crnković et al., 2006:101-102). External environment implies external factors, which (in)directly affect the accounting system, whose actions may affect the creation of accounting outputs - the financial reports.

1.1. Quantitative reclassification and a review of the environmental factors impact

In the scientific literature and databases factors and the impact of factors to the design of accounting systems are frequently described. Those factors participate effectively (or not effectively) in shaping the financial reporting system. Precisely, comparative studies on accounting ensured an increase in awareness about the impact of external factors on the development of accounting (Gray, 1988:2). These studies contributed to the growing understanding that the underlying cause of differences in accounting is a result of environmental differences and that different international classifications can have significant implications for international harmonization and promotion of economic integration (Nobes, 1983:1,5).

Before 1990, two factors were identified as the primary explanatory factors for differences in accounting practices: the cultural and economic. After 1989, other factors were being considered and that is why many authors argue that the diversity of accounting practice was caused by various factors. Baker and Barbu (2007:283-284) divide the research carried out in two equally periods: intermediate period from 1974th to 1989th, and mature period from 1990th to 2004th. The first period covers the research, which emphasize one factor, that is, research which takes into account many different factors.

Given the degree of influence, factors that affect the accounting system can be classified into: (1) external and (2) internal factors. Review of the literature showed that different authors (Crnković (2006), Doupnik and Salter (1995), Harrison and McKinnon (1986), Nobes (1998), Cook and Wallace (1990), Roberts et al. (2008), Radebaugh et al. (2006)) referred mainly external factors rather than internal factors, implying the environmental factors are superior. Internal factors act in the internal environment of business entity. Business entity may affect internal factors, while external factors characterize the inability of permanent alteration which increases risk and volatility of business.

Cook and Wallace (1990) point out that external factors (environmental factors) are of great importance, primarily referring to: (1) economic growth, (2) the

degree of inflation, (3) educational level, (4) legal system, (5) historical and geographical characteristics, (6) financial system, (7) the size and complexity of businesses, (8) notoriety of accounting profession, (9) development of financial markets, (10) culture and (11) language. Nobes (1998:163) agrees with the preceding organization factors citing the importance of the influence of religion and colonial inheritance on financial reporting (Zeghal and Mhedhbi, 2006:376). According to Radebaugh et al. (2006:17), colonial inheritance is the international factor emphasized in the former colonial countries, which has left a considerable impact on financial reporting in colonial countries. Nobes (1998:163) agrees with the authors mentioned above.

Zeghal and Mhedhbi (2006:376-378) report that external factors are: (1) economic growth, (2) the level of education, (3) the degree of economic openness, (4) the impact of culture and (5) the existence of capital markets. Mueller et al. (1987:12-15) report that accounting systems are influenced by: (1) political and economic relations with other countries, (2) legal system, (3) the degree of inflation, (4) the size and complexity of business entity, (5) sophistication of administration (6) education level, and (7) accounting clusters.

Accounting is a product of environment, especially the social environment. In this regard, the national accounting regulations and practice are the product of complex interactions of social, economic and institutional factors that contribute to the diversity of accounting at the international level, as Saudagaran reports in the book "International accounting - a user perspective." Saudagaran (2004:3-11) distinguishes ten environmental factors which probably influence the design of the development of accounting in various countries: (1) the nature of capital markets, (2) types of financial reporting, (3) types of business entities, (4) type of legal systems, (5) the level of enforcement of regulations, (6) levels of inflation, (7) relationship between politics and economics, (8) position of the accounting profession, (9) the existence of a conceptual framework and (10) the quality of accounting education.

A similar distribution was observed with Nobes (1998:163), which reports 17 factors as causes of international accounting differences, in detail shown comparable to each other in Table 1.

Table 1. Comparative review of environmental factors impact on the development of accounting

Environmental factors	Saudagaran (2004)	Roberts, Weetman & Gordon (2008)	Radebaugh, Gray & Black (2006)	Nobes (1998)
conceptual framework	▲	○	○	○
culture	○	▲	▲	▲
quality of accounting education	▲	○	○	▲
colonial inheritance	○	○	▲	▲
political and economic system	▲	▲	▲	▲
position of the accounting profession	▲	▲	▲	○
tax system	○	▲	▲	▲
nature of capital markets	▲	○	○	▲
nature of company ownership	○	○	▲	▲
inflation level	▲	○	▲	▲
enforcement of regulations	▲	○	○	○
religion	○	▲	○	▲
social environment	○	○	▲	▲
level of economic development (innovation)	○	○	▲	▲
system of corporate financing	○	○	○	○
types of financial reporting	▲	○	○	○
types of businesses	▲	○	○	○
legal system	▲	▲	▲	▲
▲ constructive interference; ○ disinterference;				

At the same time, the accounting system is the outcome of complex processes exposed to the different number of factors as pointed out by Roberts et al. (2008:200), whereby factors include: (1) political and economic system, (2) legal system, (3) tax system (4) the system of corporate financing, (5) the accounting profession, (6) religion and (7) culture. However, other factors (originating outside the country) without prejudice to national regulatory authorities may also have an important impact on the development of accounting flows - trade, colonial dependence or amount of foreign investment. They should not be considered in isolation, but actively involved in the familiar environment factors for consideration totality of the impact of various factors, noting the resulting interdependence (correlation), or cause-effect relationship.

Finally, Radebaugh et al. (2006:6) argue that despite some similarities between the accounting systems, there is at least as far as accounting systems as countries,

but there are no two exactly the same accounting systems. The fundamental reasons for these differences, in fact, derive from the environment since the accounting systems represent the environment which they serve. Furthermore, countries are, at present, divided by the level of economic development, where differences have arisen about private property rights, degree of industrialization, inflation rates and levels of economic growth. Given these differences in economic conditions, differences in accounting practices should not be surprising. On the other hand, the accounting needs of small businesses are different from those of multinational corporations so that the accounting needs of underdeveloped, agrarian countries are different from those accounting needs in highly developed industrial countries. In the environmental factors, Radebaugh et al. (2006:16-18) include: (1) enterprises ownership, (2) activities of the company, (3) finance and capital markets, (4) taxes, (5) the accounting profession, (6) political system, (7) social environment, (8) economic growth and development, (9) inflation, (10) legal system (11) accounting rules, (12) culture and (13) international factors.

2. The methodology for competitiveness calculation

World Economic Forum (WEF) in a research study, "Global Competitiveness Report 2010-2011" reports about acceptable and accurate methods of calculating a degree of competitiveness of the economy, precisely competitiveness of certain countries, and develops so-called global competitiveness index (GCI). GCI index includes the weighted average of the various components with each component measuring different aspects of competitiveness grouped into 12 pillars of economic competitiveness as follows: (1) the institutional environment, (2) developed and efficient infrastructure, (3) the macroeconomic environment, (4) health and primary education, (5) higher education and training, (6) market efficiency, (7) the effectiveness of the labor market, (8) development of financial markets, (9) technological readiness, (10) market size, (11) business sophistication, and (12) and technological innovation.

To apply the concept of GCI, pillars are organized into three sub-indexes, each critical to a particular stage of development: (1) basic requirements sub-index covers the most critical pillars for the countries in stage factors driven economies, (2) efficiency enhancers sub-index includes pillars specific to the country in stage efficiency driven economies and (3) sub-index innovation and sophistication includes key elements of the country at the stage of innovation driven economies which forms aggregate GCI index (WEF, Nardo, Annoni, 2011:12):

$$GCI_{ij} = w_{j_1}Basic_i + w_{j_2}Efficiency_i + (1 - w_{j_1} - w_{j_2})Innovation$$

Using the GCI index countries are divided into five phases: (1) phase 1, (2) transition phase from phase 1 to phase 2, (3) phase 2, (4) transition phase from phase 2 to phase 3, and (5) phase 3 on the basis of calculated values of global competitiveness. The index includes 140 countries whose competitiveness in the global environment is measured by 12 pillars of competitiveness.

3. INTERDEPENDENCE OF ENVIRONMENTAL FACTORS AND THE PILLARS OF COMPETITIVENESS

Most of the pillars of competitiveness can be linked to various factors that affect the organizational structure of accounting system and financial reporting. For example, environmental factors such as the legal system include the first pillar of competitiveness - the institutional environment, cultural factor relates to business sophistication, technological readiness and technological innovations, then, capital markets and sources of financing include the level of development of financial markets.

Table 2. The degree of correlation between the pillars of competitiveness and environmental factors

Environmental factor (DS model)	Pillars of competitiveness
Legal system	Institutional environment
Culture	Business sophistication Technological readiness technological innovation
Capital market	Financial market Sources of financing
Political and economic system	Market size Infrastructure
Inflation	Macroeconomic environment
Accounting profession	Primary education Higher education Training
Tax system	Goods market Service market

Furthermore, political and economic system determines the size of the market and related infrastructure, while inflation factor depends on the macroeconomic

environment. However, we must not omit from consideration the importance and significance of the accounting profession factors, which can be viewed from the standpoint of primary education, higher education and training in relation to the specificity of tax system, which affects the goods market and labor markets. Environmental factors described above can be directly linked to the pillars of competitiveness, which, primarily, determine the necessity for further elaboration of various factors affecting accounting systems and financial reporting systems.

4. CONCLUSION

Financial reporting largely depends on the micro and macro environment, because it is a complex and stochastic process. The emphasis is primarily on the institutional environment, with specific differences from country to country. Namely, it is a fact that supports perceived gap in financial reporting standards application through the action of various environmental factors. From the accounting aspect, observed gap becomes more pronounced as single national economies do not improve equally and they allocate scarce resources unevenly. On the other hand, some research support the fact that the application of standards in the financial reporting impacts the increase in competitiveness for equal participation in the global financial capital market. In this regard, the implementation of accounting standards (IAS/IFRS) is essential for transparent and uniform presentation of balance-sheet positions. These initiatives represent continued realization of the aspirations of the IASB for international accounting harmonization since the application was not uniform in all countries of the world. Process of harmonization enables businesses and other users of financial reports to easier understand and compare the data presented.

5. LITERATURE

Baker, C. R., Barbu, E. M., (2007), Trends in research on international accounting harmonization, *Socio-EconomicReview*, 5 (4), pp. 603-632.

CEA (2011), Svjetsko izvješće o konkurentnosti i izazovi Hrvatske dostupno na <http://ceahravska.wordpress.com/2011/02/06/svjetsko-izvjescje-o-konkurentnosti/> (01.02.2012.)

Crnković, L., Martinović, J., Mesarić, J., (2006), Organizacija i primjena računovodstva, Ekonomski fakultet u Osijeku, Osijek

- Doupnik, T. S., Salter, S. B., (1995), External environment, culture, and accounting practice: a preliminary test of a general model of international accounting development, *The International Journal of Accounting*, 30(3), pp. 189–207.
- Gray, S. J., (1988), Towards a theory of cultural influence on the development of accounting systems internationally, *Abacus*, 24(1), pp. 1–15.
- Harrison, G. L., McKinnon, J. L., (1986), Cultural and accounting change: a new perspective on corporate reporting regulation and accounting policy formulation, *Accounting, Organizations and Society*, 11(3), pp. 233–252.
- Međunarodni revizijski standardi (1993) i Međunarodni revizijski standardi izmijenjeni, (2009), HUR/HRK, Zagreb
- Mijoč, I., (2011), Primjena Međunarodnih standarda financijskog izvješćivanja u funkciji razvoja hrvatskog gospodarstva, Ekonomski fakultet u Osijeku, Osijek, doktorska disertacija
- Nobes C. W., (1983), A judgemental international classification of financial reporting practices, *Journal of Business Finance & Accounting* [serial on the Internet], 10(1), pp. 1-19.
- Nobes, C. W., (1998), The future shape of harmonization: Some responses, *European Accounting Review*, 7(2), pp. 323–330.
- Radebaugh, L. H., Gray, S. J., Black, E. L., (2006), *International accounting and multinational enterprises*, 6th Edition, John Wiley & Sons
- Roberts, C., Weetman, P., Gordon, P., (2008), *International corporate reporting – a comparative approach*, 4th Edition, Prentice Hall
- Sala-i-Martin, X., Blanke, J., Drzeniek Hanouz, M., Geiger, T., Mia, I., (2010), *The Global Competitiveness Report 2010-2011*, World Economic Forum, Geneva, Switzerland dostupno na http://www3.weforum.org/docs/WEFGlobalCompetitivenessReport_2010-11.pdf (01.02.2012.)
- Walton, P., Haller, A., Raffournier, B., (2003), *International Accounting*, 2nd Edition, Cengage Learning EMEA
- Zeghal, D., Mhedhbi, K., (2006), An analysis of the factors affecting the adoption of international accounting standards by developing countries, *The International Journal of Accounting*, 41(4), pp. 373-386.

MISCELLANEOUS CATEGORIES

IMPROVING SWOT ANALYSIS BY USING THE ANALYTICAL HIERARHY PROCESS

Dražen Barković, Full Professor
Faculty of Economics in Osijek
barkovic@efos.hr

Jelena Stanišić, univ.spec.oec.
Osimpex Ltd, Osijek, Croatia
jelena.stanasic@osimpex.hr

Mr. Sc. Nenad Stanišić
Hrvatske šume Ltd, Našice, Croatia
nenad.stanasic@hrsume.hr

ABSTRACT

The SWOT analysis is a widely applied tool in strategic decision support. The SWOT is an acronym for Strengths, Weaknesses, Opportunities, and Threats encompassing the internal and external factors that are the most important for the enterprise's future. By applying the SWOT analysis in a strategic planning process, the aim usually is to develop and adopt a strategy resulting in a good fit between these internal and external factors. However, SWOT includes no means of analytically determining the importance of factors or of assessing the fit between SWOT factors and decision alternatives. In A²WOT, the Analytic Hierarchy Process (AHP) and its eigenvalue calculation framework are integrated with SWOT analysis. The aim in applying the hybrid method is to improve the quantitative information basis of strategic planning processes. AHP's connection to SWOT yields analytically-determined priorities for the factors included in SWOT analysis and makes them commensurable. In addition, decision alternatives can be evaluated with respect to each SWOT factor by applying the AHP. So, SWOT provides the basic frame within which to perform an analysis of the decision situation, and the AHP assists in carrying out SWOT more analytically and in elaborating the analysis so that alternative strategic decisions can be prioritized.

JEL Classification: M10

Keywords: SWOT, AHP, A'WOT, strategic planning, strategic management

1. INTRODUCTION

The SWOT is an acronym standing for Strengths, Weaknesses, Opportunities and Threats and it is a widely applied tool in the analysis of internal and external environment in order to achieve a systematic approach and support for strategic decision situations (e.g. Wheelen and Hunger, 1995, Hill and Westbrook, 1997). The internal and external factors that are most important for the enterprise's future are referred to as strategic factors. By applying SWOT in a strategic planning process, the aim usually is to develop and adopt a strategy resulting in a good fit between the internal and external factors. SWOT can also be used when a strategy alternative suddenly emerges and the decision context relevant to it has to be analyzed.

Even though the SWOT analysis can be useful in strategy formulation, various authors (e.g. McDonald, 1993, Hill and Westbrook, 1997) argued that the SWOT analysis has certain shortcomings, such as: it easily remains at the level of only pinpointing the factors; the expression of individual factors is often of a very general nature and brief; includes no means of analytically determining the importance of the factors or of assessing the decision alternatives with respect to the factors; utilization of SWOT alone is mainly based on the qualitative analysis made in the planning process, and on the capabilities and expertise of the persons participating in the process. This leads to a conclusion that the result of the SWOT analysis is merely a listing of internal and external factors. That is why it has sometimes been referred as "So WOT" analysis.

One of the ways to overcome shortcomings of the SWOT analysis is to utilize the Analytic Hierarchy Process (AHP; Saaty, 1977, 1980) within a SWOT framework in order to systematically evaluate the SWOT factors and make them commensurable as regards their intensities (Kurttila et al., 2000). The AHP qualities can be regarded to be valuable characteristics in SWOT analysis. Additional value from a SWOT analysis can be achieved by performing pairwise comparisons between the SWOT factors and then analyzing them by means of the eigenvalue technique as applied in the AHP. SWOT provides the basic frame within which to perform an analysis of the decision situation and AHP assists in carrying out SWOT more analytically. The hybrid method is called A'WOT.

When comparison is done, useful quantitative information can be obtained about the decision making situation. Taking into consideration the comparison of the SWOT factors and groups, one can make various analyses. For example, is there a specific weakness requiring most of the attention, or if the company is expected to be faced with future threats exceeding the company's combined opportunities. Using the A'WOT provides an opportunity to evaluate choice alternatives with the respect to each SWOT factor and to each SWOT group. When the importance of different SWOT groups has also been determined, the choice alternatives can be prioritized with respect to the strategic choice situation as a whole (see more in Kangas et al., 2001).

2. THEORETICAL REVIEW OF SWOT ANALYSIS

Notably, SWOT analysis became one of the most popular tools for strategic planning. It has its origins in the 1960s (Learned et al., 1965), and was popularized by Wehrich's (1982) work. It is commonly adopted for the analysis of internal and external situations, in turn encouraging the development of strategies which can cope with these situations. The usage of SWOT analysis has been reported in many fields.

In the SWOT analysis literature, the terms 'strengths' and 'weaknesses' refer to attributes that measure internal capabilities whereas 'opportunities' and 'threats' originate from external environments of an object being assessed, such as a forestry program. Internal attributes are controllable to some extent by program managers. Strengths are to be pursued, and weaknesses strategically eliminated or reduced. External attributes (i.e. economic, cultural, demographic, political or legal trends and events) are largely beyond the control of a single interested party. Stakeholders involved in a forestry program are urged to take advantage of potential opportunities, and avoid potential threats that could significantly hamper the goals of the program from being fulfilled (David, 2005).

The distinction between strength and an opportunity, as well as between a weakness and a threat, is not always clearly understood, and participants in a SWOT analysis can become confused between these terms. A way to remember the difference is that strengths and weaknesses exist now; opportunities and threats refer to things which might happen in the future (McNutt, 1991). That is, 'strengths' apply to current forces associated with a forestry program at issue whereas 'opportunities' refer to what actions could be taken to enhance the program. Likewise, 'weaknesses'

refer to current problems whereas ‘threats’ are problems waiting to happen. What makes the SWOT analysis more complicated is that some of the strengths may constitute weaknesses from another view (Dillan, 1988). In other words, sometimes individuals participating in the SWOT group might disagree about whether a current fact or condition is strength or a weakness, or whether something which might happen will turn out to be an opportunity or a threat (McNutt, 1991).

Despite its widespread use, a large gap nonetheless exists between a SWOT analysis and its following step - strategy formulation. Normally, based on a SWOT analysis, a variety of strategic options will be generated and a best/optimal one will then be selected for implementation. But at its current stage of development, the SWOT analysis is insufficiently informative for the creation of strategic options. It has been reported that a SWOT analysis result is often simply a checklist of internal and external factors, or is simply discarded after the analysis (Hill and Westbrook, 1997). The main purpose of this article, therefore, is to examine one means of filling this gap to see if the strategic planning can be assisted by improving current SWOT approach using rationally analytic quantitative techniques.

However, it is important from the outset to recognize that strategic planning is a mixture of rational analysis and an art form. According to Wheelen and Hunger’s strategic management model, it appears that deriving strategies from a SWOT analysis is a rational and automatic procedure conceived as a set of logical steps following in sequence. Quantitative approaches and analytical methods are widely employed to determine an appropriate strategic path. It gives a vague impression that strategic planning is a repeatable “scientific” process, whereby a rationally analytical process will lead to appropriate strategies as a guarantee. This actually is not often the case (Lu, 2010). Research on strategic planning has suggested that strategic decision-making process often incorporates irrationality, intuition, and political behavior (Elbanna and Child, 2007; Khatri and Ng, 2000). They consider that strategic planning, especially the formulation of strategic options, is not an arena for the application of models or analytical techniques. Instead, it emphasizes strategic planning as an art form involving creativity or other processes that are not currently amenable to scientific analysis.

Weihrich (1982) proposed a seven-step framework which turns SWOT thinking into some specific steps that an analyst can truly follow. The core of the SWOT analytic framework is the TOWS matrix (sometimes called a SWOT matrix), which is shown in Figure 1. To use the framework, users need to identify and evaluate the

opportunities and threats facing an organization, and its strengths and weaknesses. The SWOT factors can be fed into the corresponding cells in the TOWS matrix. Users then need to develop strategic options based on the SWOT analysis. There are four generic strategic options, as shown in Figure 1. The O/S options maximize strengths and opportunities; the T/S options maximize strengths and minimize the threats; the O/W options maximize opportunities and minimize weaknesses; and the T/W options minimize the weaknesses and threats. Wehrich's TOWS matrix provides a systematic fashion to connect internal and external factors in order to stimulate new strategic options. Since then, SWOT analysis has become one of the most popular tools for strategic planning. Nowadays it is taught as one of the basic strategic planning tools in business schools, management colleges, and in other training courses.

Figure 1: SWOT/TOWS matrix

SWOT/TOWS matrix

	Strengths	Weaknesses
Opportunities	<p>SO strategies</p> <p>Use strengths to take advantage of opportunities</p>	<p>WO strategies</p> <p>Overcome weaknesses by taking advantage of opportunities</p>
Threats	<p>ST strategies</p> <p>Use strength to avoid threats</p>	<p>WT strategies</p> <p>Minimize weaknesses and avoid threats</p>

Source: Ridgman (1996)

Unlike other tools that became quickly outdated with the fast development of management science, SWOT analysis is still popular. The reasons are many. Firstly, it is inclusive; it fits alongside other theories and tools which emerged later. For example, a SWOT analysis may itself encompass a number of different forms of analysis, e.g. Porter's Five Forces model, Resource-Based Approach, Scenario Analysis, etc (Glaister and Falshaw, 1999). Secondly, it is simple to use. It provides strategy planners with a systematic but simple way for conducting SWOT analyses (Piercy, 1991). In addition, it is flexible. It can be used by different types of organization, including companies, non-profit organizations, government units, and even by individuals.

Many researchers have tried to quantify the SWOT factors. Notably, in a hybrid method called A²WOT (Kurttila et al, 2000), the factors identified by a SWOT analysis are evaluated using the Analytic Hierarchy Process (AHP), a multi-criteria method for determining the relative importance of attributes within a group (Saaty, 1980). The idea of applying the AHP technique within a SWOT framework is to systematically evaluate the SWOT factors and make them commensurable with regard to their relative importance (Kurttila et al., 2000). The concept of quantifying SWOT factors is interesting as it introduces mathematical modeling into SWOT analyses and strategic management processes.

There is a limitation to the traditional SWOT analysis which has not been mentioned by previous researchers. Strategic analysts can often see that the identification of SWOT factors is well guided, and the process well structured. For example, with the assistance of guidance and through certain methods (e.g. brainstorming, group meetings), a SWOT matrix would be derived, which organizes all the SWOT factors in a structured fashion. But when it comes to the following step, the generation of strategic options, most writers are “wise after the event” or arbitrary. These strategic options should be based on current internal and external situations and by analyzing these options a strategist can select an appropriate strategy (Bowman and Moskowitz, 2001).

However, only few logical links exist between a SWOT analysis and the generation of strategic options. Currently, there is a gap between these two critical stages. As mentioned above, SWOT analysis experienced a crisis, as Hill and Westbrook (1997) reported that it was often simply used as a checklist of internal and external factors, and sometimes was simply discarded after the analysis. The gap prevents the SWOT analysis from being as helpful as it could be in the generation of strategic options. The only advice given to analysts is “to be creative” in the generation of strategic options that match the SWOT analysis result. Indeed, this process is a highly creative one, and it seems that there is little writers can do with people’s creativity (Cooke and Slack, 1991). But the gap referred to above could be narrowed if the traditional SWOT analysis can be improved. If a long list of SWOT factors can be refined into more focused ones, a SWOT analysis could be more effective in the generation of strategic options.

In summary, a critical review shows that the SWOT analysis is a powerful tool for conducting strategic planning. Ensuring a strategic fit between internal and external environments has become a widely accepted principle in strategy manage-

ment. However, in spite of research into SWOT analysis in recent decades, current SWOT analysis is not informative enough for the formulation of strategic options; a method is needed which pick out and consolidates key influential SWOT factors where strategists must give particular considerations.

3. THE ANALYTICAL HIERARCHY PROCESS

The Analytical Hierarchy Process is a popular decision-making tool developed at the Wharton School of Business by Thomas Saaty (1986) and allows decision makers to model a complex problem in a hierarchical structure showing the relationships of the goal, objectives (criteria), sub-objectives, and alternatives as shown in Figure 2. Uncertainties and other influencing factors can also be included. It is used in wide variety of decision situations.

Figure 2: The AHP decision hierarchy process

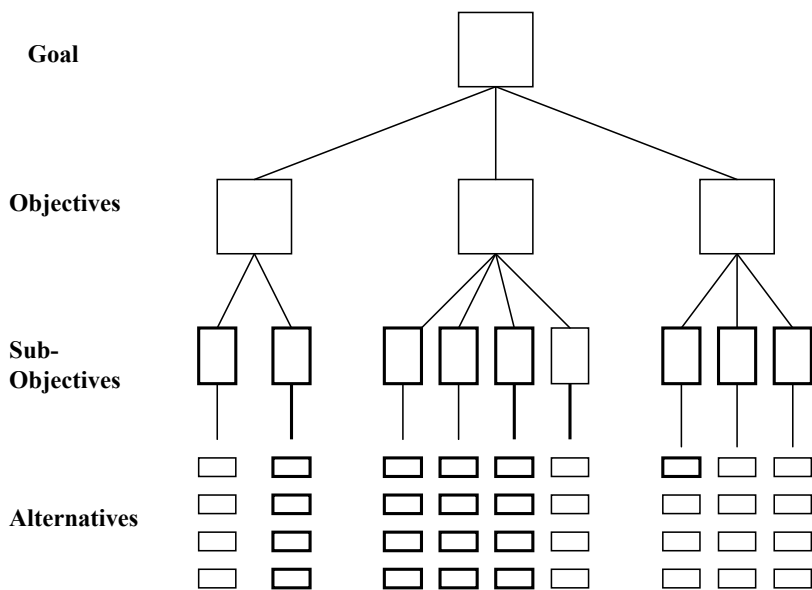


Table 1: Example scale for comparisons

Intensity of importance	Description
1	Equal importance
3	Moderate importance of one factor over another
5	Strong or essential importance
7	Very strong importance
9	Extreme importance
2, 4, 6, 8	Intermediate values
Reciprocals	Values for inverse comparison

Source: Saaty (1980)

In AHP, the main problem is first decomposed into a hierarchy of simplified sub-problems in which each can be analyzed independently. The elements of the hierarchy can relate to any aspect of the decision problem, tangible or intangible. Once the hierarchy is built, the elements are arranged systematically and compared to one another in pairs using concrete data about the elements or based on human judgments about the elements' relative meaning and importance. A numerical weight or priority is derived for each element of the hierarchy, allowing diverse and often incommensurable elements to be compared to one another in a rational and consistent way. In the final step of the process, numerical priorities are derived for each of the decision alternatives. Since these numbers represent the alternatives relative ability to achieve the decision goal, they allow a straightforward consideration of the various courses of action.

4. STEPS OF THE HYBRID METHOD

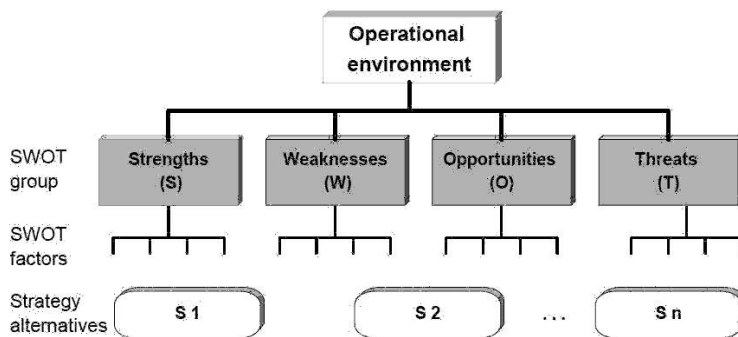
The hybrid method A²WOT proceeds as follows (Kangas et al., 2001):

- I. The SWOT analysis is carried out. The relevant factors of the external and internal environment are identified and included in SWOT analysis.
- II. Pairwise comparisons between the SWOT factors are carried out separately within each SWOT group. When making the comparisons, the issue at stake is which of the two factors compared is more important and how much more important. With these comparisons as the input, the mutual priorities of the factors are computed.
- III. The mutual importance of the SWOT groups is determined. There are several possibilities as to how to do this. For example, the factor with the highest priority may be chosen from each group, and these four factors are then

compared pairwise and their relative priorities are calculated on the basis of the comparisons. After that, the other factors are scaled relatively to these priority values within each group. Another possibility is to directly compare the importance of the entire groups. In addition to these two simplest ways, more complicated procedures can be applied, if desired.

- IV. The strategy alternatives are evaluated with respect to each SWOT factor as in the AHP.
- V. Global priorities can now be calculated for the strategy alternatives in accordance with the general A'WOT decision hierarchy, presented in Figure 3.

Figure 3. The hierarchical presentation of A'WOT analysis.



Source: Kangas et al. (2001: 190)

As an extension of the analysis, a level of scenarios can be added to the decision hierarchy, consisting of different future states-of-nature. This being the case, the probabilities for the scenarios to take place can be assessed and the importance of SWOT factors and groups can be estimated separately for each scenario. When calculating the global priorities, the probabilities of the scenarios occurring are then applied as weights in the analysis.

In the earliest A'WOT applications (see Kurttila et al., 2000, Pesonen et al., 2000) only the steps (i), (ii), and (iii), as listed above, were carried out. Indeed, in the phases of strategic planning processes typically approached by using SWOT, the most immediate aim is not always to compare alternative strategic decisions. Instead, SWOT is often applied only in the analysis of internal and external factors of the operational environment where the decisions have to be implemented, i.e., in an early stage of a strategic planning process. A'WOT strengthens the decision

basis also in the case where the result is only the quantification and commensuration of SWOT factors.

However, the final goal of any strategic planning process as a whole is to develop and adopt a strategy resulting in a good fit between internal and external factors. When the steps (iv) and (v) are included in the A'WOT process, the initial SWOT analysis might not always be applicable as such. The reason for this is that the SWOT factors could have been formulated so that strategy alternatives can't be evaluated with respect to them. This being the case, SWOT factors need some value-focused modification and fine-tuning (by the consultant). For A'WOT, SWOT factors should be determined by asking which are the internal and external factors of the operational environment that should be taken into account in choosing the strategy for the enterprise. Then it is possible to compare strategy alternatives with respect to strengths, weaknesses, opportunities, and threats as listed in SWOT. To take an example of the pairwise comparisons: which of the two strategy alternatives compared (when implemented) makes it possible to better exploit a certain opportunity, and how much better?

5. CONCLUSION

The presented A'WOT as a combination of the AHP and SWOT analysis has proven to be an useful and promising approach in supporting strategic decision-making process. By comparing forces the decision-makers are encouraged to think over the weights of the SWOT factors and to analyse the situation more precisely and in more depth than they usually do only using standard SWOT analysis. Even though it can be quite beneficial, A'WOT applications are few. Still, the approach is suitable for nearly all decision situations where SWOT has been seen applicable.

Namely, by using A'WOT one can weight not only SWOT factors but can also evaluate alternative strategic decisions that can be integrated with ordinary SWOT analysis. The intention of using of the AHP within SWOT is to overcome the most crucial weakness of SWOT. This is particularly true when the full version of which of A'WOT is applied. In addition to operational environment, decision makers' goals are crucial in the strategic choice situations. It is likely that A'WOT could be improved in the future by including more explicitly the different objectives into the analyses (i.e. not only by means of SWOT factors).

As a concluding remark, the A'WOT - a hybrid method of AHP and SWOT - offers numerous advantages out of which some include following: it improves the

information basis of strategic planning process; it provides provision of effective framework for learning in strategic decision support in numerous situations; it can be used as a tool in communication and education in decision making processes where multiple decision makers or judges are involved; when using separately for individuals or interest groups, it can provide a good basis for studying differences in opinions, expectations and the like of different stakeholders, related to a certain decision-making process.

LITERATURE

- Bowman, E.H., Moskowitz, G.T. (2001), Real options analysis and strategic decision making, *Organization Science*, 12, 772-777
- Cooke, s., Slack, N. (1991), *Making Management Decision*, Prentice Hall
- David, F.R. (2005), *Strategic Management Concepts and Cases*, Prentice Hall, Upper Saddle River, NJ.
- Dillan, J. (1988), A SWOT appraisal of the Australian profession of agricultural economics as at 1988, *Review of Marketing and Agricultural Economics*, 56(3), 340-346
- Elbanna, S., Child, J (2007), Influences on strategic decision effectiveness: development and test an integral model, *Strategic Management Journal*, 28, 431-453
- Glaister. K.W., Falshaw, J. (1999), Strategic planning: still going strong?, *Long Range Planning*, 32 (1), 107-116
- Hill, T. and Westbrook, R. (1997), SWOT analysis: It's Time for a Product Recall. *Long Range Planning*, 30(1), 46-52.
- Kangas, J., Pesonen, M., Kurttila, M., Kajanus, M. (2001.), A'WOT: Integrating the AHP with SWOT analysis, *ISAHP 2001*, Berne, Switzerland, August 2-4, 2001. Available <http://www.isahp.org/2001Proceedings/Papers/037-P.pdf> (21.03.2012.)
- Khatri, N., Ng, H.A. (2000), The role of intuition in strategic decision making, *Human Relations* 53(1), 57-86
- Kurttila, M., Pesonen, M., Kangas, J., Kajanus, M. (2000), Utilizing the analytical hierarchy process (AHP) in SWOT analysis - a hybrid method and its application to a forest- certification case, *Forest Policy and Economics* (1), 41-52
- Learned, E.P., Christiansen, C.R., Andrews, K.E., Guth, W.D. (1965), *Business Policy: Text and cases*, Irwin, Hopmewood; IL

- Lu, W. (2010), An improved SWOT approach for conducting strategic planning in the construction industry. Available at http://www.bre.polyu.edu.hk/BRE_workshop/pdf/COENG-470%20-%20An%20Improved%20SWOT%20analysis.pdf (28.03.2012.)
- McDonald, M. H. B. (1993), *The Marketing Planner*. Butterworth-Heinemann, Oxford.
- MCNutt, K. (1991), SWOT before you start, *Nutrition today*, 26(1), 48-51
- Pesonen, M., Kangas, J., Kurttila, M. and Kajanus, M. (2001a), Applying A'WOT to choose a management strategy for the forest holding owned by private partnership. In: Vayrynen, J. & Niskanen, A. (eds.). *International Symposium on Economic Sustainability of Small-scale Forestry*. IUFRO Working Unit 3.08.00: Small-scale Forestry. 20-26 March, 2001, Joensuu, Finland. Abstracts. p. 79.
- Pesonen, M., Kurttila, M., Kangas, J., Kajanus, M. and Heinonen, P. (2001b), Assessing the priorities among resource management strategies at the Finnish Forest and Park Service. To appear in *Forest Science*.
- Piercy, N. (1991), *Marketing-led Strategic Change*, Oxford: Butterworth-Heinemann
- Ridgman, T. (1996), Windows of opportunity: timing and entry strategies, *Industrial Management & Data Systems*, Vol. 96, Iss: 5, 26 – 31.
- Saaty, T. L. (1977), A scaling method for priorities in hierarchical structures. *Journal of Mathematical Psychology*, 15, 234-281.
- Saaty, T. L. (1980), *The Analytic Hierarchy Process*, McGraw-Hill, New York.
- Saaty, T.L. (1986). *Axiomatic Foundation of the Analytic Hierarchy Process*, *Management Science*, Vol. 32(7)
- Suh, J. and Emtage, N. F. (2012), Identification of strengths, weaknesses, opportunities and threats of the community-based forest management program: http://espace.library.uq.edu.au/eserv/UQ:8628/n15_Suh_and_Emta.pdf (21.03.2012.)
- Wehrich, H. (1982), The TOWS Matrix: A Tool for Situational Analysis. *Long Range Planning*, 15(2), 54 - 66.
- Wheelen, T. L. and Hunger, J. D. (1995), *Strategic Management and Business Policy*, 5th Edition, Addison Wesley, Reading, MA.

SOME THOUGHTS ABOUT THE GEOGRAPHICAL WAY OF THINKING IN THE HUNGARIAN CULTURE

Norbert Pap¹, Janka Teodóra Nagy², Andor Végh³

ABSTRACT

A continuously enriched, rapidly evolving and diversely interpreted field, cultural geography is also dealing with the cultural properties of space on its own, a historical and social approach by ethnography might also be attractive. As on the border of geography and ethnography, already at the time of the simultaneous emergence of the two fields, the importance of examining cultural space was evident. Thus, a common conceptual framework was created for the spatial analysis of ethnical issues.

The geographical space consists of a large amount of complex and complicated elements. These elements have sensitive and organic connections. In history, from several points of view and ideologies philosophers and geographers tried to describe and explain the processes taking place in geographical space. All of these space models have grabbed and emphasized some characteristic feature/features of this infinitely complex system.

Keywords: spatial analysis, cultural geography, ethnography, information society

CHARACTERISTICS OF GEOGRAPHICAL SPACE

In the history of general geographical thinking, the research of the regularities of natural, economic, political, administrative etc. areas was conducted in three main

¹ Dr. Habil. Pap, Norbert PhD, associate professor, head of department, Department of Political Geography and Regional Development, University of Pécs.

² Prof. Dr. Nagy, Janka Teodóra, college professor, vice-dean, Faculty of Illyés Gyula, University of Pécs

³ Dr. Végh, Andor PhD, assistant professor, Department of Political Geography and Regional Development, University of Pécs.

geographical theories and the regularities were formulated considering these ideas. The three main trends are:

- theory of landscape,
- theory of *rayons*, (economic region)
- theory of central places.

All the three theories (theory systems) had and also have representatives in Hungary. They had considerable theoretical and practical influences in different countries of the world in different times. The baseline, the important and outstanding active factors and organizing principles of the theories vary. Though, from time to time such efforts appear whose purpose is to integrate the results of ideologies or at least the aspects of examination.

The first geographical idea was the landscape theory or landscape geography. In the 18th century, geography was presented in works, so called state criteria, introducing countries regarding their history, ethnography, economy and nature. The three-dimensional framework of the research was the borders of the countries and the administrative boundaries in the states. At that time the first followers of landscape theory suggested that the framework of geographical research and description should be the natural spaces, the “landscapes”, not the changeable political spaces. In this idea the natural boundaries, such as high mountains, wide rivers, seas etc., played an important role. The natural spatial units were considered to be the drainage basins of smaller or larger rivers.

Then the original geographical category was being enriched with more and more contents in time. In addition, the advocates of the theory tried to interpret the relationships and problems of natural environment, settlement network, economic activities and administrative spatial division. “*The concept of táj (landscape) becomes a comprehensive, totally structuring category in which all the phenomena must be and may be defined. In order to analyse particular structures, the concepts of natural, economic, cultural, transport and political landscape are produced. ...*” - written by Zoltán Hajdú (HAJDÚ, Z. 2005).

With the spread of more geographical ideologies, the landscape – such as in Marxist economic geography on ideological grounds – was classified as a natural geographical category. As the strict ideology became milder, the anthropogenic factors came under the components of landscape. One of the Hungarian geographers, Sándor Marosi, gave a definition of landscape in 1981: “*The táj (landscape), ... is such a more or less distinct entity of space that possesses individuality as a result of interactions of natural*

and – increasingly – anthropogenic processes and regularities.” (MAROSI, S. 1985) At the same time he emphasized the basic, determining significance of natural factors.

The eminent landscape theorists in international geographical thinking are: Alexander von Humboldt, Vidal de la Blache, the Hungarian ones are: Pál Teleki, Jenő Cholnoky, and Gyula Prinz. The theory stresses the so called “tájállam” (landscape-state or natural state) (see historical Hungarian Kingdom) in political dimensions.

The theses of economic region theory (*Rayon* theory) were worked out in France at the end of the 19th century, and later geographers living in the Soviet Union and the former socialist countries developed it further – in Marxist economic geography. The organizing principle of the ideology is the society’s economic activity, regarding the characteristics of regional division of labour. The trend followers think that economy has a basic influence on the regional structure of society. The space categories of *Rayon* theory primarily reflect the relationships and space structure generated by economic activities, supposing that they are relatively stable in time. They wanted to make these regions the basis of organising society. The influence of this theory is reflected in creating area development regions today (see macro-regions).

Rayonism was related to the need that the state wished to affect and control the regional processes of economy. For example, after the World War I, in France the Minister for Trade, Clemental, initiated the formation of a modern administrative system of regions (“Clemental regions”). The plans were made by a French geographer, Hauser, H. In his opinion, 18 regions could be formed in France. The regional units were specified by nature⁴ with different economic features, so thus they could be described as economic regions. He offered to build the regional administrative division of France on this system (HAUSER, H. 1924).

The economic regions, or Rayonism, made a great career in regional planning and organization in Soviet geography. After the World War II this geographic idea spread all over the socialist countries, so did in Hungary.

The theory of central places basically studies the settlement network system, the hierarchical relations and functional content of the settlements. The followers of this theory believe that the so called complex catchment areas formed around the settlements with central functions give the elementary categories of the social and economic space in a system determined by the hierarchical level of settlements.

⁴ There was a strong influence of landscape geography.

The most important ideologists of the theory of *central places* were German economic geographers, Walter Christaller and August Lösch. Christaller wrote about his theory at the beginning of the 1930s on the grounds of empirical experiences in South Germany. He put trade services into seven categories. Those of which belong to lower categories can be found in more settlements while those of which belong to higher ones can be found in fewer places. Central places, characterized by services of higher categories, contain low-ranking functions, too. Thus it makes a certain hierarchy of settlements which together with their “hinterland” form the basic category of space.

According to the three variations of Christaller’s model, there is a market theory minimizing the number of centres, a transport theory minimizing the length of roads, and an administrative theory ranking the background areas hierarchically (CHRISTALLER, W. 1966).

All the three trends have produced a powerful effect on the recent and contemporary Hungarian human geography.

CULTURAL CHARACTERISTICS OF SPACE

A continuously enriched, rapidly evolving and diversely interpreted field, cultural geography is also dealing with the cultural properties of space on its own, a historical and social approach by ethnography might also be attractive. As on the border of geography and ethnography, already at the time of the simultaneous emergence of the two fields, the importance of examining cultural space was evident. Thus, a common conceptual framework was created for the spatial analysis of ethnical issues.

Geography has recognised that the Humboltian way of thinking, where one analyses nature entirely (from the natural conditions to the life forms) and resynthesises the knowledge, is not sufficient any more for deep understanding (KEMÉNYFI R. 2002). It is inevitable to study mankind and human activity as well, just as it was phrased by anthropogeography (the geography of mankind), a subspeciality of regional (descriptive) geography.⁵ The same thought, after nearly a fifty-years’ lag

⁵ In his works (*Antrophogeographie*, 1882–1891, Stuttgart, *Political geography* 1897), the founder of this school, Friedrich Ratzel (1844–1904) emphasised the importance of parallel investigation of human society and nature, besides the predestination of national characteristics by geographic conditions. In the first half of the 20th century, one of the three prominent figures of Hungarian anthropogeography is also linked to the Hungarian Ethnographic Museum. (Keményfi R. 2002)

in Hungary, also renewed social geography after the 1980's, which area was multiple times interwoven with ethnography by its localised character and its scenes.

Those geographers also skilled in ethnography, have enriched geography with their results and experiences in the field of ethnography, while ethnographic observations, experiences and theories on lifestyle, have also been incorporated by geography. Ethnography was very different in its methodology however, from the inductive methods of geography (and particularly cultural geography) that enabled the latter to describe general cultural rules. Ethnography in turn, aimed to observe the inner structure of culture, its historic context and changes, the differences, the unique features, while studying the lifestyle and conditions of individual ethnicities or groups of the society, using primarily deductive methods and comparison.

As a social science, geography was overshadowed after World War II in Hungary. There could be no commonality left in the subject of geography and ethnography, only in their methodology, namely in the spatiality of local cultural problems. Ethnographic cartography (showing the spatial localization of cultural units), the similar approaches of urban geography and social ethnography, and ethnographic monographies studying the "cultural landscape" that is the basic unit of cultural geography, still a subspeciality of social geography, were still small links between the two specialities. (KEMÉNYFI R. 2002)

Today, both specialities have to redefine space, as well as cultural space (absolute or relative; static or dynamic; abstract or concrete; objective or subjective) and particularly its units, like the definition and dimensions of "cultural landscape". As a new tendency, beside the increasing number of contacts between ethnography and social geography, economic geography is also expanding its scope towards social spaces of ethnicities, cultures and religions.⁶ The human and cultural ecological approach that is getting more and more popular nowadays, also demands the cooperation of geographers (and other scientists) with ethnography, for this is the only way to achieve the final, common goal: the representation of territorial (geo-

⁶ Furthermore, the phrase „ethnicity geography” is also emerging. „In parallel with the absolutely spatial approach of ethnical geography and the consequent strict terminology (e.g. nationality, ethnicity) the terms of ethnical space studies have also evolved during the last decades of the previous century. The presence of subjective spaces have also generated difficulties in measuring ethnical identity, the limitations in using statistical data, thus a need for rethinking the relations between ethnicity and space. (Keményfi R. 2002) “The essence of ethnocultural space is the cultural excess generated by lingual, regional, lifestyle, economical, architectural and art characteristics of the people living in it...” (Mihalkó 2008)

graphic) aspects while examining the adaptation of ethnic groups and social structures (ethnographic or anthropologic). (A. GERGELY, A. 2003, KEMÉNYFI R. 2002)

CHARACTERISTICS OF VIRTUAL SPACE

The definition of space, set up by the well differentiated aspects of geography is also changing, since these aspects were formed by only one single approach. After the emergence of Information Communication Technologies (ICTs), the changes associated with an information society have also “transformed space”. Classical interpretation of geographical space (village, town, county, region) is challenged by ICTs and rephrase social space in the context of the society (digital divide, digital exclusion, deep poverty, digital analphabeticism) or the community (telehouse, televillage, places of community informatics).

A virtual space has emerged (worldwide web, cyberspace, community pages, etc), which is first of all global and characterised by networking and a global media culture. Globalisation also alters the significance of space and technology reduces the impact of physical space. Media and networking fundamentally alters space: the presence of media creates “promptness”, while networking “integrates” participants. Time and space are compressed this way (*„time-space compression”*). Space is gradually becoming a “global village” in the context of ICTs. The role of physical space is “degrading” in an information society, while the virtual space has a particular impact, making possible to do advantageous (time- and cost-effective), formal (e-government) and informal (community pages) activities, thus restructuring the dimensions of virtual and real spaces. (BARABÁSI-ALBERT L. 2003, CASTELS, M. 2005, CSEPELI GY.-PRAZSÁK G. 2010, ÁGOSTON M.-NAGY J.T.-SZIRBIK G.-VARGA I. 2011)

Information society creates the term of “virtual geography” or cyber-geography” even on its own geographical territory. (JAKOBI Á. 2002) The concept is that, just as well as real world, virtual space possesses the same structural elements that define it. (MÉSZÁROS R. 2001) The terms “space”, “distance”, “direction” and “border” are, for example, well defined in a virtual space. Often it mirrors elements of the physical reality, but this intellectually constructed space, enhanced by the computer, might also be a fiction. Summarizing views on its nature and geographic meaning (NAGY G.-KANALAS I. 2009, SINKA R. 2004), one can say that “virtual space is a dimension based on the technical background of computer science, made to satisfy human needs, in order to serve the prosperous co-operation in the society, which exists by the electronic imaging of real world.” (MIHLAKÓ G. 2008)

QUESTION MARKS OF TRADITIONAL SPACE CATEGORIES

The interpretations of the previously mentioned space theories fitting into the European and world systems have also appeared in the Hungarian geographical thinking. In the recently used Hungarian space category system these theories are present either in a clearer or in a mixed way. The publications of university workshops written by Gyula Krajkó, József Tóth, József Nemes Nagy and István Süli-Zakar display the geographical frames of the image of an industrial society during the socialist era, and the unique geographical patterns of the crisis and later of the transition period.

The table below summarizes the complicated space categories and their approaches in the last period. Besides the three theories introduced earlier, traditionalism also contributes to the formation of space perception (nay we think its influence is outstanding).

Table 1: The role and significance of spaces with different organizational principles in the space organization and international relations

Economic regions	
Macro-region Meso-region Sub-region Micro-region	The value of economic relationships increases in international relations: geoeconomics besides geopolitics or partly instead of it.
Central places	
Country catchment area Regional catchment area Town catchment area Settlements	The city (metropolis) network and the roles of the leading and mediating cities grow in international relations. The functions of the traditional central places change extremely fast. The roles and weight of the different levels modify, too.
Landscape theory	
Great landscape Medium sized landscape Small landscape	It gradually appears in the identity of the areas. It becomes a factor in establishing infrastructure, forming natural and environmental protection and organizing tourism.
Traditional spaces	
Country County District Settlement City's/Town's district Household	They are important factors of society and administration organization, partnership, and interests. The role of traditional spaces has risen recently because they provide support to find identity.

The geographical space consists of a large amount of complex and complicated elements. These elements have sensitive and organic connections. In history, from several points of view and ideologies philosophers and geographers tried to describe and explain the processes taking place in geographical space. All of these space models have grabbed and emphasized some characteristic feature/features of this infinitely complex system.

Probably such model or theory cannot be produced that interprets all the phenomena but comparing the theories may help in understanding them. In our opinion, the great empirical experience is what contributes to the perception of a realistic geographical space.

In this study an essential conclusion is that there are principles and methods which can interpret links among certain areas. They assume connections among the various elements of geographical space. In the explanation of county relations, particularly in making the hierarchy of settlements the theories of central places are relevant. In addition, the landscape theory focusing on the effects of natural factors, mainly on the running of rivers and on the location of their drainage basins also adds significant aspects to the studies.

We have to take into consideration that regularities affecting geographical relations change in time as well as societies relate to their surroundings and use them. Also, the functions of settlements (e.g. central places), the way community spaces are used, the characteristics of economy, the way human relationships are maintained, the culture and ideology restricting and manipulating geographical thinking change. Obviously, these factors necessitate rewriting and re-evaluating the theories from time to time.

A definite image of the postmodern world's geographical pattern is still missing from the contemporary Hungarian geographical thinking, although there have been attempts in certain dimensions to define it.

At the end of the 1970s and at the beginning of the 1980s in Hungary declaring that the territorial and municipal rating of the society could not be given only by the economic relations and using the term of human geography instead of economic geography reflected the conditions of a moderating dictatorship, a great economic paradigm shift in the world as well as the end of the industrial era. At that time, the tetrahedron model published by József Tóth included *the social sphere besides economy* in thinking about space and settlements. It also indicated the end

of vulgar Marxist geography. However, today it is counted an everyday matter to study political, ethnic, religious, cultural etc. topics.

The settlements, counties, “regions” play a specific international role in the post-modern world’s relationships. The murderous competition for the reallocation of public resources is replaced by the different forms of network cooperation whose purposes are to achieve success in the competition for the international working capital, “tourism” and the European integration resources. Therefore a good example of the topics with no significance is the Hungarian county-region debate.⁷

The theory of central places has to be rewritten in many respects because the information communication technologies (ICT) fundamentally alter the habits of passenger traffic, communication, transport, administration, culture-entertainment, selling and buying. Think of the three principles of Christaller’s theory (market, transport and administration) and think it over how they are transformed very fast by the technological development/change. The Internet is rapidly becoming the site of correspondence, banking, insurance, consumer durables trade, bookselling, telemedicine, tourism, travel organization and plenty of other areas observed while studying the catchment areas and surveying the market relations. By e-public administration the framework of the administration with minimal motion has been formed, too. Due to these facts, the above mentioned processes reevaluate the needs of passenger traffic and the way how to meet these needs. The miniaturization, the requirement of saving resources, mainly energy, the falling demand for properties because of the decreasing number of population and aging, and the transformation of transportation systems have strongly reduced the space structuring significance of freight as well.

There is almost no such an area that has remained unchanged. We cannot set our heart at rest that the transformation is so slow that our ideas will be useful for a while. It does not go that way. All the prognoses for the tempo of development have

⁷ The Hungarian county-region debate in 1990 has lost its former significance because now the counties do not possess such weight-power that could irritate the smaller or larger part of the society. Their function of determining identity has more or less remained, though the problem of the regional structures is not that they could not appear in the Constitution but it is that the public trust in the regions is on lower level than it used to be in the counties. The crisis on the middle level of the administration is serious not because of its legitimacy but because the regions cannot cope with the fall in the number of population in the countryside (and with the decline in liveability). The corruption is more evident in smaller, rural elite groups than on country level and the regions are less able to resist the central pressure (of Budapest) than the counties used to be in all their strength.

been failed partly because the transformation occurred so quickly and its results/failures have become different from what we expected. We have reached a dividing line. We have to rethink the importance of environment for the society.

The previously mentioned processes do not mean that we have reached the point where geography would cease. It just means that new dimensions of territoriality have become important and the present geographic patterns can be described by other sometimes contradictory models existing at the same time. On the one hand, there are global networks and settlement systems along the complex corridors connecting counties; while on the other hand, strict space-control systems coexist that can be characterized by the lack of modern technology and reliability and security to operate it. They are very difficult or even impossible to describe by the traditional models. Thus, probably such an approach is needed that explains space with its various forms of geographic possibility.

Today's modern society is a kind of hybrid of recent and traditional forms. This society, divided into a variety of lifestyles, not without any conflicts has split up into groups influencing and living next to each other and characterized by manifold space use and space approaches. Communities', families' and/or the people's daily, weekly, seasonal or yearly routines take place in different spaces resulting quite diverse patterns sometimes. By this motion, places, economic and cultural space-systems have been revalued. The relationships in space have become more frequent than earlier and more impersonal in many cases. In the sense it is for sure that ICT decreases the need for personal meetings. The concrete geographical place of work has greatly become independent from the constraints.

However, by the increasing free time the possibility of greater spatial mobility has also appeared. The latter means not only more motion but longer distances, too, because the distances we pay for and the travel time have extremely decreased.

This phenomenon raises the question if the amount of motion called tourism may be studied together in one category. Today tourism has so many various forms that all of them cannot be put into the same traditional category. The efforts to move from one place to another have also resulted in a new migration.

These comings and goings brought up another question how the countries and communities should control these processes and defend themselves from their disadvantages. To control immediate residential areas, business locations, settlements and finally national territories is the most controversial and contradictory issue

nowadays. Different site monitoring methods, tools and institutions have been established in private, communal and state forms. The relation with space seems to become an important political question giving urgent tasks to find answers for.

POLITICS AND GEOGRAPHICAL SPACE

The relations between politics and space have always been delicate. The person or society continuously possesses renewable, changing needs in connection with the geographical space. These needs sometimes make conflicts. Therefore the political sphere wants to affect the interpretations of geographical space as well as those people who give the interpretations. It manipulates them with the help of the propaganda and tries to change the weight of the problems. A detailed explanation of this topic would require a whole essay, but here we would only like to make a list of contact points.

State area: the state cannot exist without space. It means that the organization of state power goes together with spatial organization. The basic state functions, such as the defence (border security, defence in depth), state territorial administration (the problems of municipality and mid-level administration), processes correcting regionally differentiated developments (regional politics or area development), the question of capital city etc. are all essential factors to the (political) geographical reality. However, the members of newly formed political movements meet each other on virtual sites, such as forums or blogs, but in electoral systems the election campaigns, the conviction of registered voters usually take place on the settlements. The “common historical memory” of state communities is also closely connected to places, settlements and geographical objects. In the postmodern world it appears in a symbolic way, mainly through the media.

Function of defence: One of the basic reasons why states were established and also the primary function was to protect people living in the same national territory from external violence (and to maintain the internal order). If the state has an attribute that cannot be abstracted from space, then this is it. The national territory is more or less strictly controlled at the borders, crossing them illegally is tried to prevent and the state regulations are applied. The disputes over borders make a considerable proportion of international conflicts. Traditionally it is also one of the most sensitive points of the countries’ integration efforts. In the Southern European area almost all forms of territorial disputes occur as we can read about them in the political geographical part of the chapter about the Southern European countries.

The “*region*”: One of the most fundamental problems is in what form of spatial framework the society should organize its life for various activities. What geographical abstractions are suitable for this, possibly reinforcing each other in different activities? The problem is remarkably complex, plenty of aspects appear but the most significant is the spatial efficiency.

The social, political and economic interests prefer various spatial solutions. The expression of “*region*” seems to be flexible enough to solve the problem. It is not at least a communicative /technological and cultural question. These phenomena are usually location bound and possess geographical content and identity. On the Iberian and Apennine Peninsulas the regional structures while in the Balkans (VÉGH A. 2012) the process of splitting up and forming new states (*according to the local majority at least*) give solutions.

Geographical accumulation: The settlement system (each settlement) – and not only their physical reality - has been formed for hundreds or thousands of years. The process of accumulation is based on favourable natural factors, the quantity and characteristics of accumulated wealth, the common experience and culture of the community. The continuous accumulation lasting for a long time may have such results as e.g. the economic-cultural prosperity of the North Italian or Catalanian region. In spite of the glorious past, the lack of processes creating structures during the thousand-year accumulation might lead to contradictions such as in Athens or in some South Italian cities.

Geographical orientations: The problem of spatial community is a basic question for all settlements, national and state communities. For all politicians a fundamental point of aligning is the question of where we belong to, the dilemma of “we” and “they”. In public discourse it appears as a geographical name dispute, as a basic problem of strategy-creation and as a specific primary geographical question of building foreign relationships. In the area of our study it raises the problem of several spatial communities such as the “Mediterranean”, the “European”, the “Eurasian”, the “Pan-Islamic”, the “Pan-Arabic”, the “Maghreb”, the “Francophone”, the “Ibero-American”, and the “Lusitanian” etc.

The role of media in representing geographical reality: Almost all aspects of human activity take place in the geographical, physical space that is why it has enormous significance. The geographical reality is almost infinitely complex, several times quite contradictory and problematic. The media – besides the most honest and righteous intentions – due to its specificities selects, simplifies, emphasizes and

omits elements. As today's people can gain information by personal experiences only with limits therefore they rely on the media, particularly the electronic media (television, internet). Thus, people are exposed to their incompetence or their intentional manipulations. Here geography as profession and science can take a huge responsibility.

The question of climate changes: How does this complex, controversial change influence the political forces? How large proportion of the GDP should prevention ask for? How much will it cost and who will finance the investments of the crisis management? How will that welfare society be able to manage these changes which could live the development and enrichment for decades? The campaign that rose "global warming" a political issue and to the level of religion favouring wealthy countries and societies poor in energy but developed in technology poses a dilemma of strife for geography. The climate is changing all over the world as it has always been one of its characteristics. In geological history much more extreme conditions occurred than the present ones without any human intervention. It is more than questionable what extent humans have contributed to the recent changes. However, in the countries of our research it arises mainly as the question of water or as the question of environmental degradation. In addition, with the arrival of climate-refugees the internal social cohesion of these countries may loosen, their instability can grow further therefore political geography must study the climate changes and their effects.

Cultural particularities: The efforts of homogenization characterizing nation-state political systems oppose the ethnic and religious diversity in geographical dimensions, which our world has been characterized by for thousands of years and which form the basis of political cleavages determining our political systems. The late processes of becoming a nation, also taking place in this region at the moment, make the problem of cultural particularities an exciting issue (Bosnian, Macedonian, ethnic Muslim, Vlach-Aromanian etc.).

Mass migration: From time to time the international community has to face the challenges caused by mass migration. A modern "migration" is taking place today. Individuals, families or whole peoples leave the densely populated, worse liveable, less safe areas hoping for better and safer life. It could mean more serious problems in the Mediterranean because these countries as either transit or destination areas may play an important role on the Eurasian- African World Island.

Political landscape: The visual symbols in public places, flags, uniforms, symbolic pictures of settlements etc. have always offered the possibility to propagate and show power. Also, they have been means to represent and reinforce sovereignty over the area (BÉKÉSI, L. 2004). The ICT devices confirm the power of symbols, display them and make them known within vast distances. The introduction of cultural differences and conflicts appreciates the roles of inscriptions, symbolic buildings, statues and monuments. Moreover, the internet has given new chances of visualizing powerful symbols for political purposes in virtual reality.

On one side, the barbaric destruction of cultural relics, the phenomenon of “urbicidium” during the recent Balkan wars and on the other side in the war recovery the large-scale reconstruction of mosques/minarets vs. orthodox or catholic churches or their reconstruction with prefabricated technology drew the attention to the symbols appearing in political geography. The sun symbol, the dispute between Macedonia and Greece over the name or flag, the toleration of graffiti, burqa or hijab⁸ or their prohibition, debates about removing/tolerating crosses in public institutions or about building mosques are new thought-provoking phenomena of Europeanism, which has been tolerant and proud of secularization and peace among religions.

The relation of the political sphere to geographical reality and geography itself is extremely ambivalent. “Politics” is formulated between the two extreme approaches of geographical nihilism and geographical possibility. Today’s western public opinion experiences geographical nihilism. Accordingly, politics communicates with society in this approach. However, in longer time the representatives of power must accept the limits even if the conditions of local, regional or global environment or the characteristic features of the geographical space necessitate adaptation. It does not contradict the facts that the perspectives of the political elite more or less last to the end of the given political cycle and the unresolved problem of adaptation over the cycle causes more and more tensions in the political elite or in the society they wish to control. These tensions, contradictions partly produce the periodic crises of the political system and the representative democracy’s slow, very unfortunate process of becoming impossible.

⁸ Traditional Muslim women’s wear.

References:

A.GERGELY ANDRÁS (ED.) 2003: Ökológia – kultúra – embertudomány. Környezet és ember a paradigmaváltások korában. Budapest-Sopron. p: 190. <http://mek.oszk.hu/01700/01710/01710.doc> Download: 11-03-2012

ÁGOSTON MAGDOLNA-SZIRBIK GABRIELLA-NAGY JANKA-VARGA ISTVÁN 2011: Az Információs Társadalom térségi és közösségi dimenziói – a globalizáció új kisközösségi paradigmái. PTE IGYK Szekszárd.

BARABÁSI-ALBERT LÁSZLÓ: Behálózva. A hálózatok új tudománya, Hogyan kapcsolódik minden egymáshoz, és mit jelent ez a tudományban, az üzleti és a mindennapi életben. Magyar Könyvklub. p:320.

BÉKÉSI LÁSZLÓ 2004: A politika földrajza. Aula kiadó.p: 208.

CASTELLS, MANUEL 2005: A hálózati társadalom kialakulása, Az információ kora: Gazdaság, Társadalom és Kultúra. I. kötet, Gondolat – Infónia Kiadó. p: 662.

CHRISTALLER, WALTER 1966: Central Places in Southern Germany. New Jersey. Prentice Hall, Englewood Cliff.

CSEPELI, GYÖRGY-PRAZSÁK GERGŐ 2010: Örök visszatérés? Társadalom az információs korban. Józsvöveg Műhely. p: 240.

HAJDÚ ZOLTÁN 2005: Magyarország közigazgatási földrajza. Dialóg Campus, Pécs-Budapest. p:332.

HAUSER, H. 1924: Le problème du regionalisme.Paris. Les presses Universitaires de France.

JAKOBI ÁKOS 2002: A virtuális világ terei. Magyar Tudomány, 2002/11. pp. 1482-1491. http://geogr.elte.hu/REF/REF_Cikkek/JA_virtualis_ter.pdf Download: 01-04-2012

KEMÉNYFI, RÓBERT 2002: Földrajzi szemlélet a néprajztudományban. Az etnikai és a felekezeti térbeliség lehetséges közös és eltérő kérdései. Ethnographia. (CXIII) 3–4. sz. pp: 195–250.

MAROSI, SÁNDOR 1985: Tájkutatói irányzatok, tájértékelés, tájtipológiai eredmények különböző nagyságú és adottságú hazai típusúterületeken: tájkutatói munkásság összefoglalója akadémiai doktori fokozat megszerzése céljából / Marosi Sándor. Budapest : MTA FKI. p: 119.

MÉSZÁROS REZSŐ: 2001 A kibertér társadalomföldrajzi megközelítése. Magyar Tudomány. 2001/7.sz. pp:769-779.

MICHALKÓ, GÁBOR 2008: A turisztikai tér társadalomföldrajzi értelmezésének új dimenziói. MTA doktori értekezés. p:211 <http://real-d.mtak.hu/95/1/Michalko.pdf>. Download: 01-04-2012

NAGY GÁBOR-KANALAS IMRE 2009: Development and regional characteristics of the Hungarian information and communication sector (ICT). *NETCOM* Vol. 23. No 1-2. pp: 21–48.

SINKA RÓBERT 2004: Gondolatok az információs társadalom földrajzi diskurzusához. In Abonyiné Palotás J. – Komarek L. (ed.): 40 éves a Szegedi Tudományegyetem Gazdaság- és Társadalomföldrajz Tanszék. Szeged. pp:193–198.

VÉGH ANDOR 2012: Minorities, mother countries, majority on the western Balkans *Revista de historia actual* online 27. pp: 83-101.

ANALYSIS AND ROLE OF LEADER PROGRAMME IN RURAL DEVELOPMENT OF CROATIA

Linda Juraković, PhD.

High Business Administration School Višnjan
linda.jurakovic@gmail.com

Romina Sinosich, M.Sc.

Pula Polytechnic
High Technical – Business Administration School
vera.sinosich@pu.t-com.hr

ABSTRACT

In this paper, the authors analyse the Leader Programme function, its principles and implementation in practice, comparing the European countries' experiences with the development trends in Croatia. In a realistic way, they show the management issues, but they also point out the paths of rural area development according to other countries' experience. Using the method of analysis and synthesis, as well as by the field research conducted using the Delphi method, the authors wish to, as realistically as possible, show the Leader Programme model and its adoption in the current politics of our country's rural area management and development. This paper's aim is to illustrate the advantages of this programme as a current and future development model, but also to indicate the problems this particular programme encounters in practice.

JEL clasification:

Key words: Leader Programme, management, development, rural area.

1. Introduction

For a number of years, rural areas have been marked with various problems which led to falling behind of those areas, starting from the loss of human resources, to the erratic management, which directly reflects upon the economic development itself. A quality established system of communication, systematic monitoring

and allocation of as large as possible financial support to the whole development are needed in order to efficiently manage all resources. Although such a system would include the founding of institutions which requires costs, they can also be non-profit ones and the means for their work could be found in various incentives and other self-government measures. A large step forward in management would also be an appropriate use of the information programme “GIS” (joining of cartography, statistical analysis, development and technology database). The scientists on the “science side” debate about the GIS programme as a method or a body of knowledge for the development and examination of the spatial theory (Brenner 1993; Laffey 1993; Sandhu 1993b, 1993a Wright) and not as a physical subject of the GIS programme itself. (Brenner, A. November 1, 1993. Environmental Protection Agency. Re: GIS as a Science [Discussion]. *Geographic Information Systems Discussion List* [Online]. Available). For a certain number of years attempts have been made to act towards provision of assistance to rural areas and great possibilities in that part are provided by the implementation of the Leader Programme. Poor communication with ministries, as well as an insufficient number of employed with specialist or expert knowledge aggravate a quality approach to many European funds, thus also to the Leader Programme itself. The cooperation between the civil and public sector in the County is not institutionalised and associations do not cooperate sufficiently. The European Union has/had a developmental programme LEADER 1 (Liaison Entre Actions de Développement de l’Economie rurale, 1991-1994), followed by LEADER 2 (1995-1999) and LEADER + (2000-2006). They have been used by local action groups and communities of public and private partners, who, together, shape and create the rural areas’ strategy and developmental measures (www.hrvatski-farmer.hr, of 12.12.2011). In Croatia, for example, the rural area renewal and development is most frequently perceived as construction renewal; rarely is it perceived as a spatial planning task with social and cultural, economic and demographic and political dimensions. Therefore, the rural area renewal should be considered as a sum of all the measures. The local self-government unit must find a way to realise the policy of a unique, spontaneous living space to all its inhabitants.

2. LEADER PROGRAMME FUNCTIONING STRATEGY

“Rural development is a new developmental model of the agricultural sector” (Plog et al., 2000., p. 392). “Apart from the increase in agricultural production competitiveness, it also includes protection of the environment, land management,

diversification, improvement of life in rural areas and LEADER approach (*Liaison Entre Actions de Développement de l'Economie rurale*), which means that all the initiatives for starting of activities should come from the local community” (Moehler, 2006, p. 56). “One of the basic characteristics of rural development implementation in rural communities is putting an accent on local population, by which it is validated as a main factor of the overall rural area development. It is this particularity of trust in people who live in rural areas and in their abilities to discover what suits best their environment, culture, work traditions and skills itself that makes the LEADER Project special”. (Štifanić, Debelić, 2009, p. 8). Connecting at the local level brings people together in order for them to exchange their experiences and knowledge, inform themselves and promote rural development activities, find project partners, as well as create a feeling of belonging to a larger entity, such as the local action group.

During recent years in Croatia, there have been intensive talks about rural development. Plans and programmes are being produced, development strategies and laws are being proposed, legislation is being coordinated with the EU and the means/funds from the EU programmes, intended for those purposes, are being used (CARDS, INTERREG, SAPARD and other). However, in order to implement the rural development plans and programmes, Croatia needs expert consulting assistance from the EU, as well as a greater self-initiative. Given that Croatia is a candidate for accession to the European Union, it should dedicate itself more to familiarising with the experiences of the other EU member countries in the process of rural development in order to avoid other countries’ mistakes. The first analyses and evaluations of the EU rural development policy show that the means from the EU funds were mostly spent on structural measures, namely approximately 34%, which includes the increase in competitiveness, i.e. investment in companies and food production, assistance to young farmers and earlier retirement. Approximately 38% of means were spent on environmental protection, soil quality improvement, afforestation and natural resource protection. “A large part of the means was also spent on the preservation of old, traditional crafts, village reconstruction, improvement of life quality in rural areas, as well as the preservation of tradition for the purposes of the development of tourism in rural areas” (Montelone, Storti, 2004, p. 139).

Table 1. Leader Programme 1991-2006 illustration

Leader initiative	Year	Number of LAGs	Area covered	EU fund in Euros
Leader I	1991-93	217	367,000 km ²	442 million
Leader II	1994-99	906	1,375,144 km ²	1,755 million
Leader +	2000-06	893	1,577,386 km ²	2,105 million

Source: EC, 2006, p. 7

Equally, rural tourism also, “as a growing business in the tourist industry offers many benefits to the local community development. It can be developed locally, in partnership with small businesses, local government, other agencies in the area and its development is not dependent on external or large companies’ decisions” (Kumrić, Franić, 2007, p. 135). The Leader approach supports innovative approaches and stimulation of unexploited resource development, or, just a different view on existing issues; the problem of rural areas, its preservation and sustainable development had been recognised in Europe much earlier than in Croatia.

One more principle by which this programme is recognisable is local financing and management, which gives big powers to the LAGs in decision making and financing of specific programmes.

2.1. Leader Programme principles

Fundamental principles of the LEADER Programme in the rural communities sustainable development are based on the characteristics of the areas to which they are applied, which means that an attempt has been made to use own unexploited resources. This principle emanates from the participants’ need to base their development on local values. According to the Leader’s action groups, there are four main values of this programme:

1. decentralised, integral approach, based on a specific area’s characteristics
2. community involvement
3. uniting of development bearers at the local level
4. possibility of implementing in practice unrealised ideas (LEADER, 2004, p. 47).

For example, *the bottom-up* approach (typical for Italy), as opposed to the majority of developmental plans, is a completely opposite approach, by which an attempt was made to encompass the largest possible number of participants who would influence the decision making process for an area. Literally everyone who

wishes and believes that they can assist the developmental process, whether it concerns the inhabitants or the public, private, or some other sector representatives. “The *bottom-up* approach means that the local factors take part in the decision making processes pertinent to the strategy and selection of the priorities which should be implemented in their local area. The European experience has shown that the bottom-up approach should not be considered as an alternative or contrast for the top-down approaches of national and/or regional authorities, but that they should be combined in order to achieve better overall results”. (Štifanić, Debelić, 2009, p.11).

Therefore, the principles based on good European practice and LEADER approach are:

- Sustainable rural development which is based on preservation and development of environmental, human, social and creative/productive capital.
- Approach based on area characteristics, as they form a foundation for quality development.
- Starting up the community, as it lags behind in inclusion in developmental processes and needs support in order to get involved in developmental processes.
- Bottom-up approach – today’s development is not possible without involvement of the public. This is why all available forces in local communities should be involved in order to, by richness of ideas and possible solutions, as high a quality as possible development could be achieved.
- Development of local partnerships in approaches and actions – presently, fragmented initiatives are often condemned to failure beforehand, they lack power and trust.
- Networking and cooperation, as well as connecting, synergistic acting in developmental processes, exchange of knowledge and experiences, both in today’s modern Europe and here, in Croatia.
- Innovative quality and tradition, together with sustainable rural development, but innovations are essential in order for traditional values to be represented in a new and market competitive way.
- Integral approach – sector division is a frequent cause of problems in development. Horizontally, inter-sector linking, as well as the vertical one, linking of

local, regional and national institutions, is of great importance in realisation of sustainable rural development.

- Local financing and project management – it is extremely important that local level activities should also be financed from local budgets.

3. LEADER PROGRAMME FUNCTION AND ITS ROLE IN RURAL DEVELOPMENT

Member countries of the European Union apply the rural development programme Leader in strengthening the local development as a counter-balance for europisation. In the period between the years 1991 and 2006, Leader I, Leader II and Leader+ Programmes demonstrated a new approach for integral and sustainable rural area development, strengthening local communities' developmental policies. In the solution of the problem of a less favourable position of rural Europe in comparison to the urban, the Leader programme represents a new social and economic model (Ray, 2001, p. 280). In analysing rural development programmes in the European Union and in Croatia, an attempt was made to concentrate on the Leader Programme as a new and innovative approach to the development of rural community, village and agriculture. In the period when Croatia is negotiating its accession to the European Union we can observe the results of the Leader Programme and principles and give recommendations for its application in Croatia. The main advantage of the Leader Programme was the bottom-up approach, which helped activate local resources for the purposes of local community development. Additionally, it involves the local population who has the closest insight into the developmental opportunities and who is deemed partly responsible for and more dedicated to the project than the external active participants. Such an approach is not in opposition to the top-down approach in the sense of the influence coming from the top of the state, regional authorities or through relevant ministries. For Croatia, the Leader Programme is considered to be positive for the purposes of rural development and we expect fast adjustment of local active participants in the creation of LAGs, as well as strengthening of their role as developmental factors. For example, we find the first institutional initiative of that kind in the Istrian County's attempts to include the Leader Programme in their rural development (Laginja and Čorić, 2000). One of the non-government organisations using the Leader Programme principles is the Croatian Rural Development Network. After the years of informal work, in January 2006, it was formally registered with the task of gathering and representing civil society organisations which deal with the sustainable rural development of Croatia (www.odraz.hr, of 23. 10. 2011).

3.1. Strategic guidelines for the Republic of Croatia's rural area management according to the Leader Programme principles

The strategic guidelines for rural area development, which should form a base for preparation of a comprehensive strategy of the development of the Republic of Croatia, should be based on the five points which we quote below. According to the studied documentation, Delphi method research and a many years long work in that area, it is proposed that the following be acted on:

a) Increasing destination competitiveness

Rural area must develop a tourist offer which will be competitive by its quality, price and attractiveness and that offer should particularly be based on originality, historical, cultural and natural characteristics of that area and its other specific qualities. Competitiveness is very important in achieving a strongly manifested destination advancement; the destination will achieve the said goal by means of offer differentiation and quality emphasising.

b) Current offer advancement and creation of new way of management

Through field research the deficiency of rural area management was determined. Apart from removing those drawbacks, the activities directed to rural development must be focused on new products and a new offer accompanied by adequate and systematic resource management.

c) Increasing overall rural area quality

Quality-wise, the current offer does not satisfy the requirements of the modern market and EU, which, in future, should be changed by bringing in new investors and retaining the existing ones, with a necessary measure of knowledge and expertise, compatible with European and world levels.

d) Creation of clusters/LAGs for the purposes of tourist (economic) development

In order to increase the number of visitors and tourists also in the geographically isolated and remote areas which contain less interesting attractions (natural, historical and cultural), it would be necessary to unite all destination's landmarks by means of clusters. Apart from this, associated itineraries for visits to attractions would also be created. In such a way a visitor critical mass would be created even in less attractive locations with less interesting contents.

e) Breeding and linking

Owning an appropriate product is a part of a successful equation. Branding is a path by which potential producers and consumers are encouraged to purchase and to produce products. Apart from an integral image, quality hallmarks for typical products can also be created.

3.2. The goal of development of Republic of Croatia's rural areas according to the Leader Programme principles

1. Faster overall economic and social growth and development

A more dynamic overall development, which can be achieved by synergy of all significant economic and managerial factors, is needed in the area.

2. Dynamic, quality and organised tourism development

Tourism in rural area does not follow in speed and quality the development of Croatian coastal destinations. In that part, tourism is expected to provide greater dynamics in development, improvement of overall quality, as well as a modern and flexible management system. Rural areas have all the predispositions to become recognisable eco-destinations, in which rural and all other sustainable forms of tourism in protected natural areas will become prominent.

3. Multiplicative impacts (economy and overall)

The current position in the economic structure does not facilitate achievement of remarkable multiplicative impacts on associated businesses. This area development must commence noticeable activities also in the fields of agriculture, trade and traffic.

4. Improvement of the lives of inhabitants

Rural area development will enable a decrease in unemployment and drain of inhabitants, economic prosperity and security, as well as entrepreneurship and a positive climate for further economic activities.

5. Giving meaning to programmes which provide a faster return on invested capital

In their work, proposers of all the contents in rural areas need to take into consideration those products which will facilitate a faster return of invested means to investors.

4. CONCLUSION

The main advantage of the Leader Programme was the bottom-up approach, which helped activate local resources for the purposes of local community development. Additionally, it involves the local population who has the closest insight into the developmental opportunities and who is deemed partly responsible for and more dedicated to the project than the external active participants. Such an approach is not in opposition to the top-down approach in the sense of the influence coming from the top of the state, regional authorities or through relevant ministries.

Only by managerial approach, respecting all managerial functions, is it possible to realise the concept of management and development as, objectively speaking, the situation in rural areas is stagnant and advancement cannot be felt. Regardless of the fact that it concerns the investment in the economic and non-economic sectors, it is possible to realise such an approach.

Equally, a team of people with managerial competences, with knowledge about the matter of rural area management, can and ought to conduct rural development actions and stimulate the implementation of the EU programmes for rural part development. Cooperation alone in that area goes further than the networking itself. It involves Local Action Groups which carry out a mutual project with another LEADER group, or with a group which has a similar approach in another region, member-country, or even in some third country.

“Cooperation can help LEADER groups to bring into focus their local activities. This can enable them to solve particular problems or to add value to local resources”. (Štifanić, Debelić, 2009, p.27).

The cooperation projects are not only a simple exchange of experiences; they have to include specific mutual projects, ideally conducted within a common structure.

LITERATURE:

1. Brenner, A. November 1, 1993. Environmental Protection Agency. Re: GIS as a Science [Discussion]. Geographic Information Systems Discussion List [Online]. Available e-mail: GIS-L@UBVM.CC.BUFFALO.EDU
2. Bocher M. Regional Governance and Rural Development in Germany the implementation of Leader+ , 2008.
3. Buller H.: Re-creating Rural Territories: Leader in France. *Sociologia Ruralis*, 2000.,40(2), str.190-199.

4. EC Directorate-General for Agriculture: Leader+ best practices, Rue de la Loi 200, B- 104 Brussels, 2008.
5. EC Office for official Publications of the European Communities: The Leader approach: A basic guide, Brussels, 2006.
6. Kumrić, O., Franić, R.: Politika ruralnog razvitka – iskustvo Italije, Agronomski fakultet Sveučilišta u Zagrebu, Zbornik radova 2. međunarodnog simpozija Agronoma, Opatija, str. 134.-137., 13.-16. veljače 2007.
7. Laginja I., Ćorić G. : Europski opservatorij LEADER/AEIDL, Rural, 2000.
8. LEADER od inicijative do metode, ZOE – centar za održivi razvoj ruralnih krajeva, Zagreb, travanj 2004.
9. Moehler, R.: Rural Development-The Second Pillar of the Common Agricultural Policy, 2006.
10. Montelone, A., Storti, D.: Rural development policy in Italy after Agenda 2000: First results for the period 2000-2003, 87th seminar of the European Association of Agricultural Economists Viena, 21-24 April, 2004.
11. Osti G.: Leader and Partnerships: The case of Italy, *Sociologia Ruralis* 40(2), str. 173-180, 2000
12. Perez J.E.: The Leader Programme and the Rise of Rural Development in Spain, *Sociologia Ruralis* 40(2), str. 200-207., 2000.
13. Ploeg, J. D., Renting, H., Brunori, G., Knickel, K., Mannion, J., Marsden, T., De Roest, K., Sevilla-Guzman, E., Flaminia Ventura: Rural Development: From Practises and Policies towards Theory. *Sociologia Ruralis* 40 (4), str. 392-408., 2000.
14. Program vlade republike hrvatske za mandat 2008. – 2011., dostupno na <http://www.vlada.hr/hr/content/download/37519/516157/file/Program%20Vlade%20Republike%20Hrvatske%20u%20mandatnom>
15. Ray, C.: Transnational Co-operation Between Rural Areas: Elements of a Political Economy of EU Rural Development. *Sociologia Ruralis* 41(3), 2001., str. 279-295.
16. Štifanić, I., Debelić, B.: Europskom praksom do vlastitih prilika, 2009.
16. <http://www.hrvatski-farmer>
17. www.odraz.hr

DIMENSIONS OF RETAIL SERVICE QUALITY THROUGH CUSTOMERS' PERCEPTION

Sanja Bijakšić, Ph.D., associate professor

sanja.bijaksic@sve-mo.ba

Sandra Jelčić, assistant

sandra.jelcic@sve-mo.ba

Arnela Bevanda, Ph.D., assistant professor

abudimir@sve-mo.ba

Faculty of Economics, University of Mostar,
Matice Hrvatske bb, 88 000 Mostar, Bosnia and Herzegovina

ABSTRACT

In the time that follows, survival and success in the retail market will depend on flexibility and efficiency in all the aspects of activities: including the superiority over the global competition in application of technology to reduce the expenses; and dramatic improvement of services' quality.

Nowadays the retail is increasingly classified as a service. Contemporary customers have very sharpened eye for price, quality, and purchase experience itself. They require a lot. It is not enough only to satisfy their wishes, needs and preferences. It is necessary to thrill them.

Exactly in creation of overall purchase experience, which is different from the one that competition offers, service delivery, service of exceptional quality, service – such and those that customers wish to be offered – can be the key to the company's success.

The purpose of the paper is to point out the importance of service quality in the (product - dominant) retail market and to determine dimensions of retail service quality based in the geographic area of Herzegovina-Neretva Canton in Bosnia and Herzegovina.

Key words: retail, service quality, customers' perception, competitiveness.

INTRODUCTION

All the activities that are related to sales of the goods and services directly to the end consumers for their personal, unbusiness-like needs can be determined as retail trade (Kotler, 2001). As such, it represents the final phase in a process of distribution. The retail trade has experienced significant changes in the last two decades. The retail trade has become concentrated and internationalised. New active participants have appeared as a result of becoming larger in retail trade. Pitiless competition of a great number of small traders cedes to give a place to violent competition of a smaller number of big traders that increasingly grow into dominant ruler of the market. According to Pavlek (2004) the area of the retail trade is caught by the changes worldwide, and those in the last twenty years have brought the following: concentration of the trade (in the most of the Western countries 10 big retail traders hold 80% of the market), broadening to the foreign markets, becoming larger, merging of small shops, decrease in number of small shops, increase in surface of sales formats, rationalisation in commodity flows (ECR systems¹, Category Management²) and similarly.

THE SERVICES IN RETAIL

In the time that follows, survival and success in the retail market will depend on flexibility and efficiency in all the aspects of activities: including the superiority over the global competition in application of technology to reduce the expenses; and dramatic improvement of services' quality (Hasty, Reardon, 1997).

- Combination of services is a key factor in differentiation of one shop to another. Retail traders make decisions on combination of services that will be offered to the customers:
- Pre-purchasing services (receiving orders through phone or post, advertising, decoration of shop-windows and interiors, equipping the premises, determination of working hours);

¹ ECR (Efficient Consumer Response) is strategic commitment for common cooperation of production and trade for the purpose of fulfilment of needs and wishes of a consumer on the best and fastest manner with the lowest expenses.

² Category Management includes implicitly the management of product categories, as strategic business units, in which both producer and supplier take part, creating together a plan of category for the purpose of creation of successful business results, placing the consumers' needs in focus.

- Post-purchasing services (shipment and delivery, gifts wrapping, adjustments and returns, changes and switches, installation and engraving) and
- Auxiliary services (information, cashing checks, parking, restaurants, repairs, interior decorations, toilet, babysitting services) (Kotler and Keller, 2008).

While defining the services in retail trade Baron et al. (1991) emphasise more significant aspects (in Fernie et al. 2003). First of all they start from a conclusion that a purpose of existence of retail traders is supplying of a customer with the services. All the aspects of retail trade i.e. all the activities that are in function of obtaining product at the retail trade site, insurance of information about them and enabling customers to purchase them add the value to the products, and each function of retail trade in adding the value represents the service to the customers. Generally, as the level of the services given to the customers is higher, they are ready to pay higher price, which enables retail trader to determine higher margins. In retail trade under services one also includes implicitly a broad spectrum of the services that retail traders apply to enrich basic exchange (money for product). In attempt to enrich basic relationship of exchange, between customer and retail trader, the companies can be differentiated through range and quality of the services they offer. The services in retail trade are also related to post-purchasing activities and services, settlement of complaints, returns etc. The perceptions of customers and their experience with retail trader's services influence the level of customers' satisfaction. The services are integral part of each supply and the role of services' quality in ensuring customers' satisfaction in retail trade is of key importance. Customers' loyalty is increasingly considered as a major for the success of retail trader since it has been recognised that attraction of new customers is more expensive than retention of the existing ones (Sullivan and Adcock, 2002).

SERVICE QUALITY - CONCEPTUALISATION AND MEASUREMENT

Service quality has acquired a lot of research attention in the last three decades, both in theoretical and practical sense. The first steps of conceptualisation in service quality are based on two schools – Northern American whose representatives are Parasuraman, Berry and Zeithaml (1985, 1988) and Scandinavian whose representative is Grönroos (1982). According to the Scandinavian school the quality of service that a client perceives is made of two dimensions: functional and technical quality. Functional quality is related to a process of service delivery, but technical quality is related to an output – the result of the process of service providing. Both

of these dimensions form an image of a service company that represents specific filter of user's perception of service and its quality, with the reference to what the customer's experience represents. The technical quality would be related to objective parameters of service quality, while psychological "upgrade" is domain of functional quality. According to the Northern American school it is possible to identify five dimensions that the clients use while evaluating the service quality: tangibility, reliability, responsiveness, assurance and empathy. The representatives of this school are the authors of the SERVQUAL model – dominant instrument in researching of service quality. According to Parasuraman et al. perceived service quality is defined as a level of discrepancies between perceptions and client's expectations. Perceived service quality – as a difference in the level and direction between perceptions and expectations – is related to the attitude of a client of overall estimation of service over the time while satisfaction is related to concrete transaction.

Perceived service quality is an outcome of comparison between client's expectation and provided service (Grönroos, 1984). Parasuraman et al. (1988) support the above-mentioned point of view defining the service quality as an attitude that is related but not equal to satisfaction, which is result of comparison between expectations and perception of performance, and expectations are customers' wishes and needs in sense of what should be given to them but not what will be given to them. According to Parasuraman et al. perceived service quality is defined as a level of discrepancy between perceptions and expectations and is related to the client's attitude or whole service estimation over the time while the satisfaction is related to concrete transaction.

Also, the other instruments for service quality measurement have followed. Lehtinen and Lehtinen (1991) define three dimensions of service quality: physical quality (physical environment and instruments), quality of interaction and corporative quality (corporation image). Cronin and Taylor (1992) have offered SERVPERF instrument for quality measurement. That instrument is only based on measurement of performances dimensions of the service quality. Namely, the authors consider that a concept of service quality should be observed as an attitude towards the service since the concept of satisfaction is defined directly as a gap between the expectations and perceptions. Parasuraman et al. (1991) and Vandamme and Leunis (1993) have conducted the revision of SERVQUAL. Koelemeijer (1991) has developed Q Scale as an equivalent to SERVQUAL. Teas (1993) has developed the Evaluated Performance Model to measure discrepancy between perception of service performance and ideal performance instead clients' expectations.

Rust and Oliver (1994) have broadened Grönroos's model adding the dimension of service environment.

According to Dabholkar et al. (1996) measurement of the service quality at the retail market must include additional dimensions. Therefore they suggested the scale named Retail Service Quality Scale based on the following five dimensions:

- Physical aspects – outlook and interior decoration;
- Reliability – readiness to fulfill accepted promises;
- Personal interaction – affability and employees' assistance that instill trust;
- Problem-solving – like complaints, products' return or replacements and
- Policy – product quality, parking space, working hours, options and payment facilities.

They consider that their instrument of quality measure is powerful diagnostic tool appropriate for retailers in detection of those service segments that require improvement.

Brady and Cronin (2001) have suggested hierarchal and multidimensional model in which the service quality has been explained with three primarily dimensions (interaction quality, physical environment quality and outcome quality). Each of these three dimensions is consisted of sub-dimensions: attitude, behaviour and experience (interaction quality); ambience, design and social factors (physical environment quality); waiting time, tangibility and value (outcome quality). Parasuraman et al. (2005) have developed E-S-QUAL scale for quality measurement in context of electronic service.

RESEARCH METHODOLOGY

Sample and Instrument

The research was conducted during June 2011 at the sample of 200 examinees at the area of Herzegovina-Neretva Canton. Upon selection of units for sample, the intentional sample was used and occasional one within it. Personally hand-delivered questionnaires at working place, home and in educational institutions were used as a method of data collection in which the examinees were kindly asked to respond the questions about supermarket in which they purchase consumer goods. The sample was chosen by taking care of representation of as possible even relationship of socio-demographic characteristics of the examinees. The above-explained Retail

Service Quality Scale of Dabholkar et al. was used as an instrument for measurement of service quality and Likert's scale of five intensities in doing so.

Data Analysis and Results

Exploratory factor analysis has been applied over the set of the observed variables to test applicability of the above-mentioned instrument in retail trade environment of Herzegovina-Neretva Canton.

The following table, testing of sample adequacy and sphericity test i.e. Kaiser-Meyer-Olkin statistics, provides the following results:

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,630
Bartlett's Test of Sphericity	Approx. Chi-Square	688,192
	df	378
	Sig.	,000

It can be concluded that the data fit well in the factors since the result is over 0.5 (or according to some authors higher than 0.6) i.e. 0.630 so the factor analysis is appropriate. Bartlett's test of sphericity is statistically significant (significance lower than 0.05 i.e. 0.000 in our case) which means that correlation matrix is not unit-based.

Table 2: Rotated Component Matrix^a

	Component								
	1	2	3	4	5	6	7	8	9
VAR00001				-,677					
VAR00002			,561						
VAR00003									-,723
VAR00004			,718						
VAR00005							-,813		
VAR00006			,527						
VAR00007						-,667			
VAR00008				,503					
VAR00009					,653				
VAR00010				,666					
VAR00011								-,813	
VAR00012	,668								
VAR00013									
VAR00014	,597								
VAR00015							,602		
VAR00016	,696								
VAR00017	,723								
VAR00018	,671								
VAR00019									,546
VAR00020									
VAR00021	,567								
VAR00022	,673								
VAR00023	,591								
VAR00024	,557								
VAR00025		,700							
VAR00026						,621			
VAR00027		,745							
VAR00028		,694							

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 14 iterations.

Table 3: Reliability of Measurement Scales

Variables	Cronbach Alpha
Interaction with employees	0.822
Support services and benefits	0.707
Physical environment	0.752
Reliability	0.735

According to Kaiser criterion, Scree test and Rotated Component Matrix one should seriously observe four factors.

Thus, with the application of factor analysis on a set of the observed variables four factors or four dimensions of service quality at the retail trade market at the area of Herzegovina-Neretva Canton were detected. They are as follows:

Factor 1 can be named as INTERACTION WITH EMPLOYEES, and is consisted of the following variables:

Employees in this store have the knowledge to answer customers' questions.

Customers feel safe in their transactions with this store.

Employees in this store tell customers exactly when services will be performed.

This store gives customers individual attention.

This store willingly handles returns and exchanges.

When a customer has a problem, this store shows a sincere interest in solving it.

Employees of this store are able to handle customer complaints directly and immediately.

Factor 2 can be named as SUPPORT SERVICES AND BENEFITS, and is consisted of the following variables:

This store provides plenty of convenient parking for customers.

This store accepts most major credit cards.

This store offers its own credit card.

Factor 3 can be named as PHYSICAL ENVIRONMENT, and is consisted of the following variables:

The physical facilities at this store are visually appealing.

This store has clean, attractive and convenient public areas (restrooms, fitting rooms).

The store layout at this store makes it easy for customers to move around in the store.

Factor 4 can be named as RELIABILITY, and is consisted of the following variables:

This store has modern-looking equipment and fixtures.

This store provides its services at the time it promises to do so.

This store has merchandise available when the customers want it.

Upon comparison of Dabholkar et al. factors and obtained factors the difference in number and structure of the obtained factors can be determined. Conducted factor analysis has generated four factors. The claims that are related to problem solving and personal interaction are within the framework of one factor. Certain claims are not within four extracted factors.

CONCLUSION

In the light of new trends in retail trade that are transferred at Bosnia and Herzegovina market, retail traders have to, as a consequence, differentiate themselves if they want to win clients over sooner and in a better way than competition. Service delivery of exceptional quality is a way towards creation of competitive advantage in retail trade. Specific characteristics of the services as intangibility, heterogeneity, inseparability from production to consumption make objective measurement of service quality more difficult. But still over the years many researchers have suggested different models of service quality and have evaluated instruments for its measurement.

The results of conducted research indicate the existence of four dimensions of service quality at the retail trade market at the area of Herzegovina-Neretva Can-

ton. They are: interaction with employees, support services and benefits, physical environment and reliability. Cognition and understanding of the above-mentioned dimensions of service quality are on the track of improvement of service marketing activities in production-dominant retail environment and a way towards sustainable competitive advantage.

The dimensions (factors) of service quality, which were obtained by the research, do not follow the structure of Dabholkar et al. factors. However, reliability of the instruments can be considered as acceptable one. Therefore, it is necessary to modify the factors in accordance with the obtained results and the instruments could be applicable in conditions of chosen geographic area, too.

REFERENCES:

- Bijakšić Martinović, S., Jelčić, S. (2009) *Distribucija i prodaja u suvremenom marketinškom okruženju*, Ekonomski fakultet Sveučilišta u Mostaru, Mostar.
- Brady, M.K., Cronin, J.J., Jr., (2001) Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach, *Journal of Marketing*, 65(3), 34-49.
- Child, D. (2006), *The Essentials of Factor Analysis*, Third Edition, Continuum International Publishing group.
- Cronin, J. Joseph, Jr. and Steven A. Taylor (1992), Measuring Service Quality: A Re-examination and Extension, *Journal of Marketing*, 56 (July), 55-68.
- Dabholkar, P.A., Thorpe, D.I., Rentz, J.O., (1996) A Measure of Service Quality for Retail Stores: Scale Development and Validation, *Journal of the Academy of Marketing Science*, 24(1), 3-16.
- Fernie, J., Fernie, S., Moore, Ch., (2003) *Principles of Retailing*, Butterworth- Heinemann.
- Fulgosi, A., (1988), *Faktorska analiza*, Zagreb, Školska knjiga
- Grönroos, C. (1982), An Applied Service Marketing Theory, *European Journal of Marketing*, 6(7), 30-41.
- Grönroos, Christian (1984), "A Service Quality Model and Its Marketing Implications" *European Journal of Marketing*, 18(4), 36-45.
- Grönroos, C. (1990) Relationship Approach to Marketing in Service Contexts: The Marketing and Organizational Behaviour Interface, *Journal of Business Research*, 20, 3-11.

- Grönroos, C. (1997) Keynote Paper from Marketing Mix to Relationship Marketing – Towards a Paradigm Shift in Marketing, *Management Decision*, 35(4), 322–339
- Hasty, R., Reardon, J., *Retail Management*, Irwin McGraw – Hill, 1997.
- Koelemeijer, K. (1991), *Perceived Customer Service Quality: Issues on Theory and Measurement*, 6th World Conference on Research in the Distributive Trades, The Hague, 68-76.
- Kotler, Ph., (2001) *Upravljanje marketingom: analiza, planiranje, primjena i kontrola*, Mate, Zagreb.
- Kotler, Ph., Keller, K.L., (2008) *Upravljanje marketingom*, 12. izdanje, MATE, Zagreb.
- Lehtinen, U., Lehtinen, J.R. (1991) Two Approaches to Service Quality Dimensions, *Service Industrial Journal*, 11(3), 287-303.
- Parasuraman, A., Zeithaml, V., Berry, L., (1985) A Conceptual Model of Service Quality and Its Implications for Research, *Journal of Marketing*, 49(4), 41-50
- Parasuraman, A., Zeithaml, V., Berry, L., (1988) SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, *Journal of Retailing*, 64(1), 12-37.
- Parasuraman, A., Zeithaml, V. A., Malhotra, A. (2005), E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality, *Journal of Service Research*, 7 (3), 213-233.
- Pavlek, Z., (2004), *Uspješna prodavaonica*, M.E.P Consult, Zagreb.
- Pradhan, S. (2007), *Retailing Management: Text and Cases*, McGraw-Hill.
- Rust, R.T., Oliver, R. L. (1994), *Service quality: Insights and Managerial Implications from the Frontier* in Rust, R.T., Oliver, R. L (eds.) *Service quality: New Directions in Theory and Practice* (1-19), London, Sage.
- Rozga, A. (2010), *Multivarijacijska statistička analiza (autorizirana predavanja)*, Ekonomski fakultet Split – Mostar.
- Sullivan, M., Adcock D., (2002), *Retail Marketing*, Thomson Learning.
- Teas, R. K. (1993), Expectations, Performance Evaluation and Consumers' Perceptions of Quality, *Journal of Marketing*, 57 (4), 18-34.

APPENDIX 1: List of Variables over which analysis was conducted

Physical aspects

This store has modern-looking equipment and fixtures.

The physical facilities at this store are visually appealing.

Materials associated with this store's service (such as shopping bags, catalogs or statements) are visually appealing.

This store has clean, attractive and convenient public areas (restrooms, fitting rooms).

The store layout at this store makes it easy for customers to find what they need.

The store layout at this store makes it easy for customers to move around in the store.

Reliability

When this store promises to do something by a certain time, it will do so.

This store provides its services at the time it promises to do so.

This store performs the service right first time.

This store has merchandise available when the customers want it.

This store insists on error-free sales transactions and records.

Personal interaction

Employees in this store have the knowledge to answer customers' questions.

The behavior of employees in this store instill confidence in customers.

Customers feel safe in their transactions with this store

Employees in this store give prompt service to customers.

Employees in this store tell customers exactly when services will be performed.

Employees in this store are never too busy to respond to customer's requests.

This store gives customers individual attention.

Employees in this store are consistently courteous with customers.

Employees of this store treat customers courteously on the telephone.

Problem solving

This store willingly handles returns and exchanges.

When a customer has a problem, this store shows a sincere interest in solving it.

Employees of this store are able to handle customer complaints directly and immediately.

Policy

This store offers high quality merchandise.

This store provides plenty of convenient parking for customers.

This store has operating hours convenient to all their customers.

This store accepts most major credit cards.

This store offers its own credit card.

TOURISTS' SATISFACTION WITH THE QUALITY OF EXTRA SERVICE IN THE TOURIST DESTINATION GRADAC AT THE SEASIDE

Marko Šantić, Mirela Mabić

1. INTRODUCTION

From the aspect of the users of tourist services, a tourist destination is understood as a full tourist product.

Today a modern tourist has enough information, and as such he is no longer apt to a tourist product based on a stereotype of a mass, but tries to get a tourist product characterized by uniqueness, originality and attractiveness. "Where to go on a holiday" is no longer the basic question because the standards regarding accommodation, food and transport are now fulfilled anywhere, but the question is "How to spend a holiday" and it implies high quality and rich content of a stay at the destination chosen. (Borković, 1992, 71)

In order to achieve this and ultimately to achieve tourist's satisfaction, or even to exceed his expectations, tourist destinations and their management need to take marketing actions in that course.

The entire offer of a tourist destination should be designed, created and adjusted according to the demands of the modern market and the market segments.

In line with this, it would be desirable to do various researches continually which would be strategic and developmental basis of creating a positive image of a tourist destination and making of a qualitatively diversification of the tourist offer. Finally, this brings the host of tourist offer up to a level where the profit starts to increase also.

Surely Croatia, as a tourist country, has potential for a serious tourist development, and therefore, the opportunity to join more developed tourist countries. In order to make this goal real and attainable, an appropriate, developmental as well as tourist politics should be formed for the purpose of achieving it.

Professional conclusions agree in one thing – there are more than enough possibilities and opportunities for Croatian tourism to follow the steps of modern and developed tourist markets. There is no doubt that the natural beauties, warm sea, cultural values, the number of sunny days, beautiful pebble beaches, are a comparative advantage of the Croatian Adriatic coast, but by all means just those things cannot be enough.

2. THE TRENDS OF THE INTERNATIONAL TOURIST MARKET

By the end of the last century international tourism reached an extraordinary high level. Participation of 657 millions foreign tourists in 1999 and their total consumption 455 billions US dollars (World Tourism Barometer www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom10_3_en.pdf) are just a part of what confirms afore-mentioned fact.

Favourable trends of the development of international tourism in the world date back from 1950, and they are shown in Table 1.

Table 1. International tourist arrivals in the world and total consumption

Year	Number of foreign tourists in millions	Tourist consumption in billions USD
1950	25.28	2.10
1960	69.32	6.87
1965	112.86	11.60
1970	165.79	17.90
1975	222.29	40.70
1980	286.00	105.32
1985	327.19	118.08
1990	458.23	268.92
1995	565.50	405.11
1999	657.00	455.00
2000	683.00	475.80
2005	802.00	679.00
2010	935.00	970.00

Source: World Tourism Barometer,

www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom11_in_april_except.pdf

In an allocation of international tourism the top place in the world belongs to the regions of Europe, America, Asia and Pacific.

In 1999, the total tourist turnover in these three regions was 93.1% of total tourist turnover in the world. In the same year, European region occupied the first place with 58.7% of total tourist turnover. America participated with 19.3% of total tourist turnover, while Asia and Pacific had 15.1% of total tourist turnover. Other regions, Africa with 4.2% and Middle East with 2.7%, had rarely modest participation in the total of tourist turnover. (Dobre, 2005, 67-68)

Favourable trends of the development of international tourism also continued during the last decade. The period from 2000-2005 is characterized by an increase of international tourist turnover by approximately 3.5% of average annual rate, as well as by an increase of total tourist income of approximately 8.5% average annual rate. (World Tourism Barometer www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom11_in_april_except.pdf)

Predictions of the World Tourist Organisation for the period 2000-2010 have completely come true, so their predictions for the year 2020 concerning total tourist arrivals, shown in Table 2, should not have meaningful deviations.

Table 2. Predictions of the World Tourism Organization of total tourist arrivals in 2020

Number	Region	Total tourist arrivals in millions
1	World	1561
2	Europe	717
3	Asia and Pacific	416
4	America	282
5	Africa	77
6	Middle East	69

Source: World Tourism Barometer,

www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom11_in_april_except.pdf

With the increase of tourist movements which are taking global attitude, tourist subjects are getting more concentrated in order to more adequately respond to bigger and more various requests of tourist demand.

Even though a large number of concentrated companies have already arisen in the international tourism recently, it may be concluded that globalization in tourism is a newer phenomenon, known as a megatrend of contemporary tourist market. (Pavlić, 2004, 215)

Within tourist demand, structural changes in the tourist needs are being obvious, so holders of tourist offer tend to integrate, and trying to become more competitive, they increasingly decide to join world associations.

Long term changes, even today and especially in the future, give tourism entirely new characteristics, and therefore, expand its contents both quantitatively and qualitatively.

3. TOURIST OFFER OF GRADAC AT THE SEASIDE MUNICIPALITY

According to the last population census in 2001, Gradac at the seaside Municipality has 3600 inhabitants. It covers 73 square kilometres and includes the following places Gradac, Brist, Podaca, Zaoštrog and Drvenik. Geographically, it is set in the south of middle Dalmatia, almost evenly distanced (approximately 100 km) from Dalmatian cities Dubrovnik and Split. Administratively, the Municipality is in Split-Dalmatia County.

All the places within the Municipality of Gradac at the seaside are connected by the Adriatic road, and the coast of this Municipality is 18 kilometres. The sand beaches stretch over almost 10 kilometres of that coast, with total area of 100 000 square metres, which can satisfy the demands of comfortable bathing of 20 000 bathers.

The climate is Mediterranean, Brist is one of the warmest towns in Croatia and the entire area offers 190 days of warm sea annually.

The whole background of Gradac at the seaside Municipality is 'protected' by the mountain Biokovo which was declared a national park in 1981.

Economically, it may be said for Gradac at the seaside Municipality that it is one of undeveloped municipalities in Croatia. Business activities associated with commerce, traffic, building and crafting services are represented sporadically. There is almost no professional fishing. The only fishing activities are connected with 'small' and sports fishing for private use. When it comes to agriculture, the only thing left is olive-growing, where around 30 olive-growers produce around 75 000 litres of oil with annual income of approximately 750 000 €.

The main economic activity of Gradac at the seaside Municipality is tourism which annually brings income of approximately 30 million € to this area.

According to the data provided by tourist community of Gradac at the seaside Municipality and the Office of municipal prefect, the number of overnight stays in accommodation capacities of tourist destination Gradac at the seaside is increasing annually (registered number of overnight stays in 2010 is 667 000). Accommodation capacities of tourist destination Gradac at the seaside is measured through hotels, hostels, camps, suits, boarding houses and private accommodation and at the moment they count 9 964 beds. Extra service offer is measured through 22 buffets, 16 taverns, 3 restaurants and 1 disco-bar. The first ten emissive markets of tourist destination Gradac at the seaside are as it follows: Czech Republic, Bosnia and Herzegovina, Poland, Slovakia, Slovenia, Germany, Sweden, Austria, Hungary, Serbia.

4. THE GOAL AND HYPOTHESIS OF THE PAPER

The goal of this paper is to investigate, realize and analyze the degree of satisfaction of tourists by extra-service in the destination said.

Starting with the identification of the problem and the goal defined, the following hypothesis is set: *Tourists in the tourist destination Gradac at the seaside are not satisfied with the quality of extra service which is available in the area of Gradac at the seaside Municipality.*

5. METHODOLOGY AND THE RESEARCH PROCESS

Collecting of the primary data was made through field research, applying the questionnaire technique. As an instrument to make primary research, a highly structural questionnaire has been used, based on Likert's grading scale of the examinees' attitudes.

The questionnaire was made of 47 questions/statements. Eleven questions/statements were related to general information regarding the examinees and they had socio-demographic character, while 16 questions/statements were conceptualized in a way as to reflect the degree of satisfaction by certain elements of extra service.

Empirical research was made in the period of July – September 2010.

During the research, a random sample has been used, which included 500 tourists who stayed in private accommodation, camp sites and hotels at the Gradac at the seaside area.

The research was made by trained interviewers who treated the examinees in identical way, so the research kept a characteristic of a standardized procedure.

The established goal of the questionnaire with all necessary starting parameters is absolutely satisfied. This fact is also confirmed by the data of socio-demographic structure of the examinees involved in the sample for empirical research.

The data has been analyzed and processed by a statistical programme SPSS for Windows 16.0. The results obtained are presented through absolute and relative frequencies, minimal and maximal values, mean and standard deviation.

6. THE RESULTS OF THE RESEARCH

6.1. *Demographic and socio-economic characteristics of the examinees*

The research included 38.5% women and 61.5% men.

Analyzing the examinees' age it is evident that the majority was in the age of 28 - 47 (33.2%), while there is equal amount of examinees' in the age under 27 and over 65 (17.6%).

The majority of examinees, 49.8%, finished high school, 30.2% finished vocational college, while 19.5% of examinees has university education. Just 0.5% examinees have only primary school education.

Most tourists, 56.1%, come with their families to this tourist destination. 21% of examinees come with their partner, and 7.3% come alone. 15.6% examinees from Bosnia and Herzegovina to this tourist destination come within tourist groups.

Analyzing the annual incomes of the examinees it is evident that vast majority of them, 95.6%, belong to that group whose annual income is up to 12 000 €, while there is a small number of those whose annual income is up to 13 000 - 24 000 €. There were none of those whose annual income is higher than 25 000 € nor higher than 51 000 €.

Most of the examinees come to this tourist destination by car, 70%. 24% come by bus, while there are not many of those who come by transport means such as airplane (5%) and railway (1%).

When analyzing the time the examinees decide to go on holiday, it is clear that most of them, 83%, decide within six months prior to taking the trip, among who 45% decide two to four months prior, and 38% six months prior to the trip. Just

11% of the examinees decide at the last moment, and only 6% examinees decided one year prior to taking the trip.

As far as information regarding this destination is concerned, 54% of the examinees had already been at this destination. 25% got all the important information from travelling agencies. Internet, as a mean of gathering information, takes up 11%, friends 5%, TV 4% and newspapers 1%, as the final mean of gathering information about this tourist destination.

When it comes to tourists' motives for coming to this tourist destination, relaxation and the closeness of nature are convincingly top motives with 87%, out of which 48% of the examinees come to this tourist destination for relaxation and 39% for nature. A very small number of visitors as their motives cite price (7%), entertainment (5%) and gastronomy (1%).

Analyzing the frequency of coming to Croatia, 67% of the examinees have been to Croatia a number of times. 8% of them came to Croatia second or third time, while 25% were there for the first time.

Concerning the emissive markets in this tourist destination, most of the examinees were from Bosnia and Herzegovina, 41%. Tourists from Western Europe are the second, with substantial 27% quota, while tourists from Eastern Europe take share of 10%. Tourists from ex-Yugoslavia countries are especially pointed out, former domestic tourists (now those are only the ones from Croatia), whose share is 22%.

6.2. Analysis of satisfaction with extra service given

Beside the service given in hotels and suits, modern tourists today have greater demands of extra contents so to make their stay at a destination more interesting and fulfilled. Analyzing the satisfaction of the examinees with extra service elements of a tourist service it can be concluded that its level is rather low. Greatest dissatisfaction was with elements such as prices in the restaurants, variety of cultural events, entertainment, sports and recreational contents, prices of groceries, gastronomic offer and speed of service in the restaurants, arrangement of the beaches, as well as cleanliness and organization of the resort, information availability and courtesy of the local people. Average grades of the said elements vary from 2.03 - 2.64.

Table 3. Satisfaction with elements of extra service

Statement	Level of agreement (%)				
	1	2	3	4	5
I am satisfied with the gastronomic offer in the restaurants	2.9	79.1	19.5	1.0	0.5
I am satisfied with prices in the restaurants	4.4	90.7	2.4	2.0	0.5
I did not wait long for the service	3.9	77.6	10.7	6.3	1.5
I am satisfied with the offered entertainment	16.6	65.4	11.2	6.8	0
I am satisfied with the sports and recreation offer	16.6	65.4	11.2	6.8	0
I am satisfied with the offer of groceries (markets)	0	3.9	6.3	89.3	0.5
I am satisfied with the prices of groceries (markets)	4.4	86.8	5.9	2.4	0.5
I am satisfied with arrangement of the beaches	1.0	50.7	41.5	6.3	0.5
I am satisfied with cleanliness of the sea and beaches	0.5	0.5	0.5	97.6	1.0
I am satisfied with cleanliness of the beaches	1.0	0.5	1.5	97.6	0
I am satisfied with variety of the cultural events	3.9	88.8	5.9	1.0	0.5
I am satisfied with the information availability	1.0	42.9	47.8	7.3	1.0
I am satisfied with courtesy of the local people	1.0	72.7	18.0	7.8	0.5
I am satisfied with arrangement of the resort	1.5	71.7	19.5	6.8	0.5
I am satisfied with cleanliness of the resort	2.0	69.8	20.0	7.8	0.5
I am satisfied with the natural beauties of the landscape	0	0	0.5	77.1	22.4

Source: Author's calculation

Table 4. Mean values and standard deviation for the answers included in this scale

Statement	Min.	Max.	Mean	StDev Deviation
I am satisfied with gastronomic offer in the restaurants	1	5	2.278	1.013
I am satisfied with prices in the restaurants	1	5	2.160	0.972
I did not wait long for the service	1	5	2.298	1.082
I am satisfied with the entertainment offered	1	5	2.086	0.968
I am satisfied with the sports and recreation offer	1	5	2.054	0.947
I am satisfied with the offer of groceries (markets)	1	5	3.496	1.055
I am satisfied with the prices of groceries (markets)	1	5	2.440	1.036
I am satisfied with arrangements of the beaches	1	5	2.568	0.952
I am satisfied with cleanliness of the sea and beaches	1	5	3.910	0.656
I am satisfied with cleanliness of the beaches	1	5	3.706	0.893

I am satisfied with variety of the cultural events	1	5	2.124	0.898
I am satisfied with the information availability	1	5	2.570	1.037
I am satisfied with courtesy of the local people	1	5	2.486	1.105
I am satisfied with arrangement of the resort	1	5	2.336	1.053
I am satisfied with cleanliness of the resort	1	5	2.330	1.023
I am satisfied with the natural beauties of the landscape	1	5	4.386	0.662

Source: Author's calculation

7. CONCLUSION

Elimination of deficiencies in extra service offer and improvement of quality of tourist product becomes strategic variable in a battle for market segment on a demand-growing tourist market.

In the last decade there has been an increase in the number of tourist service providers who use marketing concepts based on long-term partnerships with the customers. They are consumer-oriented. They put their accent on the service and direct all their strengths to satisfy consumers' expectations and to give superior value, in short - they take care about quality.

Certainly their primary goal is profit, however, management realizes that surviving on the market in a merciless competitive battle can only be guaranteed if it is long-term observed and through the prism of quality of tourist service. The quality of tourist services is seen in a three-part environment consisting of the offerer of tourist service, user of the service and country. All these subjects in a certain way expect and aspire to satisfying their goals.

Gradac at the seaside, as a tourist destination, even though has products which are offered to tourist markets world-wide, fails to stand 'shoulder to shoulder' with developed, modern tourist destinations of the Mediterranean. The reason of this backwardness is first of all in low level of quality, unfavourable quality – price ratio, undeveloped infrastructure and obvious inconsistency between naturally based quality on one hand, and prices and quality on the other.

Insufficient care about the quality of tourist product, as the most important element of marketing combination, leads to losing image and personal identity of this as well as other Croatian tourist destinations.

Today, when modern tourists and tourist market are becoming more demanding looking for variety, content, and most of all attractiveness of a tourist offer,

natural beauties as the main power of Croatian tourist offer is far from sufficient factor of attractiveness.

From the empirical research in this paper it is also evident that natural beauties are 'pearl' among other elements of offer in this tourist destination. The examinees also gave high grades of the purity and cleanliness of the sea and beaches.

However, what cannot serve as pride to a tourist destination such as Gradac at the seaside is the fact that elements of offer which depend directly on human factor got the lowest grades. Sports and recreational offer, entertainment, presentation of cultural and historic heritage are certainly just some of the elements of offer that has to be worked on in this tourist destination.

Gradac at the seaside has the opportunity to join the group of developed tourist destinations. In order to achieve this goal it must form appropriate and optimal developmental and tourist politics and strategy.

8. BIBLIOGRAPHY

Borković, V. (1992). Politika plasmana turističkih usluga i njeni učinci, Ekonomska misao i praksa, Sveučilište u Dubrovniku, ISSN 1330-1039

Dobre, R. (2005). Osnove turizma (teorija i praksa), Visoka škola za turistički menadžment, Šibenik

Pavlić, I. (2004). Suvremene tendencije u razvoju svjetskog turizma i globalizacijski procesi, Naše more, ISSN 0469-6255

www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom10_3_en.pdf.

(accessed 21-05-2011)

www.unwto.org/facts/eng/pdf/barometer/UNWTO_Barom11_in_april_except.pdf.

(accessed 21-05-2011)