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THE INFLUENCE OF GLOBALIZATION ON THE OFFER OF PASSENGER RAIL TRANSPORT IN THE CZECH REPUBLIC

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Abstract. Currently, a rail transport in the EU undergoes by significant reforms, which aims to liberalize the market for rail transport services, to eliminate the monopoly of the national transport and open up free access of independent operators to transport infrastructure and systematic improvement of the public transport services. The article discusses the influence of important globalization factor - the shaping of competition and creation of a competitive environment in offer of rail-passenger transport in the Czech Republic. On the rail market entered a private carriers, created are a new business conditions for the providing of rail passenger transport. This article aims to map and define the competitive environment in rail passenger transport in the Czech Republic, to assess the impact of the created competitive environment on the shaped offer, a quality and producing of transport services by the largest providers of passenger rail transport in the Czech Republic, from private and public sector. For evaluation the competitive positions of the suppliers on the public services are used a method of SWOT analysis, cost analysis and pricing analysis, comparative analysis and trend analysis. Analyzed are a primary data from public surveys and secondary data from available sources. In the end is evaluated impact on the passenger satisfaction through the survey of the offer and quality of the services, which are provided to the passengers and as well as the opportunities for exploitation the rail passenger transport in tourism.

Keywords: competition, offer, passenger satisfaction, rail passenger transport, tourism

JEL Classification: R41, R11, L92

1. Introduction

Železniční osobní doprava je jedním z rychle se rozvíjejících, významných a využívaných druhů dopravy, její historie v českých zemích sahá až do roku 1828 (Kyncl et al., A, 2006). Je veřejně poskytovanou službou a patří tedy k nepostradatelným prvkům, zajišťujícím chod celé společnosti, má vliv na hospodářství každé země, je součástí tvorby HDP, zajišťuje pracovní pozice a má řadu komparativních výhod v oblasti sociální, bezpečnostní a environmentální.

Po dlouhá léta byl tento druh dopravy jen v rukou státu. Skutečnou konkurenci státního monopolu Českých drah na našem trhu železniční dopravy můžeme sledovat od podzimu roku 2011, kdy na trh vstoupila společnost RegioJet a v roce 2012 třetí konkurenční dopravce Leo

Expres. Od prosince 2012 na trati Praha – Ostrava provozují osobní železniční dopravu tři různí konkurenti (z toho dva soukromí a jeden státní), což je pro Evropu jedinečné.

Konkurenční boj vyvolal změny v boji o zákazníka (Procházka, 2015). Vytvoření tržního prostředí a vstupu soukromých železničních dopravců znamená v konečném důsledku zajištění komfortního cestování za přijatelné ceny pro spotřebitele (Boskovic, Bugarinovic, 2015). Ti stále častěji cestují na delší vzdálenosti pohodlně a bezpečně vlakem, kde mohou čas během cesty využít k práci, zábavě nebo odpočinku (Mattauch et al., 2016).

Cílem článku je na základě provedených průzkumů a analýz prezentovat změny v osobní železniční dopravě na trati Praha – Ostrava, které nastaly pod vlivem globalizace a nástupem konkurence, identifikovat oblasti, které by mohly znamenat příležitost pro rozvoj a zkvalitnění nabídky pro cestující, pro udržení stability a zvyšování konkurenceschopnosti v oblasti cen, a komfortu cestování.

2. Konkurence v železniční dopravě

Železnice zažívá renesanci. Počet přepravených cestujících v tuzemsku a přepravní výkon pokračuje v růstu již šestým rokem v řadě (Tab. 1).

Table 1: Vývoj osobní dopravy v ČR v letech 2003 – 2014

Osobní doprava v ČR	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Přepravené osoby v mld.	2,899	2,916	2,844	2,816	2,825	2,882	2,803	2,805	2,679	2,748	2,692	2,675
Z toho železniční v mil. osob	174	180	180	183	184	177	164	164	167	172	174	176
Přepravní výkon v mld. oskm	38,62	39,37	39,96	40,98	41,26	42,66	42,89	43,45	42,86	42,72	42,52	43,85
Z toho železniční v mld. oskm	6,518	6,590	6,667	6,922	6,898	6,803	6,503	6,591	6,714	7,265	7,601	7,797

Source: Vlastní zpracování podle ČSÚ, Osobní doprava v ČR, https://vdb.czso.cz/vdbvo2/faces/cs/index.jsf?page=vystup-objekt&pvo=DOP05&z=T&f=TABULKA&katalog=31028&evo=v128._!_DOP-05-roky_1&c=v115~8__RP2014#w%5Bk%5D=showxlsexport&w%5Bp%5D=&w%5Bh%5D=

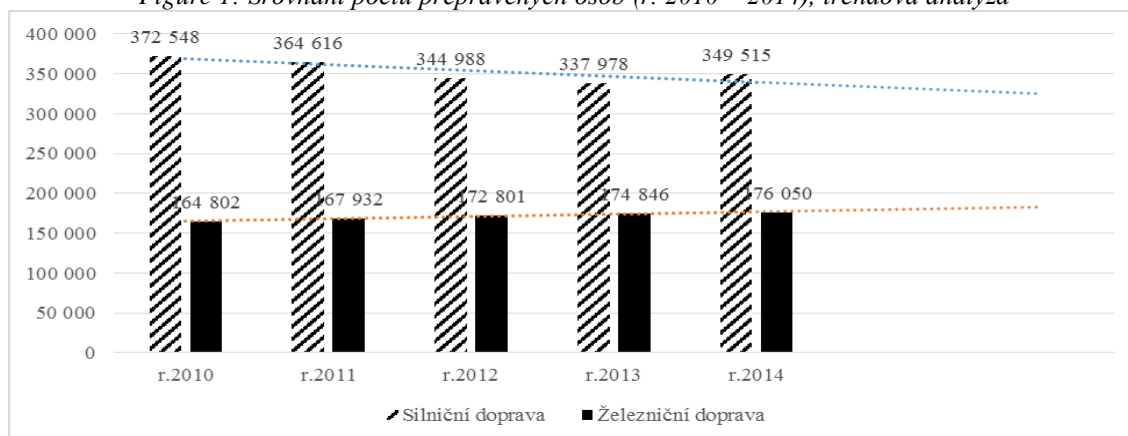
Podle ČSÚ v roce 2015 tržby v železniční dopravě ČR vzrostly o 2,3 %, v současnosti je očekáván mírný pokles, cca kolem 1 %, počet zaměstnanců v železniční dopravě tvoří cca 15 % z celkového počtu zaměstnaných v dopravě (www.czso.cz).

Počet přepravených cestujících železniční osobní dopravou od roku 1998 klesl o 5,5 % na 176,05 mil. v 2014. Přesto ve sledovaném období od roku 2010 do roku 2014 je zaznamenán mírný růst (Graf 1). Počet přepravených cestujících na železnici roste pomaleji než přepravní výkon. To ukazuje, že lidé dnes cestují na delší vzdálenosti. Za posledních pět let vzrostla průměrná přepravní vzdálenost ve vlacích ze 40 na 47 kilometrů. V roce 2012 byla určena

průměrná přepravní vzdálenost u osobní dopravy celkově 22,6 km, u veřejné dopravy 15,5 km. V roce 2013 Ministerstvo dopravy přispělo na provoz dálkové dopravy částku ve výši 32 353 tis. vlkm kompenzací 3 950 mil. Kč, průměrná částka na 1 vlkm je 122 Kč. Počet cestujících v 1. třídě sice nedosahuje ani 2 %, ale během 12 hodnocených let vzrostl na více než pětinasobek (<http://www.statistikaamy.cz/2015/05/trzby-v-doprave-rostly/>).

Železniční doprava, která odpovídá současné úrovni techniky je ve srovnání se silniční dopravou bezpečnější (Talley, 2013). V řadě případů je i rychlejší a zejména při osobních přepravách na větší vzdálenosti je také pohodlnější. (Kyncl et al., B, 2006).

Figure 1: Srovnání počtu přepravených osob (r. 2010 – 2014), trendová analýza



Source: vlastní zpracování podle [https://vdb.czso.cz/vdbvo2/faces/index.jsf?page=vystupobjekt&pvo=DOP05&zo=N&z=T&f=TABULKA&verze=1&nahled=N&sp=N&filtr=G~F_M~F_Z~F_R~F_P~_S~_null_null_&katalog=31028&evo=v128_!_DOP-05-ctvrtleti_1&c=v127__RP2014QP4\[online\]](https://vdb.czso.cz/vdbvo2/faces/index.jsf?page=vystupobjekt&pvo=DOP05&zo=N&z=T&f=TABULKA&verze=1&nahled=N&sp=N&filtr=G~F_M~F_Z~F_R~F_P~_S~_null_null_&katalog=31028&evo=v128_!_DOP-05-ctvrtleti_1&c=v127__RP2014QP4[online]) [vid. 4.8. 2016].

Železniční doprava v zemích EU v současnosti prochází dalekosáhlými reformami. Dle Cralse et al. (2004) je jejich cílem liberalizace trhu se službami železniční dopravy, odstranění monopolu ve vnitrostátní přepravě a otevření volného přístupu nezávislým subjektům k dopravní infrastruktuře.

Komfort cestování, znamenal desetiletí stagnace v cestovních časech a pohodlí vlaků (Pelayo et al., 2015). Dlouhá léta byl tento druh dopravy jen v rukou státu (Tomeš et al., 2014). Výkon osobní přepravy na železnici je nejvyšší od roku 1994. Dle Tomeše a Kvízdy (2009) se její hodnoty dnes vrátily na úroveň poloviny 90. let, kdy lidé opouštěli vlaky a přecházeli do aut. Dnes se vrací zpět do vlaků. Dostavuje se účinek investic do hlavních tratí, kde se doprava zrychlila, a to přilákalo konkurenční dopravce (Mitwallyova et al., 2014).

Konkurenční boj o zákazníka vyvolal změny v chování a změny v boji o zákazníky.

Konkurence je procesem střetávání protichůdných zájmů tržních subjektů. Každý, kdo chce a vstoupí na trh, chce realizovat své ekonomické zájmy. Snaží se o získání výhody ve srovnání s ostatními konkurenty (Jakubíková, 2009), s cílem přilákat poptávku jinak, než cenou (např. růstem kvality, servisem, službami, rychlými inovacemi). V současnosti převládá konkurence zaměřená na přilákání zákazníka prostřednictvím kvality, sortimentu a ceny doprovodných služeb (Botlík, 2014).

2.1. Konkurence v železniční osobní přepravě v České republice

Podmínky pro vznik konkurence na trhu železničních dopravců v České republice začal připravovat Zákon o dráhách (č. 266/1994 Sb.) a jeho pozdější novelizace. Na základě požadavku na liberalizaci dálkové osobní železniční dopravy ze strany Evropské unie byl vytvořen tzv. harmonogram otevírání trhu a vypisování nabídkových řízení pro jednotlivé linky (Damborský et al., 2014). Nejvýznamnějšími hráči se staly 3 společnosti:

1. *Akciová společnost České dráhy, která vznikla na základě zákona číslo 77/2002 Sb.* Akciová společnost s prvky korporace i státní firmy se dostala do vedení CER (Společenství evropských železničních společností). Zaměstnává na 15 tisíc lidí, je národním dopravcem s hodnotou dluhopisů 33 miliard Kč. Klíčovým segmentem podnikání je osobní doprava dálková a také regionální. Kontinuálně roste počet přepravených osob (Tab. 2), (ČD loni přepravily rekordní počet cestujících v pětileté historii, 2016) .

Table 2: Vývoj počtu přepravených cestujících společnostmi ČD

Rok	2009	2010	2011	2012	2013	2014
Počet přepravených osob v mil.	162,906	162,690	165,752	168,787	169,282	170,146

Source: vlastní zpracování podle <https://zeleznicar.cd.cz/zeleznicar/hlavni-zpravy/cd-loni-prepravily-rekordni-pocet-cestujicich-v-petilete-historii/-6499/4.2.2016/6.8.2016>

2. *Společnost RegioJet, a. s.* byla založena jako součást skupiny Student Agency, která provozuje silniční i železniční vnitrostátní i mezinárodní přepravu osob. Vlaky jsou provozovány bez dotací. Získala řadu ocenění za dynamický růst a kvalitní služby, bezkonkurenční ceny a silnou orientaci na zákazníka. Její filosofie změnila již zažitá ekonomická poučky, že „vše kvalitní je drahé a vše laciné je s nízkou kvalitou“. Po vstupu prvního dopravce na liberalizovaný trh bez nároku na kompenzace na linku Praha – Ostrava v roce 2011 vyjmul Ministerstvo dopravy od 1. 1. 2012 dálkové vlaky vyšší kategorie ČD v této relaci z kompenzací a tato linka je provozována v režimu open access“. Ale i v takovém případě dopravci dostávají od státu za nařízené žákovské a studentské jízdné kompenzaci. V roce 2012 tato kompenzace činila 95,1 mil. Kč (www.cd.cz). V roce 2009 tato skupina překročila obrát 4,2 miliardy korun českých (<http://www.regiojet.cz/kontakty/pribeh>).

3. *Společnost LeoExpress, a. s.* je železniční dopravce, který provozuje železniční přepravu osob na palubě vlaků švýcarské společnosti Stadler. Cílem je systematické zkvalitňování služeb veřejné dopravy a s ní spojených služeb ve státech střední Evropy. Provozuje 18 vlakových spojů na území České republiky i Slovenska. Od roku 2015 jsou novinkou návazné autobusové spoje na několika trasách: Praha-Berlín, Praha-Český Krumlov, Bohumín-Katovice-Krakov, Přerov-Zlín, Košice-Mukačevo (www.cd.cz).

3. Komparace výkonů a služeb společností České dráhy, RegioJet a LeoExpress

V rámci sledování vlivu globalizace a vývoje konkurenčního prostředí byly provedeny průzkumy nabídky služeb a komparace výkonů u vybraných poskytovatelů této služby. Zkoumány a srovnány byly faktory jako cenová nabídka, komfort cestování, sortiment nabízených služeb, tržní podíl, hospodářský výsledek za sledované období, náklady dopravní cesty přepočtené na 1 osobu, provozní doba na trati Praha – Ostrava, apod.

Od roku 2011 se snižuje téměř 100% - ní tržní podíl Českých drah jako monopolního dopravce na trhu železniční osobní dopravy rozvojem stávajících menších dopravců, či vstupem nových dopravců na trh (Tab. 3).

Table 3: Tržní podíly dopravců v osobní železniční dopravě

	2010	2011	2012	2013	2014
České dráhy	99,04 %	98,62 %	97,06 %	94,87 %	93,27 %
RegioJet	0,05 %	0,23 %	2,57 %	3,40 %	5,01 %
LEO Express			0,07 %	1,47 %	1,45 %
Vogtlandbahn	0,02 %	0,32 %	0,13 %	0,13 %	0,13 %
GW Train Regio	0,76 %	0,75 %	0,14 %	0,08 %	0,08 %
ostatní	0,13 %	0,08 %	0,03 %	0,05 %	0,06 %

Source: Výroční zpráva ČD 2015. <http://www.szdc.cz/soubory/vysledky-hospodareni/2015-szdc-vz-cz.pdf>

Provozní náklady

Při porovnání nákladů na osobu a celkových nákladů na provoz má sice RegioJet nejvyšší náklady na osobu, ale jako jediný dopravce nabízí cestujícím velký prostor při cestování, což zvyšuje pohodlí při cestování. Nejnižší náklady na provoz a náklady na osobu má společnost LeoExpress (Tab. 4).

Table 4: Náklady dopravců v Kč na dopravní cestu Praha – Ostrava

	dopravní cesta	trakční energie	celkem	Náklady na osobu
SC Pendolino	9 890	9 012	18 902	57
RegioJet	7 495	7 549	15 044	63
LeoExpress	5 286	4 120	9 406	40

Source: vlastní zpracování podle: Leo Express má proti rivalům výhodu, za provoz platí o třetinu méně http://ekonomika.idnes.cz/leo-express-ukazal-sve-vlaky-v-cesku-dvf-/eko-doprava.aspx?c=A120524_100737_eko-doprava_neh_25.5.2012/6.9.2016

Při přepočtu na 1 cestujícího vyjde provoz nejlevněji společnost LeoExpress, pak České dráhy a RegioJet. Důvodem je, že RegioJet prostorem pro cestující výrazně převyšuje konkurenci.

Nejvíce za proud a trať zaplatí společnost České dráhy. Pendolina jsou těžší, než lehký hliníkový Leo Express, vyšší je i jejich spotřeba energie. Na druhou stranu „sveze“ Pendolino více lidí, takže v přepočtu na sedačku je rozdíl třetinový. Provoz RegioJetu, který za soupravu lokomotivy a pěti vozů sice zaplatí o něco méně než Pendolino, ale v přepočtu na sedačku vychází nejdraž ze všech. Je to daň za velkorysý prostor pro cestující, výrazně převyšují konkurenci. Počet sedaček je nižší než u vlaků Českých drah či soupravy Leo Expressu. Srovnání poplatků za dopravní cestu a odhady spotřeby bez přepočtu na sedačku ukazují ještě větší rozdíl v nákladech jednotlivých dopravců. České dráhy za Pendolino zaplatí na drážním "mýtu" téměř dvakrát tolik, co Leo Express za své nové soupravy Stadler Flirt. V Tab. 4 jsou uvedeny náklady dopravců na dopravní cestu, náklady na trakční energii a po součtu těchto nákladů jsou poté rozpočítány náklady na osobu. Cenu za ujetý kilometr vypočítává Správa železniční dopravní cesty hlavně podle váhy soupravy i počtu vozů.

Z výsledků hospodaření lze u společnosti České dráhy zjistit významné změny v čase nástupu konkurence. Po několika ztrátových letech se změnou prodejní politiky dostaly ze ztráty opět do zisku (Tab. 5).

Při srovnání hospodářských výsledků zkoumaných společností lze pozorovat narovnávání ztráty vstupu na trh u RegioJetu i LeoExpressu. České dráhy před vstupem soukromých

dopraců na trh měly kladný hospodářský výsledek, po vstupu následovaly dva ztrátové roky a rok 2014 byl pro ně opět ziskový.

Table 5: Hospodářské výsledky (v tis. Kč) za období 2011 - 2014

	RegioJet	LeoExpress	České dráhy
2011	-59 767	-	491 000
2012	-76 267	-78 117	-1 594 000
2013	-93 446	-159 046	-1 953 000
2014	-42 082	-136 650	156 000

Source: vlastní zpracování podle: Výroční zprávy 2011-2014 [online] [vid. 5. 8. 2016]. Dostupné z <http://www.le.cz/cms/102-pro-investory.html>; <http://www.ceskedrahy.cz/pro-investory/financni-zpravy/vyrocnizpravy/-5596/>; <http://www.regiojet.cz/dokumenty/>

Oba největší soukromí dopravci na české železnici – společnost RegioJet a LEO Express přepravili v roce 2015 výrazně více cestujících, než o rok dříve. Služeb RegioJetu využilo více než tři miliony cestujících (+ 26 %), vlaky LEO Expressu jelo téměř 1,1 milionu lidí. Oba dopravci tak rok ukončili se ziskem (RegioJet i LeoExpress hlásí výrazný nárůst počtu přepravených cestujících, 2016).

Z analýzy dostupných zdrojů (informační materiály Českých drah) a dat primárního šetření, provedeného na Obchodně podnikatelské fakultě v roce 2015 a 2016 (Tarkota, 2016) byla sestavena SW analýza zákaznických služeb (Tab. 6). Z provedené SW analýzy lze identifikovat oblasti, které by mohly definovat budoucí příležitosti pro rozvoj, udržení stability a zvyšování konkurenceschopnosti na globalizovaném trhu.

V oblasti *cenové strategie* vstup nového dopravce na trh osobní železniční dopravy způsobil změny v rozsáhlých cenových nabídkách Českých drah pro udržení cestujících na konkurenční trati. Zavedení akčních slev a nových cen bylo podnětem pro spuštění kritiky ze strany konkurence, která označila jednání ČD za protiprávní a narušující hospodářskou soutěž. ČD se brání tvrzení, že se jedná o běžné akční slevy, kterých v minulosti byl proveden nespočet. Skutečností však je, že se nikdy nejednalo o situaci ohrožující setrvání jiného železničního dopravce na trhu.

V oblasti porovnání cen a slev v *poměru služba/cena* jízdenky nejvýhodnější ceny jízdného má RegioJet. *Nabídka služeb a jejich cen* je nejlépe hodnocena ve spojích RegioJetu, u LeoExpressu jsou služby zpoplatněny, u Českých drah cestující nejsou o aktuální nabídce dostatečně informováni. Nejčastěji chtějí zákazníci připojení k internetu a Wi-fi, elektrickou zásuvku, širší sortiment občerstvení nebo dokonce nápoj a tisk zdarma.

Z porovnání provozní doby vlaků nejrychleji trasu Praha – Ostrava zvládne SC Pendolino Českých drah, avšak s nejvyšším příplatkem. Provozní doba dopravců je přibližná, liší se jen o pár minut. U vlaku SC Pendolino je provozní doba o něco rychlejší (181 minut), protože má méně zastávek na trase a může jet vyšší rychlostí.

V *oblasti komfortu cestování* jsou lidé nejvíce spokojeni se společností RegioJet, kde mají k dispozici dostatek prostoru a pohodlná sedadla. Na druhém místě se umístily České dráhy a na třetím místě LeoExpress.

Table 6: SW analýza konkurenčního prostředí osobní železniční přepravy ČR na trati Praha – Ostrava

	Silné stránky	Slabé stránky
České dráhy	Dlouhodobá historie národního dopravce, silné postavení na trhu, vysoký počet kontaktních míst na celém území ČR,	Starší vozový park, vysoké trakční náklady, horší pověst z důvodu hygieny

	<p>pokrytí celé ČR, nabídka služeb pro specifické skupiny klientů (vozičkáři, maminky s kočárky, přeprava kol a zvířat apod.), smlouvy se státem a kraji na dotovanou přepravu, Motivací pro zákazníky je rychlost a frekvence spojů.</p>	<p>cestování a častého zpoždění vlaků, nižší stupeň flexibility cenové strategie, rozvinutý, ale nepřehledný systém slev.</p>
RegioJet	<p>Goodwill, dobrý marketing a flexibilní rezervační systém, širší možnosti placení jízdenky, výborný palubní servis, některé služby zdarma, kompenzace diskomfortu cestování, významný pro-zákaznický přístup a snaha o stále zlepšování kvality služeb, klientsky přívětivá cenová politika nabídky ve vlaku, větší prostor pro cestující a vyšší komfort cestování, návaznost na autobusové linky společnosti Student Agency, intervalový jízdní řád, aktivní marketing a nabídky zákazníkovi, které přitáhly na železnici úplně nové cestující. Motivací pro zákazníky je pohodlí, nabídka a cena.</p>	<p>Obsluha menšího území ČR, návaznost na spoje jiných dopravců, starší vozový park – lokomotivy, menší počet spojů denně, chybí možnost přepravy kol a kočárků, nemožnost vlastní regulace teploty kupé, horší pokrytí signálem a Wifi.</p>
LeoExpress	<p>Vysoká profesionalita zaškoleného personálu, širší škála nabízených služeb pro cestující, návaznost na některé autobusové linky společnosti LeoExpress (např. na trase Praha – Drážďany – Berlín, z Košic do Mukačeva, z Bohumína do Krakova, z Prahy do Českého Krumlova), atraktivní nabídka spojení. Motivací pro zákazníky je cena, rychlost a pohodlí.</p>	<p>Velké množství zastávek na Moravě, nízká přepravní kapacita a málo spojů denně, menší prostor pro zavazadla a nižší počet toalet, jen open space cestovní prostor s nepříliš přívětivým designem, zpoplatnění některých konkurenčních služeb, klientsky nepřehledné a příliš často se měnící cenové podmínky přepravy, široká a nepříliš často se měnící nabídka občerstvení, nedostatek odpadkových košů ve spojích, stísněnost prostoru pro stewardy a zavazadla, nízký stupeň spolupráce s ostatními dopravci na návazných spojích.</p>

Source: Vlastní zpracování

Se vstupem soukromých dopravců na trh osobní železniční dopravy se mnohé služby poskytovatelů této služby zlepšili. Šetření potvrdilo, že nároky cestujících na kulturu cestování se zvýšily, cestující registrují existenci více společností na jedné trati, zvýšil se komfort cestování a nabídka služeb, nabízených ve vlaku se stále více přizpůsobuje rostoucím požadavkům cestujících. Stále dominuje požadavek větší bezpečnosti a čistoty ve vlaku.

4. Conclusion

Kvalitní a fungující dopravní systémy jsou v současné době globalizace nezbytnou podmínkou nejen pro výkonnou ekonomiku, ale také pro spokojený život občanů, kteří chtějí pohodlně cestovat. Výkony dopravy však závisí také na hustotě a kvalitě dopravní

infrastruktury – hustotě silnic a železnic a velikosti a kvalitě vozového parku (Dolinajová et al., 2014). Právě v hustotě železniční sítě patří ČR historicky k nejvýznamnějším státům Evropy.

Rychlejší a kvalitnější soupravy, taktový jízdní řád, modernizace železničních tratí, výstavba nových zastávek v městských aglomeracích, provázanost veřejné dopravy v rámci integrovaných dopravních systémů, zvýšení počtu spojů, zkrácení jízdní doby a zvýšení kvality služby ovlivňují zájem cestujících. Zvýšení počtů cestujících má souvislost s postupnou dostavbou koridorů a rozšiřováním nabídky v příměstské dopravě. Růstové tendence jsou patrné zejména v dojížděce do velkých aglomerací, především do Prahy. Vývoj počtu přepravených osob však také souvisí s demografickými tendencemi. U produktivní části populace lze očekávat další růst zejména v kontextu se zvyšováním mobility obyvatelstva do velkých aglomerací (Zhang, 2007). Další investice do infrastruktury by měly především zohlednit potřeby cestujících.

Konkurence na trhu osobní železniční dopravy přinesla řadu pozitivních změn, především pro cestující. Vypsání veřejné soutěže Ministerstva dopravy a krajů o obsluhu tratí přinese soukromým dopravcům expanzi na další tratě, včetně regionálních. Konkurence a boj o každého zákazníka bude probíhat i nadále a to nejen doma, ale zejména v celoevropském měřítku. Projevuje se evropský trend, kdy cestující chtějí využívat rychlou a pohodlnou dopravu vlakem mezi velkými sídly (Kemel, Paraschiv, 2013). Naléhavým úkolem je proto udržet dobrou dopravní obslužnost až do úrovně jednotlivých obcí. Aby se ČR mohla stát dopravní křižovatkou Evropy, je zapotřebí, aby do rozvoje dopravy více investovala.

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INDUSTRY 4.0: EUROPE'S (RE)INDUSTRIALISATION NEEDS A GLOBAL LEVEL

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Abstract. The term “Industry 4.0” was first introduced in Germany in 2011. It refers to digitising industrial production. The concept outlines the vision of a smart factory, which is characterised by the complete networking of all production processes: real time control via ITC and the increased use of robots, which control themselves, are developments that should contribute to greater productivity and efficiency. The concept of Industry 4.0 is shaping the digital discourse in the Czech Republic as well. Industry 4.0 is precisely where two differing standard regimes meet: one from the IT sector that is more influenced by US standards and another regarding machine and vehicle engineering, which is more European. The question is which regime will prevail. Therefore, Europe should reflect on its strengths and should establish dominance in the most important areas at an early stage. Economic integration remains one of Europe’s major strengths, a huge advantage when it comes to setting global standards. Unfortunately, these opportunities are still neglected too often, as the economic actors follow their own short-term national interests. This leads to fragmentation and small-time plays that miss the big win. Common standards, norms and rules could make a major contribution to more positive globalization, integration and cohesion, and therefore to more growth and social progress. The aim of this paper is to discuss the issue: Industry 4.0 and its consequences for the further globalization.

Keywords: Industry 4.0, digitalization, Europe common market, globalization

JEL Classification: F02, F60, O14, O33

1. Introduction

The term “Industry 4.0” was first introduced by the German Industry-Science Research Alliance in 2011 (Bullinger at al., 2013). Industry 4.0 is the vision of increasing digitisation of production. The concept describes how the Internet of Things, Data and Services¹ will change production, logistics and work processes in the future (Kagermann et al., 2014).

Industry 4.0 is more a vision than a reality, but the concept of Industry 4.0 is now shaping the digital discourse in Europe (Drath & Horch, 2014). The paper is focused on two key questions, which guide this paper:

- What is Industry 4.0?

¹The concept Industry 4.0 involves many elements of the industrial value chain and it is based on the Internet of Things, Data and Services, sometimes called the Internet of Everything.

- What demands does Industry 4.0 place upon research and innovative policy in Europe?
 Does Industry 4.0 need Europe and the European Common Market?

2. What is Industry 4.0?

Industry 4.0 or the Fourth Industrial Revolution, is the current trend of automation, cybernation and data exchange in manufacturing technologies². It is based on the Internet of Things, Data and Services and creates what is called a "smart factory": Within the modular structured smart factories, cyber-physical systems (hereafter "CPS") monitor physical processes, create a virtual copy of the physical world and make decentralized decisions (Herman et al., 2014). Cyber-physical systems communicate and cooperate with each other and with humans in real time via the Internet of Things. Services are offered and used by participants of the value chain via the Internet of Services (Platform Industrie 4.0, 2015).

In the context of the Fourth Industrial Revolution researchers and industry representatives also discuss about a new organisation and steering of the entire value chain, which is increasingly becoming aligned with individual customer demands. The value chain covers the entire lifecycle of a product, from the initial idea through the task of developing and manufacturing it to successive customer delivery as well as the product's recycling. Growing digitisation brings us to the "second machine age" (Brynjolfsson & McAfee, 2014). This is due to the fact that data forms the material of this Fourth Industrial Revolution.

Fourth Industrial Revolution is based on CPS. Comparison with the previous levels of industry, see table 1.

Table 1: Industrial revolutions one to four: the level of complexity

	Level of complexity	Time period
The First Industrial Revolution	mechanical production facilities using water and steam power	end of 19th century
The Second Industrial Revolution	diversified mass production using electric energy	beginning of 20th century
The Third Industrial Revolution	further automation of production through use of electronics and IT	beginning of 1970s
The Fourth Industrial Revolution	on the basis of cyber-physical systems	nowadays

Source: Spath et al., 2013

The concept Industry 4.0 is based on networking. Large amounts of data (big data) is generated as a virtual copy of the physical world. Whoever can access this limitless data treasure, will benefit, above all from flexibility and efficiency. Industry 4.0 could become a result of this ongoing digitisation in which everything along the value creation chain is networked and all of the relevant information can be independently and directly exchanged between the individual chain links. Linking people, objects and systems will lead to dynamic, real-time-optimised and self-organising, cross-company value added networks that can be optimised according to different criteria, for example cost, availability and resource

²Although Industry 4.0 is currently a top priority for many companies, research institutions and universities, a generally accepted understanding of the term does not exist. As a result, discussing the topic on an academic level is difficult.

consumption (Plattform Industrie 4.0, 2015). List of the Industry 4.0 drivers and their consequences, see table 2.

Table 2: Industry 4.0 drivers and their consequences

Industry 4.0 drivers	Industry 4.0 consequences
More automation	Networking Smart objects Sensors & actuators Big data Powerful processors, low-cost mass storage, embedded systems Human-machine collaboration
Decentralised control	
New business models	
More data	
Delimitation of work	
Accelerated value creation processes	
Flexibility	
Personalised customer wishes	
More efficient resource usage	
On-off production	

Source: Ganz, 2013

In the future, the objects could communicate with each other directly and independently. They consult one another about what should happen to them next. This means that objects will become machine-readable. Thus, products will be able to express many things. Sensors and actuators will ensure that the data from scanners and computers can be distributed and processed directly. The Internet of Things and Services is the result and it promises to merge the physical and the virtual world into CPS (Wan et al., 2015)).

The guiding theme of the future developments outlined above seems to be: “anything that can be digitised will be digitised” and accordingly, the scenario of the future developments is ambitious. Researchers and industry representatives emphasize the opportunities of the concept Industry 4.0: Real-time networking of industrial processes makes production cheaper, sustainable and efficient and digital networking allows the direct involvement of customer demands. The IT and TC sectors will be the first to see the benefits. Creators and providers of software solutions for big data analysis, networking and digitisation can most likely look forward to increases in orders. Many more industries, however, will probably be deeply impacted by Industry 4.0 developments: machine and facility engineering, electrical equipment manufacturers, the chemical industry, car makers and their suppliers, but also the logistics industry as well as agriculture.

In a study for the industry association BITKOM (Ganz, 2014) estimated productivity gains in Germany of around €78 billion in six sectors over a period of ten years. A yearly sectoral average of 1.7 per cent could be achieved as additional gross added value (see table 3).

Table 3: Opportunities for growth in Germany with Industry 4.0 (purely relative observation of the potential Industry 4.0 for the six selected sectors)

Economic sectors	Gross added value in billions of euros		Potential from Industry 4.0	Annual increase	Increase in billions of euros
	2014	2015	2014 – 2025	2014-2015	2014 – 2015
Chemical industry	40,08	52,10	30%	2,21%	12,02
Motor vehicles and automotive parts	74,00	88,80	20%	1,53%	14,80
Machinery and facility engineering	76,79	99,83	30%	2,21%	23,04
Electrical equipment	40,72	52,35	30%	2,21%	12,08
Agriculture and forestry	18,55	21,33	15%	1,17%	2,78

Information and communication technology	93,65	107,70	15%	1,17%	14,05
Joint potential of the 6 selected branches	343,34	422,11	23%	1,74%	78,77
Exemplary extrapolation for the total German economy*	2326,6*	5593,03*	11,5%*	1,27%*	267,45*

*The total includes the potential for Industry 4.0 for the six selected sectors as well as the projection for the remaining sectors the assumption that the six sectors amount to 50% of gross added value.

Source: Spath, 2013

The issue of the Industry 4.0 has been analysed and is driven from a technical standpoint. However, Industry 4.0 arises in the interaction of many different actors. It radiates outward with multiple thematic issues: innovation policy, social and technological standards, business models, organization of work and changing labour market (Picot & Neuburger 2014).

Special attention is payed to innovation policy promoting networked thinking, openness and exchange to strengthen companies absorptive capacity in schools and universities, in vocational training and further education programs. It can stimulate collective learning, also by integrating non-research-intensive enterprises, so that new technologies and new knowledge can diffuse more quickly. Innovation policy can promote the creation of interdisciplinary project coalitions and competence centres through competitions or initial project funding. It can support the transfer of basic research findings into application development through real-world experiments, that demonstrate these future technologies (ILO, 2016).

3. Industry 4.0 needs Europe and the European Common Market

The European Commission and the European Parliament try to support Europe's (re) industrialization with the research framework programme Horizon 2020, which is the financial instrument implementing a flagship initiative aimed at securing Europe's global competitiveness. It seems advisable to develop system solutions in European networks, in order to occupy a stronger position at a global level (Horizon 2020, 2016).

The European Union could evolve into a global market for Industry 4.0. A global market is a geographically demarcated market that promotes innovation through favourable local preferences and conditions. Successful providers encounter critical users and differing needs. It is not about reinvention, but about cooperation. Everyone will benefit from the greater number of cases in European wide research and application projects, will gather experience, learn from one another and develop common standards – with regard to data privacy, protection and security (e.g., European cloud infrastructures, digital interior markets or European legal frameworks) (Horizon 2020, 2016).

Industry 4.0 is precisely where two differing standard regimes meet: one from the IT sector that is more greatly influenced by US standards and another regarding machine, facility and vehicle engineering, which is more European (Segura-Velandia et al., 2016). The interesting question is which regime will prevail. If there is a doubt, one should also look to the sheer size of the market. Europe still has a stronger global industrial market place than the US. There are nearly 800 million inhabitants on the continent – the 28 (27 in the future) European Union member states make up population of half a billion. Therefore, Europe should reflect on its strengths – but loose no time in picking up the pace and intensity to establish dominance in the most important areas at an early stage. Economic integration remains one of Europe's major

strengths, which is linked directly to the size of the market – a huge advantage when it comes to setting standards. Unfortunately, these opportunities are still neglected far too often, as the economic actors follow their own short-term national interests. Moreover, many EU policies still permit considerable national discretion. This leads to fragmentation and small-time plays that miss the big win. Common standards, norms and rules could make a major contribution to more positive integration and cohesion, and therefore to more growth and social progress (Enderlein & Pisani-Ferry, 2014).

4. The Czech National Initiative of the Industry 4.0

The Ministry of Industry and Trade of the Czech Republic, released the National Initiative 4.0 Industry (MPO, 2015) in September 2015, which follows the concept of German Industry 4.0. Czech initiative is a challenge to launch a debate on the possible impacts of the introduction of the 4.0 Industry in Czech economic environment. The aim of this initiative is to encourage the creation of a suitable economic environment in which the Czech industry will respond to the challenges of new industry trends. It is expected that many jobs will disappear and new ones will emerge in the future on the Czech labor market. An important element will therefore be the creation of lifelong learning (Kotýnková & Krebs, 2015).

Technological progress is driven by research and development (hereafter R & D). Paul Romer's model for endogenous growth provides theoretical explanation: the greater the proportion of an economy's labour force involved in research sectors, the stronger that economy's growth. Since its inception, many innovation analyses and innovation-policy approaches have been following this principle all over the world. The formula is then: more is better. That means one can invest as much as possible in research and development and supposedly sit back and watch the positive effects on production and the blossoming market (Romer, 2016). Importance and position of R & D is in the Czech Republic slightly below the EU average: the share of expenditure on R & D was 2% of GDP over the period 2012-2014, the average expenditure on R & D in the EU was 2.5% of GDP. But in the developed European countries (Sweden, Great Britain, Denmark), these expenses amounted to 3% of GDP. The share of employees in R & D per 1,000 employees was 13 employees in the Czech Republic, in developed European countries amounted to 20 employees per 1,000 in the years 2012-2014 (ČSÚ, 2015).

5. Conclusion

In the future, companies will network their equipment, storage systems, resources, employees, supplier and partner companies and their customers via cyber-physical systems. There is enormous potential behind Industry 4.0: individual customer demands can be taken into account and even one-off, tailored production may become profitable; production will become faster and more flexible; this reduces the resource usage and improves productivity. Employee productivity may also greatly improve. The result of Industry 4.0 will be in the future, that many labour processes will be carried out more efficiently and effectively by cyber-physical systems. The processes will also provide a variety of new assistance systems. This means that administration processes will be further automated as well.

Special attention is paid to innovation policy promoting networked thinking, openness and exchange to strengthen companies absorptive capacity in schools and universities, in vocational

training and further education programs. Innovation policy will support the transfer of basic research findings into application development through real-world laboratories, living labs and factories that demonstrate these future technologies. This, in turn, encourages communication and cooperation and prepares the ground for further technical innovations.

Europe itself must be understood as an opportunity for Industry 4.0. As a global market, it has the potential to set standards worldwide, for data privacy, protection and security (e.g., European cloud infrastructures, digital interior markets or European legal frameworks). Industry 4.0 is precisely where two differing standard regimes meet: one from the IT sector that is more greatly influenced by US standards and another regarding machine, facility and vehicle engineering, which is more European. The interesting question is which regime will prevail. If there is a doubt, one should also look to the sheer size of the market. Europe (still) has a stronger global industrial market place than the US. There are nearly 800 million inhabitants on the continent – the 28 (27) European Union member states make up population of half a billion. Therefore, Europe should reflect on its strengths – but loose no time in picking up the pace and intensity to establish dominance in the most important areas at an early stage.

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Industry 4.0 still has to prove its benefit to society. Only when the developments within and around Industry 4.0 result in social added value, when new technologies, regulations, services and organisations establish themselves in the society and when these social practices prove to be “better for people”, we will have recognised and put the potential for Industry 4.0 to work (Shestakov, 2016).

We are now at the beginning of a fundamental debate on the consequences of Industry 4.0 for the world of work (Edwards & Ramirez, 2016). If widespread predictions are correct, the digitisation of production can mean the extinction for millions of jobs. Innovations may seem grandiose, but they can also be destructive, rendering entire professions obsolete. High unemployment has a negative impact on people’s life (Wadsworth at al. 1999), however could emerge as a new feature of Industrie 4.0.

Acknowledgement

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IMPACT OF GLOBALIZATION ON ACCESS TO PROCESS BUSINESSES MANAGEMENT

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Abstract. More and more enterprises operating on domestic and foreign markets in the present era of globalization approaches the transition from traditional management to process management. Implementation of process management in the enterprise leads to the creation of process-controlled enterprise in which each strategic decision to implement the optimization of business processes through a certain degree of change or improvements in business processes, for example the impact of technological equipment, support of information systems and others. Improving processes is to find and implement measures through which rectify the situation and increase the performance of the process being monitored. By identifying and visualization processes, it creates the basic framework the company, namely the processing system. By compilation of process visualization system is necessary to identify the logical links processes and their interactions. When measuring and evaluating the monitored levels of these processes, and by selected characteristics and performance indicators of their respective individual processes are evaluated. The paper is focused on the characteristics of the area of process improvement, special attention is paid to the analysis of approaches for visualizing process model. The aim is to highlight the possibilities of visualization process models with the analysis of secondary sources of information in the field of business process improvement and process management and analysis tools to model the process. Visualization is a tool that enables identification of points for improvement, provides a comprehensive assessment of possible proposals for amendments.

Keywords: process business management, visualizing process model, globalisation

JEL Classification: F68, L26, O25

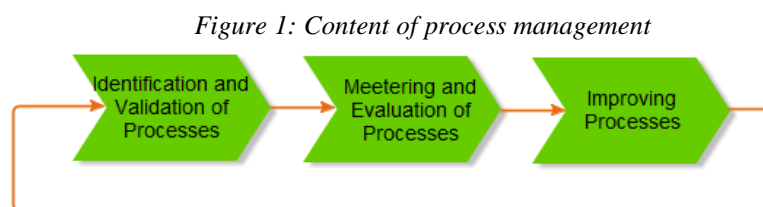
1. Introduction

Processes associated with internal and external business activates are a part of every business. Several definitions of a business process are stated in the professional literature. In the majority of them it is possible to find a common concept, namely that a business process is made of an aggregate of mutually linked activities and their result represents a value for the customer. Staněk (2003) states that a business process is a sequence of activities performed repeatedly, whereby it has an exactly determined beginning and end. The beginning of a process is created by inputs into production and the end is represented by the output. The course of the process together with the outputs may lead either directly or indirectly to the

creation of end value for the customer. Hammer and Champy (2000) add to the basic characteristics of a process that they are made up of smaller sub-processes, or operations, which can be depicted on a map of sub-processes. (Štofko et al., 2016) It is also possible to characterize a process as a sequence of partial activities with a common aim. The entire process is kicked off on the basis of a triggering signal, and an output for the customer is gradually created according to the defined sub-processes with the use of assigned resources. (Džubáková & Lichnerová, 2012)

2. Starting points for the issue of process management of a business

Process controlling, also called process management, can be defined as a methodology for analysis, evaluation and improvement of the fundamental and most important processes in a business. Work in a business is managed as a purposeful process made up of interconnected and logically arranged sub-processes. Process management derives from the fact that each product in a business is created by a sequence of certain activities labelled as a process (Tucek & Mikeska, 2015). With respect to this fact a new method of depicting organizational relations in the form of a process diagram arose in the process management of organizations. A process diagram includes all activities in the scope of a process, the links and sequences between these processes and also the workers responsible for them. (Tuček & Zámečník, 2007; Štofková & Schwedler, 2011) During implementation of process management, the creation of a model of business processes, by which their transparency is achieved, and the creation of the foundation for improving process or the removing of critical areas, are among the aims of the business (Zamecnik & Rajnoha, 2015).. The main task or content of process management is the reshaping of a business process in such a form that is more advantageous and more effective for the business; that is the improving of processes. This process includes identification, measuring and improving of all business processes (Fig. 1). (Závadský, 2004).



Source: Závadský, 2004; own processing

With identification and visualization of processes a basic skeleton of the business, that is a process system, is formed. For compiling a process system and its visualization it is necessary to identify logical links of processes and their mutual interactions. This part is also labelled as the modelling of business processes. During measurement and assessment the level of these processes is monitored, and through the selected characteristics and indicators of efficiency pertaining to them, the individual processes are evaluated. (Závadský, 2004)

During identification, measuring and improvement, it is possible to use Deming's PDCA cycle, which consists of the four steps:

- planning - analysis of the current status, data collection, determining of goals, process of implementation, sources,
- doing - performing of planned activities,

- check - comparison of achieved parameters with goals and
- act - in the case of success, the performing of standardization; in the case of failure, the cycle is repeated. (Štofková et al., 2015)

In addition to the PDCA approach another similar approach suitable for improving processes exists: this is the DMAIC method. DMAIC is based on five phases:

- define - is focused on finding and naming the aims of the improvement project in direct association with covering the needs of customers of the process,
- measure - contains the proposal of a complex control system of measuring and a set of measures which enable development of the improvement project to be monitored,
- analyse - the role of this phase is to evaluate data which was obtained in the preceding phase and using graphic, mathematical and statistical instruments to determine the reasons which cause a difference between the current efficiency of the process and the target state which was set in the first phase,
- improve – is focused on proposing variant solutions for problem locations of the process, or proposal of an improvement solution for fulfilling the aims of the process,
- control - the phase is sometimes labelled as the control phase; in addition to other things, it emphasizes that the results of the project must be not only implemented but it is also necessary to ensure their maintenance. (Svozilová, 2011)

ITIL is also devoted to the issue of improving processes. ITIL is a set of book publications which contain a collection of the best practices from professional management of information technology services. It is in the ownership of the British company AXELOS, Ltd. ITIL expanded Deming's PDCA cycle and defined seven degrees of improving processes: identification of strategies of improving, defining of measurable indicators, data collection plan, the gathering of data, analysis of information and data, presenting and using information, implementation of improvements. (ITIL)

The mentioned models for improving business processes have similar cycles, when after the changeover through all determined parts the process of improvement begins again (Zamecnik & Rajnoha, 2015).

3. Aim of the contribution

The aim of the contribution is to point to the possibilities of visualization of process models. In connection with fulfilment of the aim of the contribution, the associated partial tasks were resolved:

- with analysis of secondary sources of information from the field of improving business processes and process management,
- with analysis instruments intended for modelling processes,
- with responsible roles and assigned people as a Human resources responsible for the activities in the respective processes. (Tucek & Hrabal, 2014)

4. Analysis of instruments for the creation of process models

Many instruments and languages exist that are suitable for modelling business processes, and the majority of them record the process and its parts graphically, through graphic symbols.

The result of the modelling of processes is the creation of a process model for the business, or a so-called process map depicting all business processes and their relationships (Keil, 2016, Parsyak 2011). A process model captures the mutual relationships, both in the interior of a company and in relation to the external environment (customers and suppliers). We can characterise it as a structured description of reality, with an emphasis on exactness and transparency. With the creation of a process model it is possible to use these options:

- start from reference models, where emphasis is placed on the use of the best practices which were identified (in the given sectors) and which were included in the relevant reference model,
- map the business - i.e. all activities and processes running in the business. (Papulová, 2014)

The process model reflects the real status of processes; therefore, it's updating is necessary in the case that a change in requirements occurs. In the scope of this contribution selected approaches for modelling processes will be described. With respect to the universality of the description of the individual models, their application is worldwide. (Majerník, 2011)

Flow chart

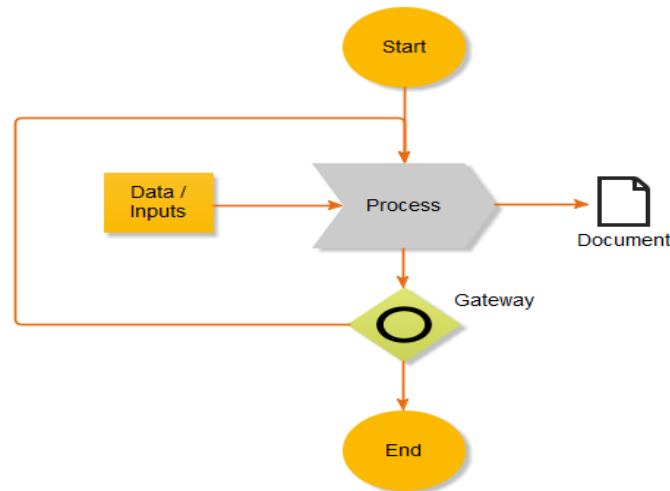
Frank Gilbreth, a member of the American Society of Mechanical Engineers (ASME), presented the first integrated form of a flow chart intended for documenting a process in 1921. It is often used when creating documentation of a system of managerial quality; however, it is most often used in informatics when programming. (Džubáková & Lichnerová, 2012) The process of creating a flow chart consists of two individual steps: carrying out analysis of individual activities in the framework of the process and compiling a drawing of the course of the process according to the facts determined in the preceding step. The virtue of a flow chart is the expressing of a process through the individual steps, which are logically linked to one another (Fig. 2.).

A flow chart is not suitable for the high-level depiction of a process, because it doesn't allow sub-processes running at the same time to be monitored. In contrast, it is usable particularly for the creation of low-level process maps. (Závadský, 2004)

IDEF group of methods

The IDEF method originated from the graphically orientated language SADT on the basis of the requirements of the United States Air Force. The goal was to create an environment for analysis and communication between people who are focused on increasing the productivity of production. In the IDEF group of methods variants IDEF0 through IDEF14 have gradually developed and are used with different purposes of modelling.

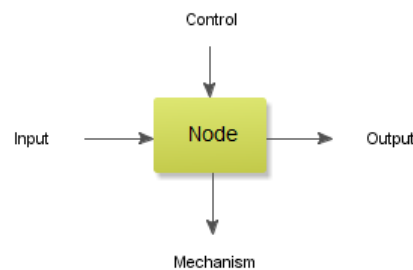
Figure 2: Basic symbols of flow charts



Source: Džubáková & Lichnerová, 2012; own processing

Analysis of processes is carried out on the basis of a top-down approach, and likewise with application of the ICOM (input, control, output, mechanism) system. IDEF0 is the most commonly used method from the IDEF group (Fig. 3). It is useful for extensive and complex processes, because it enables a digested recording of a function, information and objects in the scope of the process. At the same time a small number of symbols are used and they are simple and comprehensible.

Figure 3: Basic scheme of IDEF0



Source: Závadský, 2004; own processing

The IDEF1 method in its essence approaches an entity-relationship model. This is a simulation method focused especially on the description of dynamic components of a system, specifically the resources and consumption of these sources (Fig.4). Its main task is to help businesses with the systematic managing of information and requests. Construction of the model of a process consists of an entity, an attribute and a relationship. (Džubáková & Lichnerová, 2012; Závadský 2004)

While the IDEF0 method is labelled as a functional or process model, IDEF1 is more an informational model. Both mentioned methods are today used around the world.

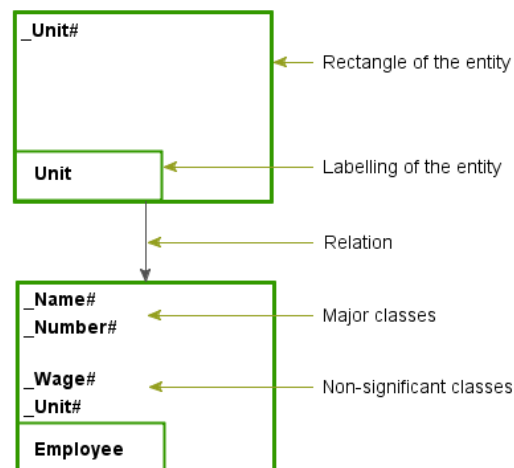
Unified Modelling Language

UML (Unified Modelling Language) represents a universal graphic language which serves for the visual description of any system. The development of UML was started in 1994 at the company Rational Software. Today this company is a component of the company IBM. In the past UML served especially for the support of the development of object-oriented systems, but

at present UML has become a general modelling language. In the framework of UML 13 basic diagrams have developed, which are divided into two groups:

- structural diagrams which represent exclusively the structure of the system and do not take a time dimension into consideration, and
- diagrams of behaviour, which are focused on time dependencies of sub-processes.

Figure 4: Diagram IDEF1



Source: Zavadský, 2004; own processing

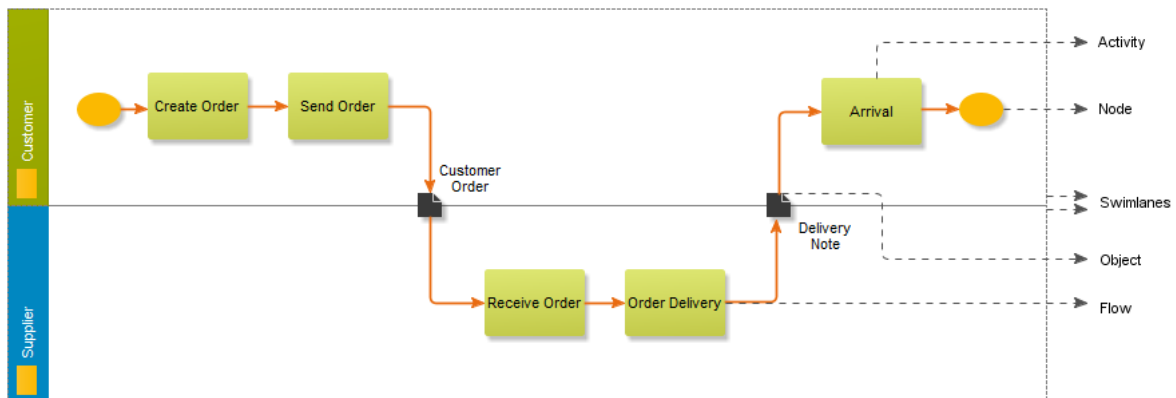
For description of processes an activity diagram, which depicts a process as a set of activities and the sequence between the individual steps and takes into consideration who is responsible for the given activity, is considered to be the most appropriate (Jelacic et al. 2015). This thus enables a dynamic view of a process. This is most often used for modelling business processes, illustrating algorithms, capturing the internal logic of complex operations or specification of the flows of events in a process. (Džubáková, Lichnerová, 2004; Zavadská et al., 2015). An activity diagram enables the description of the dynamic of the monitored system and offers a simpler overview of the steps the make up the process (Fig.5).

Business Process Management Notation

The BPMN (Business Process Management Notation) instrument represents a graphical representation serving for the modelling of processes; it was presented publicly for the first time in 2004 and originated thanks to the initiative of the BPMI (Business Process Management Initiative). It was created exclusively for the purpose of modelling business processes and unifying the notations of these processes (Daneshjo, 2012). The main aim of BPMN is that the diagram illustrated with the help of this representation is comprehensible and clear for all employees in a business that come into contact with it.

At present it defines only one diagram, namely the Business Process Diagram (BPD). This is based on the activity diagram and is made up of graphic elements which indicate the parts of a process. These elements must be exactly observed; however, it is possible to modify them with colour or add one's own supplementary elements to the diagram, which, however, cannot overlap the stipulated elements. (Džubáková & Lichnerová, 2012)

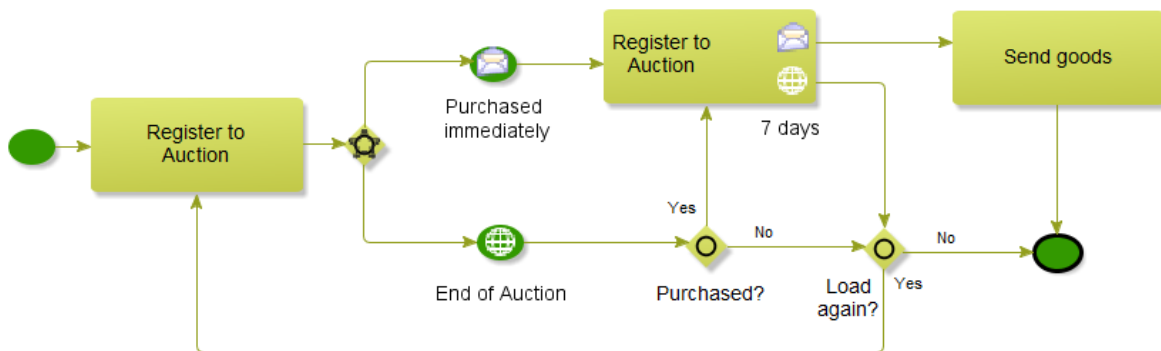
Figure 5: Execution of an order - activity diagram



Source: Džubáková & Lichnerová, 2012; own processing

The following figure offers the use of the mentioned method of depicting the process of an online auction recorded in the form of a BPD diagram (Fig. 6).

Figure 6 Auction - BPD



Source: Džubáková & Lichnerová, 2012; own processing

5. Results of work and assessment

Each of the presented methods is in some way specific and differs from the others. From this it follows that for modelling a specific process one method in particular may be more suitable and another method perhaps cannot be used for the modelling of this process. A flow chart is suitable for using especially with a detail description of a single specific activity, or with creation of a low-level process map. Its plus consists in particular in its clarity and easy creation. In contrast, it is not suitable for modelling complicated processes, especially for their multi-level depiction. It is most often used in informatics, with programming.

The IDEF0 method is suitable for modelling extensive and complex processes. The representation of a process using this method is simple and comprehensible, since it uses a small number of symbols. While the IDEF0 method represents a process model, IDEF1 is more an informational model. This method is focused on a description of the dynamic components of a system, specifically resources and their consumption.

The graphic language UML serves for a visual description of any system. One of the most suitable diagrams in the scope of UML is the activity diagram, which offers a dynamic view on the process in that it simply and transparently displays the sequence of steps that make up the

process. It is most often used especially when modelling business processes and for capturing the internal logic of complex operations. The main goal of a BPMN graphic representation is comprehensibility and clarity of the representation for all employees. Thus far, the only diagram in the scope of a BPMN is a Business Process Diagram (BPD). This is based on an activity diagram and is also suitable for modelling more complex business processes. Its advantage is, however, the fact that despite the exactly set graphical elements it is possible, as needed, to supplement an element necessary for modelling a process.

6. Conclusion

When improving business processes the identification and visualization of business process as well as measuring and assessing processes play a major role. In the contribution we focused on one of these areas – visualization – which represents different approaches of graphical capturing of a process. As mentioned, several approaches exist for modelling processes, and with each of them an instrument supporting the selected approach can be used, for example to create diagrams in the scope of BPMN with the aid of the 2c8 software tool.

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THE POSITION OF MICROBREWERIES IN THE CULINARY TOURISM IN THE CZECH REPUBLIC

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Abstract. The culinary tourism is a new phenomenon in the field of world tourist industry. It has been considered to be a new scientific discipline since 2001. In 2003, Erik Wolf founded the International Culinary Tourism Association that supports and popularizes culinary entities and their activities all over the world. In the Czech Republic, there are 44 active industrial breweries and 300 microbreweries. Although the microbreweries produce only 1% of beer consumption in general, they have become a popular tourist target of original beer fans. Some of them offer beer only; others prepare local traditional culinary specialities as well when striving to provide better services than their competitors do. This case study analyses a promisingly developing Rožnov brewery and beer spa called Rožnovský pivovar a Rožnovské pivní lázně. The brewery offers beer specialities and in its restaurant, the regional culinary products are served. In historical cellars, there is a beer spa, and the brewery also cooperates with other entities of tourist industry. The research has confirmed that the brewery makes use of destination management tools. Moreover, it cooperates with other business entities of tourist industry in Rožnov pod Radhoštěm, e.g. hotels, shipping companies, and with Wallachian Open Air Museum in the first place, which maintains folklore traditions. In case the brewery manages to group together the strongest and most important partners for a strategic cooperation, and forms a net, it can make a flexible international complex system out of the destination, which will be a driving force of the economic development.

Keywords: culinary tourism, beer, microbrewery, strategic cooperation

JEL Classification: M11, M31, R11

1. Introduction

Kulinářský turismus je mladé odvětví cestovního ruchu a je považováno za nový vědní obor. Jako samostatné odvětví začal fungovat až od roku 2001. V roce 2003 založil Erik Wolf International Culinary Tourism Association. Přesto je dnes odvětvím velice důležitým a jeho význam stále roste. Speciality Travel Agents Association dokonce označila kulinářský turismus za trend č. 1 v cestovním ruchu pro rok 2009.

Do roku 1992 existoval v České republice pouze jeden minipivovar, a to minipivovar U Fleků v Praze. V roce 1992 byl otevřen Hotel a minipivovar Pegas v Brně. Po rušení průmyslových pivovarů začal boom minipivovarů, jako odpověď na unifikovanou chuť pív, které získaly nelichotivý výraz „europivo“. V současnosti (2016) se odhaduje, že je v České republice v provozu 300 minipivovarů. Některé nabízí pouze pivo, některé i jídlo, mnohá jsou

spojena s ubytovacími službami. Existuje malá skupina minipivovarů, které provozují vlastní pивní lázně.

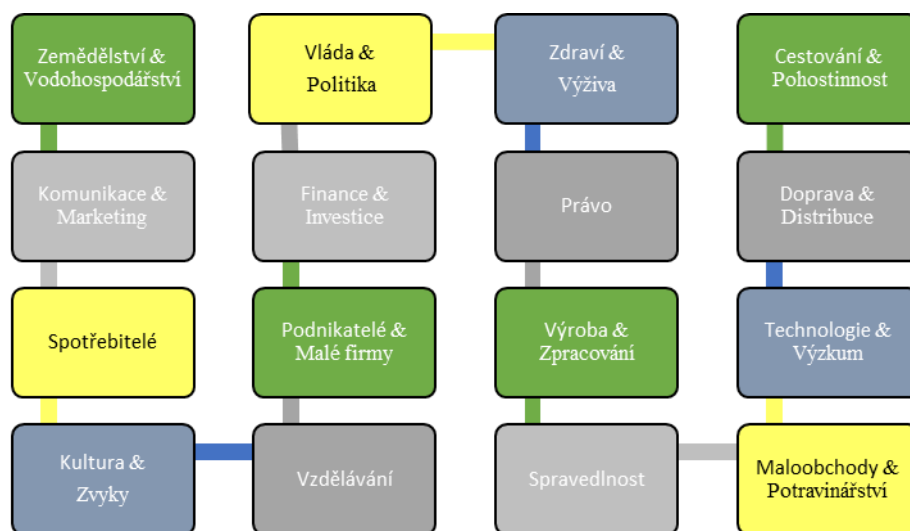
2. Kulinářský cestovní ruch

Pojem „kulinářský cestovní ruch“ (Culinary tourism) použila poprvé Lucy Long v článku Culinary Tourism – A folkistic perspective on rating and otherness (Long, 1998). Lucy Long působí na Univerzitě v Pensylvánii a překvapivě není oblastí jejího vědeckého bádání cestovní ruch, ale folkloristika. Tento fakt dokládá provázání cestovního ruchu s jinými vědními obory a také skutečnost, že jídlo a pití je zapotřebí chápat jako nedílnou součást kultury, tradic a kulturního dědictví. V roce 2004 pak vychází kniha od stejné autorky s názvem Culinary Tourism, která obsahuje i původní článek z roku 1998. Přibližně ve stejném období se objevují publikace s tématem food tourism, které se zabývají fenoménem jídla v cestovním ruchu. V roce 2003 vycházejí knihy Food tourism Around the World: Development, Management, and Market (Hall a Sharples) a Tasting tourism: Travelling for food and Drink (Boniface, 2003). Publikace Food tourism od Aleka Clarka vyšla v roce 2011. O významu kulinářského cestovního ruchu svědčí i vědecká konference s názvem Evropský kulinářský cestovní ruch (European Culinary Tourism), která se konala v roce 2011 ve Vídni. Konference se zúčastnila řada odborníků na kulinářský cestovní ruch - zejména Erik Wolf, prezident a zakladatel Mezinárodní asociace kulinářského cestovního ruchu a profesor Michael C. Hall – autor řady publikací s tematikou kulinářského cestovního ruchu. Kotíková (2014). Konference se zúčastnil i zodpovědný řešitel Vratislav Kozák s příspěvkem Beer Tourism In Border Regions As Of Culinary Attraction a Věra Kozáková vystoupila s příspěvkem Culinary Tourism around Bata Waterway.

Zakladatel International Culinary Tourism Association Erik Wolf (Wolf, 2016) v mailu pro řešitele projektu konstatuje, že jídlo a pití jsou dvě věci, které si musí 100% turistů zakoupit. Přesto si obyvatelé a návštěvníci ne vždy uvědomují, jak pozoruhodné jídlo a pití existuje v oblasti. Skvělé jídlo a pití jsou základní motivací pro návštěvníky. Proč posílat turisty domů se vzpomínkami na hamburgery v řetězcích a obdobně kávu z řetězců? Nepřijedou zpět a nebudou mluvit o svých zážitcích a vzpomínkách na jídlo a pití. "Skvělé jídlo a pití" je tak mnohem více než "dobré restaurace, pivovary a vinařství." Nabídka místních potravin a nápojů je součástí komplexního systému ekonomického rozvoje, která se nazývá GeoCulinary.

Spilková (2014) se zabývá funkcí propojovacího orgánu, který by vytvářel spojení mezi venkovskou turistikou a regionálními produkty. Potenciál kulinářského cestovního ruchu a podporu jeho rozvoje řeší Otterbacher (2013). Mason (2012) upozorňuje na nutnost sledovat spokojenost a emoce návštěvníků a jejich subjektivní vnímání. Horng (2012) se ve svém příspěvku soustředil na komunikační strategii pro rozvoj místního kulinářského cestovního ruchu a způsoby vytváření marketingových strategií, Horng (2012) se v malém výzkumu zaměřil na kulinářskou oblast jako na značku. Nad možnostmi dalšího rozvoje pивní kultury v Belgii a ve Vlámku se zamýšlí Van Roy (2007). Obdobné téma, ale pro oblast centrálního Ontaria v Kanadě, zpracoval Plummer (2005). Vinařská turistika byla hlavním motivem příspěvku Carlsena (2015), Alonso (2015) a Nella (2014).

Figure 1: Geokulturní potravinářské ekonomické forum & související pracovní skupiny. Mnoho hlasů zpívajících dohromady tvoří sbor příležitostí.



Source: vlastní zpracování dle Wolf, 2016

Česká republika je světově známá svým pivem, kterého Češi na osobu spotřebují 140 litrů ročně. Druhý rekord drží Česká republika v počtu minipivovarů na jednoho obyvatele. V současnosti je v provozu více než 300 minipivovarů. Některé z nich vyrábějí pouze pivo, jiné ve snaze lépe obstát nabízejí i kulinářské speciality.

3. Rožnovský pivovar a Rožnovské pivní lázně

Prostory nefunkčního pivovaru byly vráceny v restituci. Majiteli se stali Tomáš Kupčik a Jaromír Beneš, kteří po rozsáhlé rekonstrukci vrátili pivovaru jeho původní slávu. V současnosti se v pivovaru nachází měděná varna, které pravidelně a nejčastěji produkuje: světlý ležák Radhošť 11 %, světlý speciál Rožnov 13 % a polotmavý speciál Rothschild 13 %. V letních měsících jsou oblíbenými pivy citrónové a višňové speciály, které mají obvykle okolo 11 % alkoholu. Ke zvláštním příležitostem se nejvíce hodí Medové 300 let, označení 300 let představuje oslavu 300 let od založení Rožnovského pivovaru, které se pyšní 30 % extraktem původní mladiny. Respektive sládcí získali ze sladu 20 % extraktu původní mladiny a zbylých 10 % doplnili medem. Výroba tohoto speciálu trvá 10 týdnů a pivo je většinou k dostání okolo Vánoc. Alternativou tohoto piva je Medový speciál, který vznikl jako velice povedený výsledek experimentu, oproti Medovému 300 let je slabší, a přídavek medu je tvořen ze 7 %. Dále širokou nabídku pivovaru tvoří: světlý American Pale Ale 11 %, černý ležák Čert 12 %, pětisladový ležák Žerotín 12 %, polotmavý speciál Gutmann 16%, tmavý speciál Habsburg 16 %, světlý speciál Baron Armín Popper 16 %.

Majitelé Tomáš Kupčik a Jaromír Beneš usilují o naprosto jedinečný přístup ke svým zákazníkům z hlediska lázeňství. Jejich cílem bylo vybudovat lázně naprosto odlišného a nového druhu. Podle mého výzkumu se jim to nejenže povedlo, ale zároveň vnikly myšlenku pro vznik obdobných lázní i jiným podnikatelům. Avšak „TO NĚCO“, co je odlišuje od ostatních, zůstává stále jedinečné. Tuto jedinečnost pocítí každý člověk již při samotném vstupu do prostoru kavárny nebo pivnice. Jejich cílem je „...skloubit prvky alternativního léčitelství vycházejícího z prastarých technik starých Egyptanů a východních kultur s běžnými i

méně běžnými lázeňskými a fyzioterapeutickými postupy“ (Rožnovské pивní lázně, 2015). „Díky osobním zkušenostem totiž hluboce věříme, že pouze skrze dosažení harmonie těla a duše lze žít šťastný život v lásce, radosti, zdraví, hojnosti a prosperitě“ (Rožnovské pивní lázně, 2015).

Rožnovské lázně svým zákazníkům nabízejí možnost stoprocentní relaxace v hluboko položených sklepních prostorách pivovaru. Lázeňské procedury začínají prohřátím celého těla v jemné bylinné parní sauně s peelingem, kde se tělo i mysl, pomocí páry a jogínské audionahrávky, uvolní a člověk se tak mnohem více naladí na samotnou lázeň v černém pivu. Koupele v černém pivu, včetně jeho samotné neomezené konzumace, již kdysi hojně využívalo lidové léčitelství. Vždyť už naše babičky i babičky našich babiček hojně využívaly léčebné účinky pivovarských kvasnic. Díky vysokému obsahu vitamínu B jsou výborné na pokožku i na pleť. V rámci koupele se vám tak dostane intenzivní „doping“ vitamínu B do pokožky díky pивní lázni, do pleti díky obličejové kvasnicové masce a samozřejmě také samotnou konzumací piva, vyráběného přímo v pivovaru.

Spektrum poskytovaných lázeňských služeb je široké. Lázně svým zákazníkům nabízejí alternativní léčebné techniky, avšak pro ty, kteří svou důvěru do alternativních postupů nekládají, lázně nabízejí také klasické fyzioterapeutické masáže, jako např.: masáž lávovými kameny, bambusová masáž, čokoládová či medová a jiné. Díky znalostem rituálů z Fidži jsou tak školené lázeňské schopny zákazníkům poskytnout tu nejlepší péči, od nejrůznějších zábalů, jako například: peeling třtinovým cukrem, parafinové zábaly, omývání kokosovým mlékem, hydratační zábaly z kokosového oleje, zábaly minerálním Krymským bahnem anebo zábaly do banánových listů.

"Nemůžete být milovaní, pokud nemilujete sami sebe. Nemůžete cítit radost, pokud věříte, že svět a lidé v něm jsou zlí. Nemůžete žít v hojnosti, pokud věříte, že hojnosti je nedostatek. Vydejte se společně s námi na cestu objevování dosud nepoznaného vnitřního světa. Možná Vám dokážeme změnit Váš pohled na svět a pohled na sebe sama. Někdy i jedna věta nebo setkání s jediným člověkem dokáže změnit celý život. Všichni máme právo žít úžasný život a naším přáním je Vám na této cestě třeba jen trochu pootevřít dveře“ (Rožnovské pивní lázně, 2015). Ondryášová, 2016.

Výzkum potvrdil, že Rožnovský pivovar využívá prvky destinačního marketingu. Spolupracuje s dalšími subjekty cestovního ruchu v Rožnově pod Radhoštěm, například s hotely, dopravci a především s Valašským muzeem v přírodě, které udržuje folklórní tradice. V rámci pobytových balíčků v Rožnovských pивních lázních se zákazníkům nabízí výběr ubytování v místních hotelích. Zájemce si může hotel vybrat podle ceny nebo nabízených služeb. Pro uživatele balíčků se nabízí přeprava zdarma z nádraží a mezi hotelem a Rožnovskými pивními lázněmi. Dále lázně nabízí možnost 50% slevy do Valašského muzea v přírodě, neboť kulinářská turistika a folklór se vzájemně doplňují a obohacují. Pokud se pivovaru podaří sjednotit nejsilnějších a nejdůležitějších partnery do strategických kooperací a vytvoří síť, může z destinace vytvořit rychle, pružně a tržně jednající komplexní systém, který bude motorem ekonomického rozvoje.

4. Pivovar, restaurace, penzion a hotel ČERNÝ OREL v Kroměříži

„Tříhvězdičkový hotel a penzion Černý Orel - Pivovar, Hotel, Penzion se nachází v historickém centru Kroměříže, pouhých 200 metrů od věhlasného zámku se zahradami, které se spolu s ním nacházejí na seznamu světového dědictví UNESCO. Nabízí bezplatné Wi-Fi, pivovar a restauraci vyznamenanou řadou cen. V ceně ubytování je konzumace 3 piv. Černý Orel sestává z hotelu a penzionu. Pokoje jsou vybaveny ledničkou, posezením a satelitní LCD TV s USB portem. Černý Orel nabízí také prostor pro pořádání společenských akcí. Restaurace podává tradiční pokrmy české i mezinárodní kuchyně. Černý Orel točí různé druhy piva, od tradičních českých ležáků přes Hefeweizen německého typu až po hořká piva belgického typu. Pivovar Černý Orel nabízí pravidelné prohlídky s průvodcem.“ (Černý orel – Pivovar, Hotel, Penzion, © 1996–2016)

Analýza marketingového mixu služeb vyznívá pro hotel příznivě. Veškeré služby jsou na vynikající úrovni, včetně vystupování a přístupu personálu. Černý Orel nabízí i pobytové balíčky podle zaměření klientely a ročního období. Jedinou (ale významnou) nevýhodou je absence wellness služeb, které má Černý Orel sjednány smluvně. Hosté jsou stále náročnější, a nemají zájem, zvláště v zimních měsících, přecházet do jiných zařízení. Absenci wellness, jako konkurenční nevýhody, potvrdila i analýza konkurence.

Z průzkumu, který prováděla Dagmar Danielová (2013) u náhodně vybraného vzorku 184 respondentů vyplynulo, že si téměř 60 % dává přednost hotelů s wellness, 15% tuto skutečnost nerozlišuje a asi 25 % respondentů wellness nevyžaduje. Výsledku průzkumu autor konzultoval se zakladatelem Institut rozvoje služeb & wellness. Výsledky se dají shrnout takto:

- nabídka wellness se pro hotely stává nezbytností
- wellness je obtížně provozovat se ziskem, zisk přináší vyšší obsazenost hotelu
- wellness zvyšuje nebezpečí úrazu hostů
- nutno rozlišovat plavkovou a bez plavkovou zónu, obdobně společné či privátní wellness za příplatek

Na základě analýz a po konzultaci s provozovatelem hotelu bylo rozhodnuto, že Černý Orel zřídí pivní lázně po vzoru Rožnovského pivovaru. Lázně budou zhodnocovat druhotné suroviny vzniklé při přípravě piva – především výstřelky, mláto a kvasnice. Na základě analýzy požadavků klientů budou součástí wellness i sauny a masáže.

Návrh projektu vybudování pivních lázní, sauny a masáží byl podroben časové, nákladové a rizikové analýze. Provozovatel zvážil podklady a v současné době (červen 2016) práce na wellness pokračují. Černý Orel bude pro své klienty nabízet nejen kulturní a historické zážitky, ale i relaxaci a obnovu sil ve vlastním wellness. Základní podmínkou je však jeho správné provozování, včetně výběru a proškolení personálu.

Z možného zneužití konkurencí nemohou být publikovány podrobné údaje.

5. Conclusion

Tato případová studie analyzuje dva minipivovary, které vyrábějí pivní speciály a nabízejí regionální kulinářské produkty. První z nich ještě zřídil a úspěšně provozuje pivní lázně a využívá folklórních tradic. Druhý minipivovar sází na luxusní ubytování v historické Kroměříži, využívá možností turismu a na základě průzkumu připravuje projekt pivních lázní. Úspěšný rozvoj obou minipivovarů dává za pravdu zakladateli International Culinary Tourism

Association Eriku Wolfovi, že jídlo a pití jsou dvě věci, které si musí 100% turistů zakoupit. Skvělé jídlo a pití jsou často primární motivací pro návštěvníky turistického regionu. Proč posílat cestující domů s vzpomínkami na hamburgery a kávu z řetězců? Nepřijedou zpět a nebudou mluvit o svých zážitcích a vzpomínkách na jídlo a pití. "Skvělé jídlo a pití" je tak mnohem více než "dobré restaurace, pivovary a vinařství." Nabídka místních potravin a nápojů je součástí komplexního systému ekonomického rozvoje.

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METHODS AND MODELS OF PROJECT MANAGEMENT IN THE WORLD ECONOMY

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Abstract. In the world economy the project management is actively used by the public authorities, economic and social facilities to effectively accomplish the objectives of its development. The development of methodologies for the development and implementation of projects is an important condition for improving the development of managed objects. The aim of this paper is to outline the rationale for the recommended methods and models for use in the design and implementation of projects in Government. The study was conducted basing on the results of project management in the public administration central Federal District regions over a period of 5 years (2011-2015). Simulated and network project design model, econometric and expert prediction methods were used in the study. Based on the results of the use of methods and models we have developed an algorithm for constructing the project depending on the industry sector selected the control algorithm to enhance the effectiveness of the implementation of the project and ensure sustainable socio-economic development and improving governance. The conclusions and recommendations to the public authorities were made during the research to improve project management in various industries and occupations on the basis of economic-mathematical modelling and forecasting-analytical work in the process of drafting.

Keywords: the project method, model, algorithm, efficiency

JEL Classification: B41, C18, C53

1. Project management in global management

Problems of project management are explained by the influence of objective and subjective factors, including insufficient development of the structure of the methods and models recommended for use in the development and implementation of the projects, failure of the use of information technologies to the goals and objectives of the projects and the limitations of their practical application.

The historical roots of the concept of management of projects related to the works of classics of management, Gantt, A. Fayol, F. Taylor. Henry Gantt (1861-1919) was an American engineer, who proposed a new scheduling technique using horizontal charts in 1910. Subsequently, the Gantt chart has become a tool de facto, and the inventor was awarded the title of «father of technology planning». The Gantt chart was so serious analytical tool that for

nearly a hundred years had not been changed. And only in the 1990-ies, for a more detailed description of dependencies between tasks links have been added. A. Fayol (Henri Fayol, 1841-1925) - creator of classical control theory, identified five core functions of management, which became the basis for project management. The work of the author of "scientific management F. W. Taylor (Frederik Winslow Taylor, 1856-1915) became the prototypes for many of today's tools, including the hierarchical structure of the works (Work Breakdown Structure) (Bozhenyuk et al., 2015).

Early modern concepts of project management were formed in the mid 50-ies in the United States and in 60-ies they were developed in the West. The penetration of the ideology of project management in Russia also belongs to that time. However, the development processes of project management in the global economy and in the former USSR was different and isolated from each other. Formation of the market economy, "the world of project management" made a recognized project management methodology. Project development and implementation is an integral part of the civilized enterprise and human culture, becoming a professional area of expertise and activities. In the domestic economy development processes of project management have evolved anyway (Kossova & Sheluntcova, 2016).

Modern project management is a special type of management, which, anyway, can be used to control any objects, but not just objects with obvious characteristics of the project. This is confirmed by the results of the practical use of project management in a variety of areas of modern Russian management. Wednesday surrounding the project is seen as a source of risk; as a deviation from previous decisions.

1.1 Features of project management in Russia

Project management at this stage in its development is actively integrating into the management of organizations and enables public policy actors in the process of implementation of projects to achieve certain goals (Burkov & Burkova, 2012).

A dual situation has been arisen in the modern management of public projects. On the one hand, numerous programs and projects are approved in almost every direction of State and Municipal Government today. On the other hand, they are governed mainly on the basis of the functional approach, firmly rooted in the practice of the authorities in our country, despite the fact that the design approach necessary in order to transfer the implementation of the implementation of the state tasks to outsource. Only a few regional and federal authorities at this stage introducing the methods of project management in its activities. Their experience requires research and analysis with a view to expanding the scope of project management in the activities of the authorities (Vertakova et al., 2015).

Project management is combined (integrated) the Board of integration activities aimed at achieving desired results — goals. Integration activities of project management focuses first on problem management and change management.

Project management is an open dynamic system, which consists of interrelated works, interacts with the environment Wednesday, gaining from it the necessary resources and providing it with the results obtained, as well as under the influence of various risk factors.

The control system of bodies of state power is a set of processes and resource management tools designed to achieve the objectives of the public authority. The choice of method of achieving goals, respectively, the type of system control authority and state power is based on

the magnitude and urgency of changes that are included in the objectives related to the current state (Kozeva & Belyaeva, 2016).

The need for project management for improvement of policies implementation of public policies in terms of socio-economic transformation increases, the experience of introduction and implementation of project activities in bodies of state requires study and comprehensive analysis.

An integral aspect of successful project management in public authorities is an effective organizational structure. A lot of Government agencies generally used linear-functional structures. The prevailing socio-economic situation of these structures is not too profitable. A wide range of organizational structures from the weak matrix to the design is applicable in the framework of project management. This is especially true for organizations of a particular industry, for example in the sphere of culture.

Matrix structure in organizations culture will facilitate rapid and convenient interaction between units; optimizes information flow between the head of the Organization and employees; will determine the responsible project manager, coordinating and controlling all the project; it will improve internal climate within teamwork (Ganskau et al., 2010).

The diversity of processes occurring at the same time, can be represented as a set of social, technical, organizational, economic projects. If, on the one hand, continue developing the project management and if, on the other hand, leaders, who called to make decisions, will listen to the recommendations of professional project managers, the reforms, conducted in the country, will be more successful (Vertakova et al., 2015).

The need for project management to improve the strategies of implementation of the policy of public authorities in terms of socio-economic transformation increases, the experience of introduction and implementation of project activities in this area requires study and comprehensive analysis.

1.1.1 Methods and models of project management

Building the project is one of the main tasks of project management. For the development and functioning of the project there are different economic-mathematical methods on the basis of which it is implementing.

Development and implementation of the project should be implemented using special methods and forms of governance. In the practice of project management are now actively using methods of quantitative estimation of influence of factors on the results of the project.

In the simulation project using model to determine the effect of exposure to uncertain external Wednesday on the results of the project as a whole (Ershova et al., 2016).

Model in project management in the field of culture and art can be considered feasible and have a practical value only if the model reflected only the properties of the real system that affect the value of the selected KPI.

The main features of the projects, including internal development projects, are comprised of their standard structure and standard limitations. That is the standard time limit, cost of implementation and the quality of the results can be used to construct the generalized indicator of efficiency of the internal projects of public authorities through the assessment of arising deviations. These performance indicators suggest objective assessment of success of

implementation of internal projects, which can be used to develop approaches developing methods for evaluations of projects by exception model.

The current state of the methodology is the project management of complex estimates that take into account, on the one hand, a comprehensive analysis of deviations and, on the other, compliance projects, development strategy.

Based on the analysis of a large number of projects for each dimension standard metrics deviations that are typical for this type of projects were built - manipulating resources, temporal parameters, the results of the project. Proposed rules for defining integrated assessment deviations (PD) as average mark in three dimensions.

Here D1 (departure), D2 (cost variance) and D3 (deviation on quality of the product) are on a five-point scale, depending on the severity of the consequences of deviations. Weight metrics (K1, K2, K3) are selected based on how critical for this project (artist and/or the customer) is a type of deviation, and played the role of additional parameters, whose values are determined individually for each project depending on the valid (optimal) strategy changes in the project.

$$PD = \frac{\sum_{i=1}^3 (K_i \times D_i)}{\sum_{i=1}^3 K_i} \quad (1)$$

Measuring value (private deviation) can be calculated on the basis of special scales allowing classified deviations in terms of the severity of their consequences, for example:

- 0 – without loss;
- 1 – routine losses (project management plan);
- 2 – allowable losses (minor unplanned costs);
- 3 – unwanted losses (significant unplanned expenses);
- 5 – invalid losses (unplanned costs that are unacceptable for one or more project participants).

The proposed project performance assessment model allows taking into account the views of all stakeholders. Internal company projects are carried out in accordance with the company rules and standards of project management. Regardless of the level of knowledge of project management project implementation process in any organization includes several predefined stages (initialization, planning, execution, monitoring, conclusion). Each stage involves performing certain functions related to the management of time and cost parameters of project risk management, contracts, quality, etc. to these stages and functions and must be tailored to use to assess the effectiveness and getting the actual values. An integrated approach is focused on finding methodological approaches to the construction of the project management system at the level of the organization that actually sets the limitation of this approach.

Simulation and network models are used effectively in the development of projects Simulation model of project management in public administration is a formal description of the logic of functioning of the system of interaction between individual elements in time, taking into account the most significant causal relationship inherent in the public authorities, and to conduct statistical experiments. For the simulation there are practically no restrictions on the scope of their application, and the question may be only about the appropriateness of projects applied by public authorities and on the amount of labor in its development. Since the basis of simulation modeling is the method of statistical tests, the greatest effect of adoption is achieved

in the study of complex systems of public authorities, the functioning of which is substantially affected by random factors.

Network models are the primary organizational tool for project management. They allow for the scheduling of work, optimize the use of resources, reduce or increase the time it takes to complete the work, depending on their cost, organize operational management and control in the course of the project.

The effectiveness of project management depends on the organizational structure. The choice and design, analysis and creation of the organizational structure is important, complex, interdisciplinary, poorly structured and formalized activities.

Rational Management project is based on the relationship of the concept of the life cycle of the project, the project team and the project funding. The concept of the life cycle of the project stems from the need to organize a single nonbreaking process of achieving the goals of the project. The team concept of the project involves the construction of a single organizational structure responsible for the success of the project at all stages of its implementation. The concept of project financing is intended to provide the financial costs of the project amount and quality of work performed.

In the implementation of fairly complex large-scale projects and activities in the management of them can simultaneously receive the participation of different stakeholders, each of which can have its own project management team headed by a Manager with appropriate credentials and represent the project interests of the party.

Different stakeholders in the project have different expectations, roles, degree of responsibility and action. This is caused by the following: despite the fact that they are in the project partners working on the overall result, they may have different objectives in the project, different success criteria and assess the extent of achieving their goals, different values and strategies for achieving the goals. These differences significantly affect their staging of the project objectives, methods, tools, and technology solutions to management problems, focusing on their specific needs (Zinchenko, 2016).

Project management system has certain elements by introducing an original isometric configuration. This study will present only its two-dimensional version, including processes and project management functions in their close relationship.

Proposed by the Group of processes:

- initiation;
- planning;
- execution;
- monitoring and control;
- closing.

The project goal is not only situational impact on the team and other participants. Is the composition balanced activities that the project Manager and senior managers is carried out based on the formalized experience of generations of specialists in the project region not only of a particular object, but of the entire world business community. Project management implies a mastery of leadership, special tools, methods, and skills are procedural in nature. This approach ensures the reliability of results.

Further promotion of project management and enhancing its efficiency requires the development of methodologies and technologies of the new governance paradigm project activities.

For the adoption of the large-scale projects of a strategic nature models of linear programming (LP) are used. Linear programming is among the most common methods used to solve industrial and commercial tasks, as well as to build and manage the project.

Model LP should contain the objective function and some set of restrictions. The physical meaning of the objective function depends on the substance of the organizational tasks. In the tasks of production-economic nature of the objective function are most often represents a profit (maximizing) or cost (minimization). Constraints determine the valid values area managed variables, i.e. measurable quantities whose values are subject to optimization. Expressed through controlled variables of the target function and constraints constitute the model of organizational management.

Methods of analysis of networks are a powerful mathematical tool for solving technological, engineering and economic challenges. Advantages of these methods are their visibility and logical validity, natural approach of solving problems, small computing cost both in time and in memory. Network models as graphs can accurately describe many of the real system. Such models are more intuitive practices than other methods of operations research.

The network model is widely used in project management. Metody are applicable to projects when to achieve a specific purpose must be running an ordered sequence of jobs. There are two methods for managing projects:

- method for critical path (INC);
- method of evaluating and revising plans (Perth).

Practice and realization of projects in public authorities in recent years shows the effectiveness of this form of organizational and managerial activity. Despite the fact that this issue is now in the spotlight of domestic and foreign scholars and experts on the theoretical and methodological level, the analysis of specificity of project activities in the organs of state power and determining the main directions of its effective application remain insufficiently investigated. In this work, an attempt is made to consider the project activities as organizational and management model of implementing strategic goals and objectives of public authorities.

2. Conclusion

Project management in the public administration is based on certain principles and evaluation of economic-legal, socio-demographic and economic factors, the use of methods and forms of governance. Quantitative methods and models, based on statistical experiment, allow you to explore projects in view of the random factors. The simulation results contribute to the validity and effectiveness of the projects. The objectives of the project is the creation of an adequate organizational structure.

So, the development of public authorities contributes to the project activity as a mechanism for implementing process improvement. Optimization of the use of this mechanism in modern socio-economic conditions is based on algorithms of project management for different sectors and spheres of activity.

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APPLICATION OF A SELECTED METHOD OF MULTI-CRITERIA DECISION WHEN PREPARING FINANCIAL STATEMENTS ACCORDING TO IFRS AND CZECH ACCOUNTING STANDARDS

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Abstract. The article deals with selected theoretical and practical aspects of drawing up the financial statements in accordance with national and international accounting standards in conditions of the Czech Republic. Due to increasing globalization, international business development and interconnection of economies, the financial statement drawn up only in accordance with national accounting standards might not be sufficient. Means to ensure a comparability of financial statements in the international context are the International Financial Reporting Standards which today play the role in the harmonization of accounting. In deciding whether such a set of standards is to be applied in enterprises, it is necessary to take into account a number of criteria, while each of the defined criteria has a different degree of significance. In addition to a one-off transition to the international accounting standards, the possibility how to ensure the comparability of financial statements is a gradual implementation of selected provisions of International Financial Reporting Standards into national accounting regulations. Financial statements provide important information, therefore it is appropriate for them to be as meaningful as possible in a global perspective without significant differences according to national adjustments. The results of the analysis performed in industrial enterprises in a selected region of the Czech Republic show that the main obstacle to the application of these standards in accounting of enterprises are the high costs. The article contains the methods of description, comparison, analysis, synthesis, and selected methods of multi-criteria decision making.

Keywords: financial statements, IFRS, multi-criteria decision making, weight of criteria

JEL Classification: C60, M20, M41

1. Introduction

This article aims to choose by application of selected methods of multi-criteria decision such an accounting system that shows the greatest effect in assessment in terms of utility. Globalization today affects practically entire economy. The consequence of globalization tendencies is an expanding of a market space within which a business entity can be active. This

phenomenon increases the need to compare financial information from a global perspective, because national accounting systems are diverse due to different control methods, composition and content of financial statements.

The purpose of harmonization is not to strictly set a procedure how to account selected economic operations in the company, but to ensure that the information presented in financial statements are comparable. This is therefore the coordination of the internal logic of accounting.

Selected aspects of accounting harmonization in the world were dealt with by Barth et al. (2008) in their paper. Research findings confirmed the hypothesis that the quality of IFRS cannot be lower than the quality of domestic (national) accounting standards. Bartov et al. (2008) investigating voluntary compliance with IFRS in Germany found that the financial statements prepared in accordance with IFRS provide better information than the financial statements prepared in accordance with German accounting standards. Opposite conclusions is based on a research carried out in the same country by Tendeloo & Vanstralen (2005).

Influence of IFRS on accounting quality in Sweden was studied by Paananen (2008). The quality of financial reporting in this case did not increase immediately, but in the two-year period since the adoption of IFRS. Increase in the quality of accounting by the adoption of IFRS was also noted among the respondents in the research of Karampinis & Hevas (2011) or Escaffre & Sefsaf (2011).

2. Financial statements in the context of IFRS

Financial statements in general are governed by IAS 1 which follows the provisions of the Framework. The part of financial statements is a statement of financial position, a statement of comprehensive income, a statement of changes in equity, cash flow statement and commentary. The number of entities preparing financial statements in accordance with IFRS, according to Christensen et al. (2013), is increasing. In the Czech Republic, the preparation of financial statements in accordance with IFRS is mandatory for companies whose shares are traded on public markets. This fact had an impact on European equity market (Armstrong, et al., 2010 or Aharony, 2010).

IFRS will improve competitiveness and will help companies to improve their position (Hakalová et al., 2012). Findings of the study Yip & Young (2012) or Ahmed et al. (2013) show that by preparing the financial statements according to IFRS, the comparability of the information derived from the financial statements increased.

Information on assets and sources of their coverage is provided by the statement of financial position. The statement of financial position is prepared either in horizontal or vertical form. A statement of comprehensive income shows the costs and benefits of the entity. In addition to the costs and benefits the comprehensive income includes also changes in equity not induced by the owners. IAS 1 allows the preparation of the statement either in generic or purposive classification.

A mandatory part of the financial statements is a statement of changes in equity which covers transactions influencing the equity. A separate standard – IAS 7 – adapts a statement of cash flows which are presented in the statement as an operational, financial and investment activities. The statement is prepared by using either the direct or the indirect method.

An important part of the financial statements is a comment contributing to understanding of the content of the information provided in previous financial statements. Providing detailed information helps to use the financial statements for the further analysis.

Financial statements provide a basis for preparing financial analysis, therefore, it is desirable to respect all the principles, rules and procedures when preparing financial statements to follow the "true and fair view" (Meier, 2016).

Barth et al. (2008) found that firms applying IFRS and domestic standard could exhibit differences in accounting in the post-adoption period because they differed in the period before the firms applying IFRS adopted IFRS, i.e. the pre-adopted period.

3. Methodology

To achieve the objective of the paper authors used standard positivist economic methodology which also included the scientific methods of description, deduction, comparison, as well as study of legal sources and finally synthesizing methods.

The resulting utility determined by a method of the weighted sum is influenced by weight criteria, for the significance of these criteria is different. Criteria weights are determined by using of the Saaty's method (Saaty, 1980). The result of the criteria comparison is Saaty's matrix determined by (1),

$$S = \begin{matrix} & k_1 & k_2 & \dots & k_j \\ \begin{matrix} k_1 \\ k_2 \\ \vdots \\ k_i \end{matrix} & \begin{pmatrix} s_{11} & s_{12} & \dots & s_{1j} \\ s_{21} & s_{22} & \dots & s_{2j} \\ \vdots & \vdots & \ddots & \vdots \\ s_{i1} & s_{i2} & \dots & s_{ij} \end{pmatrix} & & & \end{matrix}, \quad (1)$$

where s_{ij} are elements of Saaty's matrix.

Standardized criterion weight v_i (2) is determined by the approximative methods, e.g. by geometric mean (3) proportion of the i -th criterion and the sum of the geometric mean of all criteria $\sum_{i=1}^n G_i$,

$$v_i = \frac{G_i}{\sum_{i=1}^n G_i}, \quad (2)$$

$$G_i = \sqrt[n]{s_{i1} \cdot s_{i2} \cdot \dots \cdot s_{ij}}. \quad (3)$$

In order to gain a relevant evaluation of the criteria significance in Saaty's matrix S , it will be necessary to verify its consistency using consistency coefficient CR (4),

$$CR = \frac{CI}{RI}, \quad (4)$$

where RI is the random index. CI is consistency index determined by the equation (5),

$$CI = \frac{\lambda_{\max} - N}{N - 1}, \quad (5)$$

where λ_{max} is the largest eigenvalue of the matrix and N is number of criterions. For more about consistency see Alonso & Lamana (2006).

The resultant utility of the j -th variant is determined by the sum of values c_{ij} (6),

$$c_{ij} = b_{ij} \cdot v_i \tag{6}$$

where v_i is weight of i -th criterion. b_{ij} is element of criterial matrix determined by the equation (7),

$$b_{ij} = \frac{a_{ij} - a_i^{min}}{a_i^{max} - a_i^{min}}, \tag{7}$$

where a_i^{max} expresses the highest (ideal) value of the i -th criterion, a_i^{min} the lowest (baseline) value of the i -th criterion. For minimization criterion is used equation (8),

$$b_{ij} = \frac{a_i^{max} - a_{ij}}{a_i^{max} - a_i^{min}}. \tag{8}$$

4. Application of selected method of multi-criteria decision

To solve the problem, it is necessary to specify the alternatives, where each alternative represents one of the possible ways to achieve goal (Krajčová et al., 2016). A decision-making body – the entity – selects out of five variants in total. These variants reflect the currently valid legislation of the Czech Republic and the worldwide trend towards harmonization of accounting. US GAAP is the accounting harmonization tool in the world, but owing to the ongoing process of convergence of US GAAP and IFRS, the US GAAP are not included in the set of variants. One other reason are also the findings of Barth et al. (2012) and Street et. al. (2000) stating that the accounting of companies applying IFRS is comparable to those who use US GAAP.

The first variant (V_1) reflects a situation where an entity keeps accounts in accordance with national (Czech) accounting standards as well as in accordance with IFRS. In case of variant V_2 the accounting is kept only in accordance with Czech accounting regulations, and in case of the third variant – only in accordance with IFRS. The fourth and the fifth variants are based on the gradual implementation of IFRS into national accounting standards and compliance with the IFRS system, either up to 10 years in case of V_4 , eventually 5 years in case of V_5 .

When assessing the utility, a total of five criteria that have different weights are taken into account. Criterion C_1 – costs (labour costs, the cost of training and education, the cost of accounting software). Criterion C_2 – difficulty level of understanding of financial statements (evaluated from a user's perspective and from a manager's perspective). Another factor influencing the final utility is C_3 – the possibility of entering the world's stock exchange. The fourth criterion evaluates the difficulty of keeping the accounting (in case of accounting, preparing the financial statements, as a basis for preparing the tax return for corporate income tax). The last criterion influencing the utility is C_5 – the quality and credibility of accounting and financial statements.

Data for the analysis were obtained from a questionnaire survey. The research was carried out in the Czech Republic in Zlin region, where there exist, according to data of the Czech

Statistical Office, 165 industrial enterprises with number of employees exceeding 100. Newbold et al. (2013) state that it is difficult to obtain data from all the subjects, therefore it is appropriate for analyzing to choose a sample from the population basic set. To obtain the relevant research findings, it is necessary to have data from 19 accounting entities. Summary of the data obtained from a questionnaire survey is indicated in Table 1.

Table 1: Summary data from a questionnaire survey

Criterion	V ₁	V ₂	V ₃	V ₄	V ₅
C ₁	309 717	214 365	268 396	262 076	278 546
C ₂	6	5,5	8	7	8
C ₃	YES	NO	YES	NO	NO
C ₄	6,5	4	7	8	7
C ₅	8	6	9	7	8

Source: own processing according to data from the questionnaire survey

Values in column C₁ represent costs in CZK associated with the implementation of the j -th variant, the goal is to achieve the lowest costs. Criteria C₂, C₄ and C₅ are evaluated by using a numerical scale of 0-10. It is true for C₂ that the higher complexity, the more points are allocated from the selected scale, therefore the criterion C₂ is of minimization nature. The same type of criterion is C₄, the higher the intensity, the more points the j -th variant acquires. Criterion C₅ is the same as the criterion C₃ of maximizing type.

4.1 Weight of criteria

Utility in case of accounting and financial statements preparation is influenced by a total of 5 criteria whose weight is different. The weights of these criteria, determined by Saaty's method, are documented in Table 2. The weight of each criterion v_i is determined by (2).

Table 2: Saaty's matrix for cumulative criteria C₁-C₅ and consistency

Criterion	C ₁	C ₂	C ₃	C ₄	C ₅	G	v_i	λ_{\max}	CI	RI	CR
C ₁	1	5	7	3	3	3.159	0.477	5.40	0.101	1.12	0.089
C ₂	1/5	1	3	3	1	1.128	0.169	5.35	0.088	1.12	0.078
C ₃	1/7	1/3	1	1/3	1/5	0.316	0.049	5.16	0.041	1.12	0.036
C ₄	1/3	1/3	3	1	1/3	0.644	0.097	5.40	0.101	1.12	0.090
C ₅	1/3	1	5	3	1	1.379	0.208	5.13	0.032	1.12	0.028

Source: own processing according to data from the questionnaire survey

Table 2 implies that the most significant criterion is C₁ – costs. The least significant criterion is C₃ – possibility of entering the world's stock exchange. In all cases the consistency was verified with (4), the CR results show that values in Saaty's matrix are consistent, because CR < 0.1.

4.2 Evaluation of utility

Utility evaluation and selection of an optimal variant is performed by using a weighted sum. Table 3 shows the values that are the basis for preparing the standardized criterial matrix. Since the input data in Table 1 also include verbally expressed criterion, the verbal criterion is converted into numbers. In case that the accounting system is recognized by the world's stock exchange, the appropriate version for the i -th criterion has 10 points, otherwise 0 points.

Table 3: Ideal and basal value of criteria C_1 - C_5

Criterion	C_1	C_2	C_3	C_4	C_5
Type	Min	Min	Max	Min	Max
B_i^{\max}	309 717	10	10	8	9
B_i^{\min}	214 365	5	0	4	6

Source: own processing according to data from the questionnaire survey

By application of (7) or (8) according to the type of criterion the elements of normalized criterial matrix are obtained. Individual values of weighted sum are calculated using (6). The resulting values and overall utility is the content of Table 4.

Table 4: Total utility

Crit	V_1	V_2	V_3	V_4	V_5	v_i	V_1	V_2	V_3	V_4	V_5
.											
C_1	0	1	0,433	0,5	0,327	0,477	0	0,477	0,207	0,238	0,156
C_2	0,8	0,9	0,4	0,6	0,4	0,169	0,135	0,152	0,068	0,101	0,068
C_3	1	0	1	0	0	0,049	0,049	0	0,049	0	0
C_4	0,375	1	0,25	0	0,25	0,097	0,036	0,097	0,024	0	0,024
C_5	0,667	0	1	0,333	0,667	0,208	0,139	0	0,208	0,069	0,139
U	-	-	-	-	-	1,000	0,359	0,726	0,556	0,409	0,386

Source: own calculation's

The highest value of U is acquired by a variant V_2 , when it is accounted only according to national accounting standards. One of the reasons is the fact that is stated by e.g. Chen et al. (2010) that characteristics of local business environment and institutional frameworks determine the form and contents of accounting. The second best variant is V_3 which is based on the substance of the application of IFRS rules. Due to the high costs associated with the necessity of keeping the double accounting, variant V_1 acquires the lowest U . The necessity of cleansing the impact of the tax base of corporate income tax from IFRS is the reason of the lower U in V_3 in comparison with V_2 . It should be noted that from a perspective of tax revenue, the highest proportion in the Czech Republic has the VAT (Šíroky et al., 2012).

The lower resulting values are acquired by variants based on the gradual implementation of IFRS into Czech accounting regulations. Gradual implementation is on the one hand a way of achieving a long-term compliance with IFRS, on the other hand, in this transitional period it is not possible to declare a full compatibility with the IFRS system, due to the changing forms of standards a comparability of information from the financial statements in a time context is limited.

5. Conclusion

With regard to the development and globalization of economies, accounting only in accordance with national accounting legislation, not just for big business corporations, is inadequate. Financial statements prepared only in accordance with the rules set by national accounting standards is not recognized by global stock markets. Therefore, the advantage of IFRS is their global nature that leads to greater credibility of financial statements of business corporations in comparison with national accounting regulations.

Significant role in harmonizing accounting is played by the Directive 2013/34/EU of the European Parliament and of the Council on the annual accounts, the consolidated financial statements and related reports of some types of enterprises, on amendment of the European

Parliament and of the Council Directive 2006/43/EC and on repealing Council Directives 78/660/EEC and 83/349/EEC (more on this directive in the context of assessing the impact on SMEs Hýblová, 2015). Harmonised form of financial statements ensures the clarity and comparability of outcomes obtained from accounting in a transnational context. This fact as well has undoubtedly an impact on the further development of the world economy.

Rising global nature of the economy increases the pressure on the unification of the financial statements. A completion of the amendment to the Framework will further enhance the quality of IFRS. The drawback of preparing the financial statements according to IFRS are high input costs for a number of accounting units. Also, the current form of the law on income tax does not allow to use the outputs from accounting according to IFRS for tax documents.

In order to achieve the maximum credibility, clarity and accuracy of accounting, it is necessary to consistently apply all accounting principles, whether it is accounted only in accordance with national legislation or IFRS.

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IMPORTANCE OF COMPANY EARLY WARNING SYSTEM IN GLOBALIZING MARKET ENVIRONMENT

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Abstract. Early warning systems (EWS) are tools for detection of danger and risks of internal and external environment that have influence to company well in advance. Current globalizing market environment is source of new risk cases with high degree of severity that threaten large enterprise values. If companies want to have long-term prosperity at global markets, they cannot have a passive attitude to risk management. Globalization process cannot be considered as completed. Globalization causes a revolutionary socio-economic transformation and forces companies to adopt new global strategic solutions and approaches. Adoption of right measures to prevent and protect against the crisis is very important and in case of crisis, companies have to react adequately in its effective solutions. For this reason, the sophisticated early warning systems are irreplaceable component of risk management. This article defines early warning systems and its objectives and describes the various stages of the process of early warning system. Early warning systems are applied in many areas of corporate practice, but the article is primarily focused on corporate finance and financial risk detection that determine the emergence of company bankruptcy. Article also discusses financial indicators through which it is possible to identify impending danger and deterioration of financial health of the company. Due to the turbulence of the global business environment, understanding the financial health of a company is very important information not only for management of the company, but also for other stakeholders.

Keywords: early warning system, financial health, financial indicators, risk management,

JEL Classification: G32, G33, F61

1. Introduction

The successful resolution of any crisis in a corporate environment is also greatly depends on its early detection. On the basis of well-chosen indicators we can now quickly detect early signs of coming crises. Company is then able to tackle this situation effectively and incoming consequences of the crisis are usually not so significant. This assumption is mainly ensured by a properly functioning early warning system

Early warning system has its origin in the military field. Today finds its application in many other areas such as financial market, business economics, medicine, biology, meteorology and

so on. It can play an important role in detecting the crisis at the sector, national economy or the global economy at the global level.

In domestic and foreign professional and scientific literature is received considerable attention to the issue of early warning systems. It is mainly about publications that address early detection of crisis at national and supranational economies (Knedlik, 2014; Cumperayot & Kouwenberg, 2013; Eichengreen, 2003; Kaminsky, 2006; Ari, 2012 and others). Due to the previous financial crisis, which broke out in 2007, the issue of early warning systems is often inflected also in the environment of the banking sector (Davis & Karim, 2008; Barrell et al., 2010; Tumpach, et. al., 2014; Dabrowski, 2016 and others).

Reliable leading indicators and credible early warning systems would allow policy makers to adopt preventive measures in the run-up to crises. This could help avoid the crises or at least limit their potential adverse effects on the economy (Lang & Schmidt, 2016).

Early warning systems feature prominently in both the academic literature and in practical policies to anticipate financial crises. However, recently, authors (re) discovered the need to model aspects of politicians' preferences into the construction of early warning systems. They show that politicians' preferences regarding risk-averseness have a strong impact on the choice of crisis thresholds (Knedlik, 2014).

The high costs of crises for the public sector as well as for private investors also led to a proliferation of empirical studies that aim to illustrate the key determinants of crises in order to predict future crisis episodes. In this regard, these studies are frequently called „early warning systems“, as they are likely to inform policymakers as well as investors about the occurrence of a crisis in the near future (Ari, 2012).

Model-based early warning systems (EWS) are one approach among many others used for country risk monitoring. Such quantitative tools can usefully complement the sound judgement and broader analysis of decision-makers by yielding objective measures of country vulnerability to debt crises (Fuertes & Kalotychou, 2006).

2. Definition of an early warning system

The early warning system is defined as a system based on defined indicators allows timely identification of changes in the business area and inside the company, of which there is a danger or a similar situation happens by them unused (Zuzák, 2009).

For this it is clear that the purpose of the early warning system is preventive crisis prevention in the enterprise. It is in economic terms usually appears more convenient than the implementation of corrective measures designed to remedy the consequences of the crisis.

STN ISO 31000: 2011 defines early warning system as a system which based on indicators identify changes in the corporate area and in the company, of which there is a danger or a similar situation arises they are not used.

2.1 Tasks of the early warning system

The most important requirements for a quality system of early warning enterprise can include:

- the ability to timely and reliable detection of possible emergencies on the basis of symptoms, which is still not reflected in the financial field, thus it pays increased attention,
- the existence of indicators of the early warning system, enabling comprehensive monitoring of the state of business environment,
- availability of data necessary to obtain the values set out indicators,
- ensure continuous monitoring of business environment,
- existence scenarios for solving arising deviations, the performance of which is the prevention of crisis,
- the adaptability of changing environmental conditions,
- appropriate financial and human resources needed for the functioning of the system,
- interconnection of enterprise management information system.

Among the specific tasks of the early warning system belongs (Zuzák, 2004):

- early identification of changes in the environment of the company,
- quick transmission of information about the resulting change to the entity which will deal intensively with these changes,
- Analysis and evaluation of changes especially in terms of its impact and further development in the future,
- to decide whether it is necessary to continue to deal with change.

The role of early warning system in the company's timely identification of potential or actual strategically relevant changes in the environment. Those arising out of established planning cycles and pose a threat to the enterprise. It means that monitor the signals of strategic importance to be able to detect unexpected events occurring at an early stage (Zuzák & Königová, 2009).

Early warning system gives the company time to react, to improve its market position and increase flexibility. It contributes to the positive development of the overall value of the business and increasing shareholder value. Through the use of early warning systems businesses have a head start and can react sooner to reduce potential risks (Bickhoff et al., 2004).

Predictive models of financial health of the company, financial indicators and their trends reliably fulfill the function of detection of emergencies since its beginnings. These are quantifiable indicators on which it can be demonstrated that the change has occurred. Remember that not all of the symptoms of the crisis in the latent phase are quantifiable. It may also be unquantifiable signs that exact numerical expression is not possible. But they can be a significant indicator of revelations coming crisis.

2.2. The creation of an early warning system

The process of building an early warning system for the area of financial management of the company can be divided into the following stages:

1. the definition of financial areas and financial processes, which will be the subject of an early warning system,
2. identification of potential or existing risks with thorough analysis of values that threaten their probability of occurrence and so on,

3. selection and definition of indicators to be used for monitoring potential risks in specific areas, including the determination of their reference (border) values deemed to be accepted,
4. creation of preventive scenario and subsequent measures applicable in identifying events defining emerging risk,
5. decomposition of the powers and responsibilities of persons who will apply developing early warning systems in a corporate environment,
6. the implementation of the system.

3. Indicators

Useful indicators of early warning systems of enterprises can be divided into (Gozora, 2000):

1. *Performance indicators* – serve on the performance characteristics of the company in the time period in kind or value terms, documented progressive or regressive business performance.
2. *Cost indicators* – define cost trends in the reproductive process in relation to business performance.
3. *Result indicators* – monitor the results of business in the long term in terms of profitability, liquidity, etc.

In drawing up the set of indicators is recommended to respect these conditions (Horváth, 2004):

- indicators shall be quantifiable parameters,
- can not arise conflicting links between indicators of one system (logical criteria),
- indicators may relate to the data of the past and to the future,
- structure of indicators should not be arbitrarily amended to guarantee the comparability of results over a longer period of time,
- detection of indicators are governed by the terms of economy - an appropriate balance between the cost of information acquisition and processing and benefits accruing from them,
- indicators have shown what is essential in a concentrated form,
- a system of indicators must permit the rational work, i.e. the core system shall contain only the information that the recipient regularly use and other part of the system of indicators is provided only when necessary.

As part of the early warning system is needed to monitor the company main groups of indicators. These are the important financial indicators and financial-economic indicators in key areas of business management, the results of which affect the company's survival (Buganová & Hudáková, 2012):

1. Selected financial indicators - indicators to monitor the financial health of the company (cash flow indicators, indicators of financial analysis ex post, indicators of financial analysis ex ante, indicators of overall leverage)
2. Selected indicators for the field of sales and marketing - profit per customer, the number of lost customers per year, the cost of market research, advertising effectiveness and so on.

3. Selected indicators for purchase field - the cost of providing material, average stock in warehouses, the average waiting time, the proportion of unusable inventory and so on.
4. Selected indicators for the manufacturing field - manufacturing fixed costs attributable time to complete one order, labor productivity, cost per procedure and so on.
5. Selected indicators for the field of quality in the company - number of bad items to a specified quantity of products produced the number of claims and complaints of customers, the quality index and so on.
6. Selected indicators for the development field - the number of patents, volume costs for process improvement, the time required for design and planning of the product and so on.
7. Selected indicators for the logistics field - logistics costs broken down by location and function, journey times of one contract, area utilization rate, the average residence time in the warehouse and so on.
8. Selected Indicators for Human Resources - the cost of wages, employee turnover per year, number of accidents, the age structure of employees, and so on.

In domestic and foreign literature many indicators are formulated with trade specialization, which the authors recommend to include in early warning systems. For example, for the banking sector were based on analysis of 70 economies, which account for 95% of world production and assessment of the crisis in the banking sector between 1975-2010 formulated these indicators (Lang & Schmidt, 2016):

- Growth in domestic credit/GDP increasingly outperforms the norm starting several years before the onset of banking problems.
- Demand deposits are a better early warning indicator than time deposits. Their gradual loss starts fifteen months prior to the crisis and peaks at its onset.
- Low liquidity ratio is an important vulnerability indicator. Banks use both cash and marketable claims on general government to meet their liquidity needs. Therefore, broad liquidity ratio is far superior to narrow liquidity ratio.
- Relatively high domestic real interest rates potentially attract foreign investors. Bank investment liabilities/GDP substantially outperforms the norm in the run-up to banking crises making the banking sector strongly vulnerable towards foreign capital outflow.
- Both stock prices and house prices continuously outperform in the five years before the crisis, but their growth rates deteriorate eighteen months preceding the crisis outbreak and turn to negative in the pre-crisis period.
- Banking crises do not always follow recessionary effects. After their outbreak, the economy slides into a deep recession. Thus, real sector variables are rather lagging than leading indicators and only marginally useful to recognize forthcoming crises.
- Government expenditures–revenues ratio deteriorates prior to banking problems, possibly reflecting the shortfall of income tax revenues as a consequence of a slowdown in economic activity and declining asset prices.

The informative value of early warning systems is influenced by the choice of methods, which is selected as a prediction of a potential crisis. In the publication Caggiano et al., 2016 on a sample of 92 economies and data from the years 1982 to 2010 is assessed reliability and binomial logit model in relation to the creation of early warning systems for predicting the crisis in the banking sector.

Results from a large sample of world economies suggest that i) the multinomial logit outperforms the binomial logit model in predicting systemic banking crises, and ii) the longer the average duration of the crisis in the sample, the larger the improvement.

4. Conclusion

In the current unstable market environment with the impact of global aspects it is not appropriate, when managers rely only on their intuition and feel for the assessment of the situation. They must also take into account information the source is an early warning system. Only then can eliminate wrong decisions and delayed reactions caused by the application of the risk event.

Late identification of potential company threats, which does not allow adequate preparation for its operation even at the stage called latent crisis is a common problem of businesses management operating in a globalizing environment. This would result in the formation of the costs that represent potential savings in case of early identification of threats.

A properly functioning system of early warning must take into account the specific conditions of the company. It is therefore not possible to create a single, universal, reliable system for businesses operating in the same industry or the same market.

Appropriate setting of the early warning system makes possible to response to changes in the environment of the company well in advance. But it should not be based only on the data accumulated with accounting system of enterprise. It should take into account the forecast results and symptoms which reveal problems making impossible to achieving success, further development of the company or threatening its existence.

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BUSINESS CLUSTERS AND INITIATIVES AS A TOOL OF PROMOTING COMPETITIVENESS IN A GLOBALIZING ENVIRONMENT

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Abstract. The continuing process of internationalization of national economies and markets, increasing level of market competition, consumers' sophistication, and requirements on comprehensive meeting of their needs force firms to look for new ways how to become more competitiveness not only at the national level, but also at the international. One from the possibilities how to handle the consequences of globalization is the utilization of potential of different forms of common cooperation between firms and/or other entities while maintaining different levels of legal autonomy and decision-making. They include the concept of business clusters, too. It is a relatively long known concept of potential economic development, at the beginning of which was the Ricardo's theory of comparative advantages and specialization. Its current understanding was primary developed by Porter in the 90s of 20th century and his work is followed up by other authors. The cluster concept represents a specific form of economic organization of different economic entities to take advantage of common beneficially cooperation. Besides the cooperation, business clusters are linked with innovation, innovation capacity, technology development, transfer of knowledge, technologies and capital, skill formation and other positive spillovers, from which may benefit not just collaborating entities, but also customers, hosting region and the national economy, too. In line that, the paper will deal with the issue of business clusters in Slovakia. As first the theoretical knowledge will be presented. Then it will follow a brief presentation of information on existing clusters, initiatives, and cluster policy in case of the Slovak economy.

Keywords: business cluster, cluster initiative, competitiveness, globalization

JEL Classification: F43, F60, R11

1. Concept of business clusters – theoretical and practical insights

The concept of business clusters may not be considered as a new economic phenome, although its importance have come the fore particularly in relation to the relatively recent rapidly ongoing advances in technology, internationalization of national economies, market liberalization and growing demands on businesses to be competitive not only at the national level, but also at the international. The basis of this type of economic cooperation is regarded to the Ricardo's theory of comparative advantage and Marshall's work on industrial districts, which is linked with the economy of agglomeration that covers the economies of localisation and urbanisation. The concept includes, and points at (mainly) positive aspects that the theories emphasize – positive externalities that could be gain from the geographical proximity,

specialization and proximity of concentration of economic activities around the key business activities, which put together all cluster members. The business cluster is deemed by many economists an appropriate tool for SMEs to become able to compete with multinational firms and become global market players. Besides the primary positive effects that could be gained by common cooperation – cost savings and increasing firm's productivity, the concept is discussed and analysed in connection with the competitive advantage of cluster members over other isolated subjects (Maresova & Kuca, 2014), with innovations and more efficient transfer of knowledge and technologies (Krugman, 1991; OECD, 2007, Sölvell, 2009, Bures et al., 2012), and consequently with their potential to support employment (Palfyova & Kovac, 2014), development and economic growth of the hosting region, consequently the national economy as a whole. Porter (2000), who is considered a current populariser of this concept in the scientific community (starting in the 90s of the last century), emphasizes *“that concept of economic cooperation reveals not only important insights about the microeconomics of competition and role of location in gaining competitive advantages, but also its importance in regional and national development and growth”*. State governments mostly try to support cluster activities and initiatives because the clusters are seen to be beneficial fighting against economic slowdown and economically strong and flourishing clusters are interesting for the qualified and skilled workforce, are centre of innovations and also help in attracting foreign capital (Brikinshaw, 2000). This fact, in connection with the Slovak economy, is emphasized, too; for instance in the scientific papers presented by Chlebikova & Mrazikova, (2009), Haviernikova (2012, 2013), Bures et al. (2012), Betakova et al. (2014), Kramarova et al. (2014) etc. On the international scientific scene besides Porter other important economists, who deal with the issue of business clusters, are e.g. Becantini, Enright, Krugman, Lindquist, Malmeber, Sforzi, Sölvell, Swan and others. Even though each of them presents own definition of the business cluster, the core of definitions are mostly the same. In the author's opinion just the extended definition presented by Porter captures the essence of business cluster and cluster members: *“Cluster is geographic concentration of interconnected companies, specialized suppliers, service providers, firms in related industries, and associated institutions in a particular field that compete but also cooperate.”* It is a *“network that occurs within a geographic location, in which the proximity of firms and institutions ensures certain form of commonality and increases the frequency and impact of interactions. Clusters and their members include end product or service companies, suppliers of specialized inputs, components, machinery, and services, financial institutions, and firms in related industries.”* Porter also further emphasize the role of specialized infrastructure providers, government and/or its agencies, trade associations, and institutions providing specialized training, education, information, R&D, and technical support (in general education sector) (Porter, 1998). Practice points out that in real and often divergent economic conditions may form various types of business clusters that operate at different levels of development. By mapping of their features and behaviour of cluster members, it has been found out that all clusters have common feature – the basic structure that covers a core of business clusters, support section, and infrastructure section that is divided into soft and hard infrastructure. The first two sections are characterized by a high level of specialization around the key business activities. The core is formed by firms that concentrate in the same branch of industry and have status of competitors as well as business partners. The support section comprises firms that support activities of key firms including suppliers of different tangible, intangible, and financial inputs. The soft infrastructure includes primary other cooperating subjects that offer different knowledge, information and different kind of support needed for appropriate functioning of

previous sections, e.g. universities, science technology parks, government institutions, professional associations etc. And finally, the last section includes different types of infrastructure. Entities in the sections may operate in private, academic, and/or public sector, and the sectoral cooperation is an essential element for innovation process and the cluster's further development³. The common feature of all four sections (thus all cluster members) is their relatively geographical proximity. At the certain level of cluster's development the cooperation within its members locating in all levels of cluster's structure may be officially proclaimed – it is created so-called *cluster initiative* (cluster organization). This may be different types of programs or projects that are aimed at improving competitiveness of the cluster members and hosting region. Söllvel et al. (2003) defines it as “*an organised effort to increase the growth and competitiveness of a cluster within a region, involving cluster firms, government and/or the research community*”. By definition on a business cluster and cluster initiative, the basic difference between them is that the cluster initiative is a way of official cooperation in the interest of common objectives of the cluster organization as a whole (officially established cluster). Within the cluster may exist also other cooperation on an informal base (cooperation within cluster members of not yet officially established cluster organization) (Kramarova et. all, 2014). Initiatives may consist from many different activities: e.g. supporting cluster's expansion and general cluster networking, supporting business development of participating firms e.g. through common promotion, purchasing or sharing inputs (goods, services, machinery, technologies etc.) to gain cost savings, supporting innovation, knowledge application (commercialization of R&D results), and technology objectives to promote products, services and process innovation, supporting human resources development, improving overall business environment and microeconomic conditions for entrepreneurship etc. The synergy that can be gain by initiatives is considered to be very important, thereby the governments at any level usually try to support their establishment and further development by applying different types of cluster policies. Empirical researches point out that public support should be balanced. It means that support should be oriented not only at establishment of new initiatives, but as well as at initiatives in early stages of development and well-functioning initiatives, too (Laur, 2015).

2. Business clusters in Slovakia

2.1 Slovak cluster policy

Slovakia has the character of an open economy, and thus the competitiveness of the Slovak firms, products, regions and ability to attract foreign investments in a globalizing environment plays an important role in increasing of employment, economic growth, and standard of living. Important role plays an ability to be innovative⁴ and offer added value to customers and foreign investors. As Janoskova & Kral (2015) remark, “*only a company which is able to identify the perfect moment of innovation, can be considered to be successful, especially in terms of innovation management, and can gain a significant competitive advantage*“. Although the

³ Note: This cooperation is known as Triple helix model (concept) developed by Etzkowitz and Leydesdorff in 1997 within the knowledge-based economy.

⁴ Note: The term „innovation“ in Slovakia is defined in Act No. 172/2005 Coll. on the Organization of State Support for R&D and on Amds. to Act. No. 575/2001 Coll. on the Organization of Government Activities and the Organization of Central State Administration as Amd. in the Section 5, § 5. (NR SR, 2014)

competitiveness index of Slovakia and Slovak firms has been improved – the shift from 75th position to 67th in 2015 (World Economic Forum, 2015), its competitiveness is not still ideal. In connection with competitiveness, just business clusters, as important microeconomic structural elements, may play an important role in the development of regional/national competitiveness and in further economic development. Although the positive effects of clustering for the regional/national economy are obvious, the official Slovak cluster policy is still missing. Similarly, it also lacks legal definition of terms cluster, cluster organization or cluster initiative. However the situation is more positively now than few years ago. The Slovak cluster policy at the national level usually exists as a part of official documents on innovation strategies development and implementation of these strategies. The Innovation Strategy of the Slovak Republic 2007-2013, namely measure No. 1 within the priority No. 1 – Support of Innovative Industrial Cluster Organization and the Operation Programme Competitiveness and Economic Growth as a part of the National Strategic Reference Programme 2007-2013 or Minerva 2.0 – Slovakia into the First League are considered to be the first documents, which were primary addressed to the business clusters. Documents in force currently – the Innovation Strategy of the Slovak Republic 2014-2020, the Innovation Strategy for Smart Specialization of the Slovak Republic 2014-2020, etc. define different financial or nonfinancial aid instruments including those that could help with innovation processes mainly in the SMEs, including instruments supporting the development of cluster initiatives and cooperation between firms and scientific or educational institutions.

In case of Slovakia the regional cluster policy has played more important role in clusters' formation than the policy at the national level in many cases – the regional (higher) territorial units (hereinafter HTUs) or lower territorial units (hereinafter LTUs) at the level of city or municipality often participate as members of cluster organizations. Based on own research it has found out, that HTUs or LTUs participate in the most of identified cluster initiatives (see text below) except the few initiatives, where it was not or could not be directly identified any participation due to lack of information⁵. Besides that it has been identified an effort to establish cross-border cluster organizations to strengthen the competitiveness of cross-border regions within the Euroregion. In such kind of organizations it has been existing the possibility to finance them through operational programs for cross-border cooperation or territorial cooperation programs, which financial sources come from the EU funds.

2.2 Clusters and initiatives in Slovakia

Slovakia is considered more industrially oriented economy and therefore most of clusters have character of technological clusters. In case of Slovakia generally applies that most of clusters have formed spontaneously using mainly specific features, sources, infrastructure, and tradition of industry in hosting regions (due to absent of continuous government assistance, too). In case of technologic clusters also applies that most of them have been formed around multinational firms, which investments are the most important sources of FDI for regions and the Slovak economy, too. They operate mainly in the automotive, engineering, ICT and energetic industries and consequently attract other firms (foreign or domestic), especially sub-contractors and firms that provide specific supporting services (located in the support and soft-

⁵ Note: From 52 identified initiatives just in case of 19 initiatives was not identified any member participation of HTUs or LTUs. However this fact does not exclude the existence of potential cooperation between the initiatives and HTUs or LTUs that is based on the other than membership cooperation.

infrastructure parts of the cluster). Firms comprised within those clusters pose also important employers not only at the regional but also at the national level.⁶ Except them there are also identified tourist and knowledge clusters in Slovakia. The tourist clusters are first of all created in locations attractive for tourism (natural and historic areas). They associate mainly SMEs that operate in the tourism and in other ancillary industries. By networking and common cooperation support the development of those industries in the regions, and help them to compete at the international level⁷. They play a key role of employers in some regions, too. Given the growing importance of the creative economy, the Ministry of economy and Ministry of Education, Science, Research and Sport of the Slovak Republic according to their study have pointed on growing potential for development of creative business cluster(s), too. In terms of geographic localization, mainly in Bratislava region, the “potential” for concentration of creative and cultural activities was identified⁸. (MH SR and MŠVVŠ SR, 2013) This fact was also supported by own findings. The localization quotient (indicates the regional specialization in a given industry using the data on employment) was in case of creative industries in the HTU Bratislava almost 1.70 points (for 2014). The result indicates a relatively high level of the region’s specialization in the creative industries, however till today has not been identified any official umbrella cluster organization that would connect and coordinate activities of firms operating in this or in allied industries. Regarding the coordinated cooperation between cluster members, most of cluster initiatives in Slovakia have been built up spontaneously just like most of clusters. The first initiatives was established in 2004, till August 2016 there were identified 52 initiatives. The highest increase occurred in the case of tourist clusters. The initiators of their foundation are mainly local firms with the leadership position in the cluster and HTUs or LTUs. Besides that in case of 17 initiatives it was identified a membership participation of the education sector⁹. Although the situation with financing of initiatives has improved partially, majority of funding still comes from the private sector.

The existing Slovak cluster initiatives are located at different stages of their development, mostly in the embryonic and developing. (Balog, 2015). Most of the initiatives are located in the middle and west part of Slovakia, which basically follows the fact, that initiatives are located in more economically developed regions. In many cases, the initiatives such as coordinated activities of cluster members despite their formal establishment do not really exist because their common activities do not have sufficient activity. Even so, there are initiatives that have reached international importance in Slovakia – they have been awarded by the bronze label of the European Cluster Excellence Initiative,¹⁰ namely: 1st Slovak Engineering Cluster, Automotive Cluster Slovakia, BITERAP, Slovak Plastic Cluster, Z@ict, Košice IT Valley, Cluster Orava, Cluster LIPTOV, Cluster HOREHRONIE, Electrotechnical Cluster - West Slovakia, InTech Žiar n/Hronom, Cluster AT+R, National Energetic Cluster NEK, and Cluster

⁶ Note: The automotive industry has a leadership position, definitely. In 2015 its share on the Slovak GDP was app. 12%, on the Slovak export app. 26%, and employed app. 80 thousand employees. (ČTK, 2015)

⁷ Note: Proved by the growing interest of domestic and foreign tourists in the Slovak regions.

⁸ Note: App. 5% of all employees in this region are employed in the creative industry (91% directly in the capital city Bratislava) and more than 46% of all firms of creative industry are located in this region.

⁹Note: In the analysis the author only took into account the Slovak universities and the Slovak Academy of Science. Author abstracted from the secondary education, although some of existing initiatives try to develop the cooperation with secondary schools directly, mainly with technical secondary schools. Into account it was not also taken non-membership cooperation.

¹⁰ Note: Just in comparison, till the October 2014 the award was given to 8 Slovak initiatives, till the August 2016 the award has been given to 14 initiatives.

AT+R. (ESCA, 2016) Most of them are tourist clusters (5), ICT clusters (4), engineering clusters (2) followed by automotive cluster, energy and environment cluster, and new materials and chemistry cluster. Based on own research, the cluster initiatives in the Table 1 were identified in the HTUs in Slovakia (totally; till August 2016):

Table 1: Table description

Higher Territorial Unit	Name of Cluster Initiatives (Date of Its Establishment)
Banská Bystrica (8)	BALNEA Cluster (2008), 1st Slovak Engineering Cluster (2008), InTech Žiar n/Hronom (2008), Cluster of Border Castles (2010), Cluster HOREHRONIE - Tourist Association (2011), Cluster Huculská Magistrála (2014), Cluster TRISKEL (2014), Cluster Kremnické vrchy - Tourist Association (2014)
Bratislava (5)	ABC - Academic Business Cluster (2007), Danube Knowledge Cluster (2010), National Energetic Cluster NEK (2012), EMOCITY - Cluster for E-mobility and Smart City (2014), Slovak AeroSpace Cluster (2016)
Košice (9)	BITERAP (2004), Technology Cluster for Earth Resource Utilization (2004), Košice IT Valley (2007), Cluster AT+R (2010), Cluster of Tourism - Košice Tourism (2010), 1st Cluster of Spiš (2014), Cluster RADAR (2014), Aviation Cluster Slovakia (2014), Electrotechnical Cluster (2014)
Nitra (6)	Slovak Plastic Cluster (2009), Cluster Topoľčany (2012), Cluster for Energy Storage of RE (2013), Food Cluster (2014), Bioeconomy Cluster (2015), Agri-environment Cluster (2015)
Prešov (4)	Energetic Cluster of Region Prešov (2012), Railway Transport Cluster (2014), Tourist Cluster Saris (2014), Cluster of Tourism Slanské Vrchy (2014)
Trenčín (2)	KITech Cluster of Innovation Technologies for the Handling with Dusty Inorganic Waste (2012), Slovak IT Cluster (2013)
Tŕnava (11)	Automotive Cluster Slovakia (2007), Electrotechnical Cluster - West Slovakia (2008), Cluster of Regional Development - West Slovakia (2008), Tourism Cluster - West Slovakia (2009), Energetic Cluster - West Slovakia (2009), Energetic Cluster CENTROPE (2010), Smolenice Cluster (2010), Construction Cluster Slovakia (2010), Cluster for Green and Innovative Technologies Support (2012), Tŕnava-Myjava engineering Cluster (2013), Cluster "Agriculture and Country" (2014)
Žilina (7)	Z@aict (2008), Cluster LIPTOV - Tourist Association (2008), Cluster TURIEC - Tourist Association (2009), Cluster ORAVA (2009), Cluster MONOCRYSTAL (2013), Cluster of Liptov Innovation and Regional Development (2015), Cluster OravaRegion (2015)

Source: author based on the information from the Evidence of the Civil Associations of the Slovak Rep., Register of Interest the Associations of Legal Persons of the Slovak Rep.

The listed initiatives have a form of interest association of legal persons or civil association and their activities are governed priority by the Slovak Civil Code – Act No. 40/1964 Coll. on the Civil Code as amended and by the act of association of citizens – Act No. 83/1990 Coll. on the Association of Citizens as amended. However, these acts are considered to be more general without taking into account specific aspects of cluster initiatives. All officially existing cluster initiatives are registered in the Register of the Interest Association of Legal Persons or in the Evidence of the Civil Association. Other official register(s) of all established cluster initiatives do(es) not exist in Slovakia and thereby it is very difficult to find out accurate information on number and functioning of existing initiatives. Although there is the Union of Slovak Clusters in Slovakia (founded in 2010) and that should officially represent interests of initiatives and cluster members, it does not offer complex information on all existing cluster initiatives.¹¹

3. Conclusion

The concept of business cluster is well known and reputable strategy of economic development that is based mainly on economic and territorial proximity of cluster members. Although cluster members, based on empirical findings, are usually located in different levels of cluster's structure and are representatives of a private, public and/or educational/research sector, by using common cooperation and principles of networking, they are able to support own competitiveness, individual economic growth as well as economic growth of the cluster as

¹¹ Note: Also for those reasons the number of identified cluster initiatives in Slovakia is different in each scientific literature. Often it also arise problems in obtaining real information about their functionality.

a whole. The impact of the concept is also undeniable on the competitiveness of hosting regions, their socio-economic development, and the national economy as a whole, too. In case of Slovakia, the concept of business cluster is mainly perceived in connection with competitiveness and innovations of SMEs and socio-economic development of hosting regions in a global market. However, despite the identified potential of business clusters for the Slovak economy, an integrated concept of cluster policy is just in early stages of its development in comparison to other developed economies. In all regions of Slovakia may be identified industries (firms) with potential for clustering, but as the main barrier of clusters' creation or their declared form – cluster initiative it has been identified the financial funding. Fortunately, as positive shifts may be considered currently valid national policy documents and special programs aimed directly at cluster organizations to help them finance their activities particularly in close relation to R&D – innovation activities of firms generally (Valášková, 2014), whether directly or indirectly.

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NONLINEAR PREDICTION OF THE GDP GROWTH RATE IN THE GLOBALIZED WORLD

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Abstract. In the present complex and globalized world, often classical linear prediction methods fail, so it is necessary to look for other methods. We deal with approaches based on chaos theory and we focus on nonlinear prediction. The goal of this paper is to analyse the gross domestic product (GDP) and to find chaos in the GDP growth rate time series. At the beginning of our analysis we must deal with the fundamental question regarding the existence of deterministic chaos. We estimated the time delay and the embedding dimension, which is needed for the Lyapunov exponent estimation and for the phase space reconstruction. Subsequently, we computed the largest Lyapunov exponent, which is one of the important indicators of chaos. The results indicated that chaotic behaviors obviously exist in GDP. If the system behaves chaotically, we are forced to accept limited predictions. Deterministic chaos, usually referred to simply as chaos, indicates presence of structure and often very complex order on a global scale but absence of these characteristics on a local scale. In general, chaotic processes can be characterized by irregular and long-term unpredictable behavior, but this behavior is purely deterministic. Finally we computed predictions using a radial basis function to fit global nonlinear functions to the data.

Keywords: Chaos theory, Gross domestic product (GDP), Time series analysis, Nonlinear prediction, Gaussian radial basis function

JEL Classification: C53, C61, E27

1. Introduction

The only purely stochastic process is a mathematical model described by mathematical statistics. The statistical model often works and is one of many possible descriptions if we do not know the system. This also applies to economic quantities, including forecasts for GDP. The basic question is therefore the existence of chaotic behavior. If the system behaves chaotically, we are forced to accept only limited predictions (Kříž, 2011). In this paper we will try to show the chaotic behavior of GDP growth rate time series. The approaches based on chaos theory are widely acceptable due to the assumption that, it is possible to predict the future state of the system based on the single scalar time series assuming that, all the information regarding the external forcing factors is contained in that single time series (Kříž & Lešáková, 2016). Numerous new methods of time series analysis have been developed for dealing with nonlinear data e.g. Abarbanel (1996), Casdagli (1989), Farmer & Sidorowich (1987), Kantz & Schreiber (1997). In particular, the surrogate data approach (e.g. Theiler et

al., 1992) is a powerful tool for detecting actual nonlinear behavior, and distinguishing it from other phenomena.

2. Methodology

In short, we will describe the basic definitions and the basic methods for examining the input data.

Chaos theory allows for the reconstruction of phase space from time series, which can be used for specifying the system states (Abardanel et al., 1973). This analysis is based on Takens (1980) embedding theorems. Takens' theorem transforms the prediction problem from time extrapolation to phase space interpolation (Kříž, 2013).

Let there be given a time series x_1, x_2, \dots, x_N which is embedded into the m -dimensional phase space by the time delay vectors. A point in the phase space is given as:

$$Y_n = x_n, x_{n-\tau}, \dots, x_{n-(m-1)\tau} \quad n = 1, 2, \dots, N - (m-1)\tau \quad (1)$$

where τ is the time delay and m is the embedding dimension. Different choices of τ and m yield different reconstructed trajectories. Kodba et al. (2005) discuss how we can determine optimal τ and m . We use method developed by Fraser & Swinney (1986), which is based on the mutual information between x_n and $x_{n+\tau}$ as a suitable quantity for determining τ . The mutual information between x_n and $x_{n+\tau}$ quantifies the amount of information we have about the state $x_{n+\tau}$ presuming we know the state x_n . The mutual information function is:

$$I(\tau) = -\sum_{h=1}^j \sum_{k=1}^j P_{h,k}(\tau) \ln \frac{P_{h,k}(\tau)}{P_h P_k}, \quad (2)$$

where P_h and P_k denote the probabilities that the variable assumes a value inside the h^{th} and k^{th} bins, respectively, and $P_{h,k}(\tau)$ is the joint probability that x_n is in bin h and $x_{n+\tau}$ is in bin k . The first minimum of $I(\tau)$ then marks the optimal choice for the time delay.

The embedding dimension m can be chosen using the “false nearest neighbors” method. This method measures the percentage of close neighboring points in a given dimension that remain so in the next highest dimension. The minimum embedding dimension capable of containing the reconstructed attractor is that for which the percentage of false nearest neighbors drops to zero for a given tolerance level μ . We use method developed by Kennel et al. (1982). For more information see also e.g. Abarbanel et al. (1993), Kodera & Quang (2009), Kennel & Buhl (2003).

Lyapunov exponent λ of a dynamical system is a quantity that characterizes the rate of separation of infinitesimally close trajectories. A positive largest Lyapunov exponent is usually taken as an indication that the system is chaotic. We have used the Rosenstein (1993) algorithm, which counts the largest Lyapunov exponent as follows:

$$\lambda_1(i) = \frac{1}{i\Delta t} \cdot \frac{1}{(M-i)} \sum_{j=1}^{M-i} \ln \frac{d_j(i)}{d_j(0)}, \quad (3)$$

where $d_j(i)$ is distance from the j point to its nearest neighbor after i time steps and M is the number of reconstructed points.

One of the principal characteristics which is used for description of strange attractors is a dimension. Our method is based on the concept of correlation dimension D_C suggested by Grassberger & Procaccia (1983). D_C describes the dimensionality of the underlying process in relation to its geometrical reconstruction in phase space. D_C quantifies the “strangeness” of an attractor (Schreiber, 1999). Define the correlation integral $C(\varepsilon)$ for set of M data:

$$C(\varepsilon) = \frac{1}{M(M-1)} \sum_{\substack{i,j=1 \\ i \neq j}}^M \Theta(\varepsilon - \|x_i - x_j\|), \quad (4)$$

where Θ is the Heaviside step function. Euclidean metric is used for all calculations in this paper. When a lower limit exists, the correlation dimension is then defined as

$$D_C = \lim_{\substack{\varepsilon \rightarrow 0 \\ M \rightarrow \infty}} \frac{\partial \ln(C(\varepsilon))}{\partial \ln(\varepsilon)}, \quad (5)$$

In real cases, the limitation imposed in the above equation is not possible due to the limited amount of available data. Hence, D_C can be obtained by plotting $\ln C(\varepsilon)$ against $\ln(\varepsilon)$. The slopes of the curves for different embedding dimensions m give the values of D_C (Grassberger & Procaccia, 1983). The saturation of D_C at a certain values of m indicates that the process generating time series is not random but rather deterministic (Hegger et al., 1999).

Predictability is one way how correlations between data express themselves (Hegger et al., 1999). Most properties of chaotic systems are much more easily determined from the governing equations than from a time series. Unfortunately, the governing equations are usually not known, except for well controlled laboratory experiments. Analyzing an empirical model, and maybe synthetic time series data generated from it, can provide a valuable consistency test for the results of time series analysis. Chaotic dynamical systems generically show the phenomenon of structural instability (Kantz & Schreiber, 1997).

According Kantz & Schreiber (1997), using the reconstructed phase space for m and τ , a functional relationship f between the current state $X(t)$ and future state $X(t+T)$ can be given as

$$X(t+T) = f(X(t)), \quad (6)$$

where T represents the number of time steps ahead that one wishes to perform the prediction. Function f represents the approximation to unknown dynamical system. It is shown that for sufficiently large values of the embedding dimension and if some additional conditions are satisfied, the reconstructed trajectory has the same topological and geometrical properties as the system’s phase space trajectory (Takens, 1981). The predictive mapping can be expressed as

$$X(t+T) = f_p(X(t)). \quad (7)$$

The aim is to find the predictor f_p , so that $x(t+T)$ can be predicted based on the reconstructed time series. If the time series is chaotic, then f_p is necessarily nonlinear. Several local and global approaches are available in the literature to find the function f_p (Farmer & Sidorowich, 1987).

The idea of locally linear predictions is following. If there is a good reason to assume that the relation

$$s_{n+1} = f(s_n) \quad (8)$$

is fulfilled by the experimental data in good approximation for some unknown f and that f is smooth, predictions can be improved by fitting local linear models. They can be considered as the local Taylor expansion of the unknown f , and are easily determined by minimizing

$$\sigma^2 = \sum_{s_j \in U_n} (s_{n+1} - a_n s_j - b_n)^2, \quad (9)$$

with respect to a_n and b_n , where U_n is the ε -neighbourhood of s_n , excluding s_n , as before. Then, the prediction is

$$\hat{s}_{n+1} = a_n s_n + b_n, \quad (10)$$

The minimization problem can be solved through a set of coupled linear equations, a standard linear algebra problem (Hegger et al., 1999).

The local linear fits are very flexible, but can go wrong on parts of the phase space where the points do not span the available space dimensions and where the inverse of the matrix involved in the solution of the minimization does not exist. Moreover, very often a large set of different linear maps is unsatisfying. Therefore many authors suggested fitting global nonlinear functions to the data, i.e. to solve

$$\sigma^2 = \sum_n (s_{n+1} - f_p(s_n))^2, \quad (11)$$

where f_p is now a nonlinear function in closed form with parameters p , with respect to which the minimization is done. The results depend on how far the chosen ansatz f_p is suited to model the unknown nonlinear function, and on how well the data are deterministic at all (Hegger et al., 1999). A radial basis function (RBF) is a real-valued function whose value depends only on the distance from the origin, or alternatively on the distance from some other point x_i , called a center, or alternatively on the distance from some other point c , called a center, so that

$$\Phi(x, c) = \Phi(\|x - c\|) \quad (12)$$

Gaussian kernel is used in this analysis.

$$\Phi(x) = e^{-c^2 x^2} \quad (13)$$

Hence the prediction made is:

$$f_p = a_0 + \sum_{i=1}^n a_i \Phi(\|x - x_i\|), \quad (14)$$

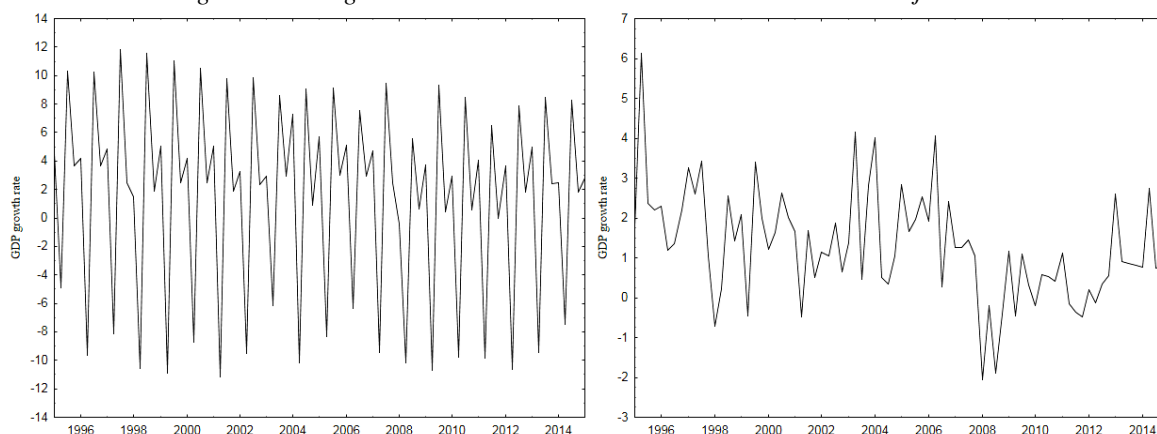
respectively

$$x_{t+1} = a_0 + \sum_{i=1}^n a_i e^{-(c\|x-x_i\|)^2}, \quad (15)$$

3. Input data

Gross domestic product by type of expenditure in current prices is used in this paper. We have used data (quarterly, without and with seasonal adjustment) from the Czech Statistical Office. We analyze data from the Czech Republic between the years 1995 -2015. The main problem in analyzing the GDP time series is the lack of data. The analysis of such short time series in the context of nonlinear dynamics or in the presence of chaos can be questionable. Analysis of short time series may lead to a spurious estimation of the invariants e.g. Lyapunov exponents. Despite the above, we have no choice but to analyze GDP time series in the context of nonlinear dynamics and try to find chaotic behavior of GDP time series. Despite the above, we have no choice but to analyze GDP time series in the context of nonlinear dynamics and try to find chaotic behavior of GDP growth rate time series. Therefore, all results are only estimates. The second problem can be the presence of trends in time series. Trended data are not suitable for future analysis to study chaos dynamics. There is no universal way to remove the trend from the data set. The results often depend on how the data are detrended. This is solved using the GDP growth rate (cf. Figure 1).

Figure 1: GDP growth rate time series without and with seasonal adjustment



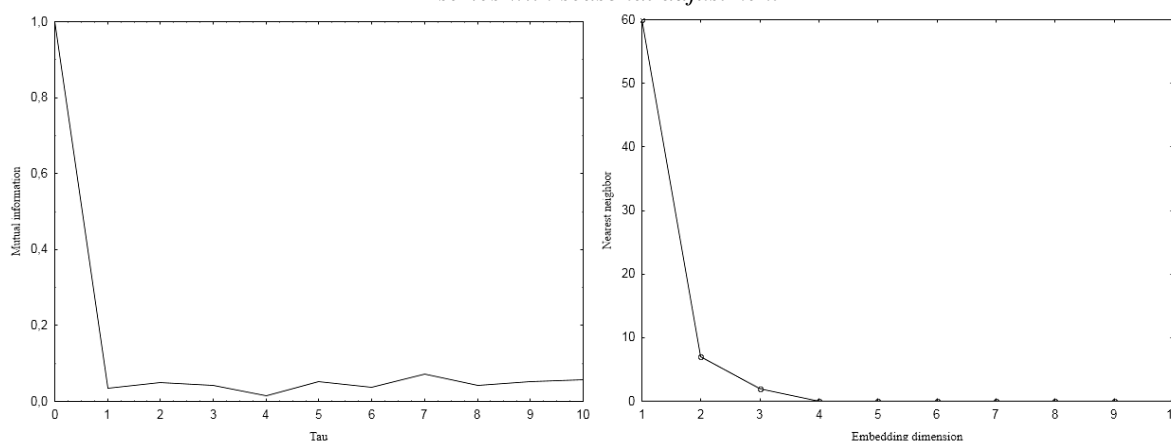
4. Empirical analysis

We will use the mutual information approach to determine the time delay τ and the false nearest neighbor method to determine the minimal sufficient embedding dimension m . τ is estimated from the graph in Fig. 2a. The first minimum of the mutual information function $I(\tau)$ (Eq. 2) marks the optimal choice for the time delay. Thus, the time delay τ is 1 for GDP growth rate time series with and without seasonal adjustment. The embedding dimension m is chosen using the “false nearest neighbors” method, estimated from the graph in Fig. 2b. The minimum embedding dimension capable of containing the reconstructed attractor is that for which the percentage of false nearest neighbors drops to zero for a given tolerance level μ . Thus, the embedding dimension m is 3 for GDP growth rate time series without seasonal adjustment and 4 for GDP growth rate time series with seasonal adjustment.

We calculate the largest Lyapunov exponent as was shown above. We used the Rosenstein algorithm. The calculation of the largest Lyapunov exponent depends on the estimation of the embedding dimension. The value of the largest Lyapunov exponent was estimated at 0,06 for GDP growth rate time series without seasonal adjustment and 0,077 for GDP growth rate time

series with seasonal adjustment. A positive largest Lyapunov exponent is one of the necessary conditions for chaotic behavior. Next, we estimate the correlation dimension. Relationship between the Gaussian kernel correlation integral $C_G(\varepsilon)$ and radius ε is shown on ln-ln scale. The estimate of saturation value of the correlation dimension for GDP concentration time series without and with seasonal adjustment is between 1,3 and 2,5. As expected, the values of the correlation dimensions are not an integer. The value of the Kolmogorov entropy GDP growth rate time series was calculated at 8,4.

Figure 2: Mutual average information and Fraction of false nearest neighbors for the GDP growth rate time series with seasonal adjustment



Finally we computed predictions using a Gaussian radial basis function to fit global non-linear functions to the data for GDP growth rate time series without seasonal adjustment using RBF. This prediction for the 2 years is quite good. The prediction correctly estimated the peaks and trends of the GDP growth rate time series (cf. Figure 3). Different situation is in case for GDP growth rate time series with seasonal adjustment. In this case, we cannot recommend this prediction (cf. Figure 4).

Figure 3: Prediction of the GDP growth rate time series using RBF time series without seasonal adjustment

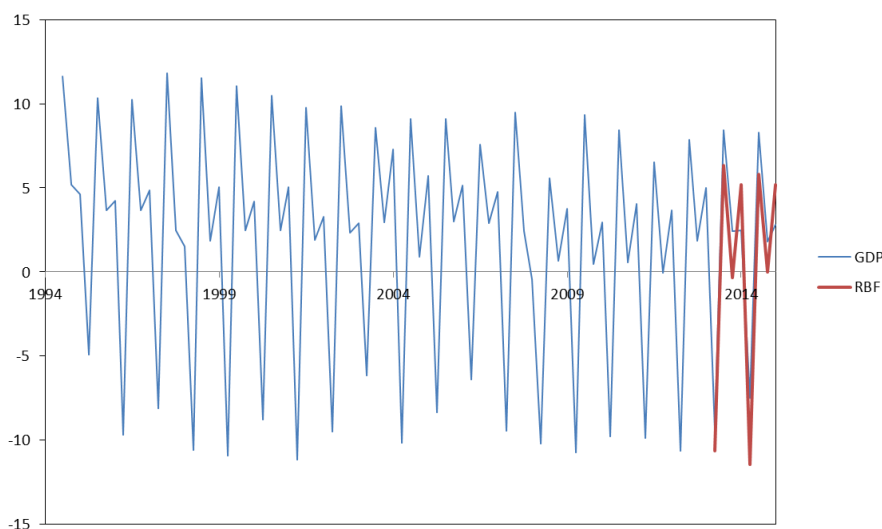
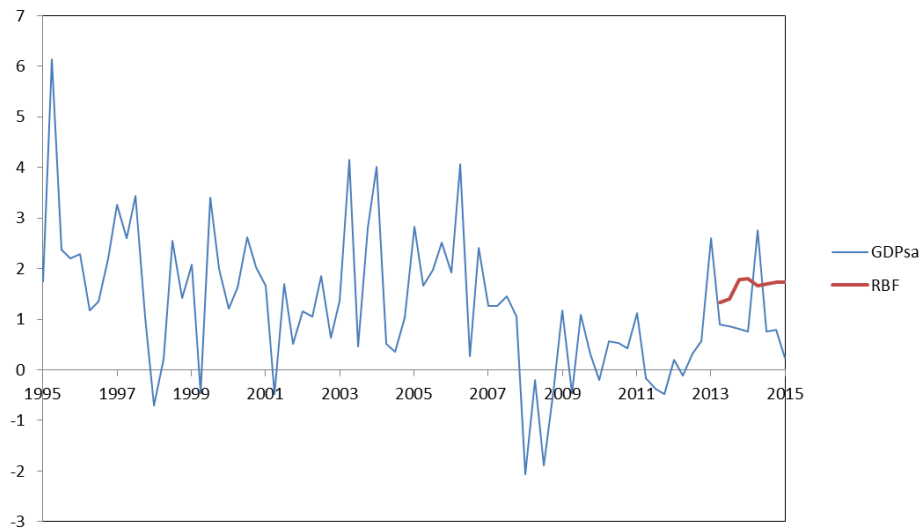


Figure 4: Prediction of the GDP growth rate time series using RBF time series with seasonal adjustment



5. Conclusion

Chaos theory has changed the thinking of scientists and the methodology of science. Chaos theory has an irreplaceable role in today's globalized world. Making a theoretical prediction and then matching it to the experiment is not possible in chaotic processes. Long term forecasts are, in principle, also impossible according to chaos theory. The main problem is in the quantity and quality of data (Kříž, 2014). We shown in this paper that the HDP concentration time series can be chaotic. The value of the largest Lyapunov exponent was estimated at 0,06 for GDP growth rate time series without seasonal adjustment and 0,077 for GDP growth rate time series with seasonal adjustment. If the correlation dimension is low, the largest Lyapunov exponent is positive and the Kolmogorov entropy has a finite positive value, chaos is probably present. From these estimations it can be concluded that GDP concentration time series is chaotic. Finally we computed predictions using a Gaussian RBF to fit global nonlinear functions to the data. Considering all these findings, we recommend the Gaussian RBF to fit global non-linear functions as one of the methods used for prediction, but only for GDP growth rate time series using RBF time series without seasonal adjustment. As it may not be reliable under certain circumstances, it should be used in combination with other prediction methods.

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INTANGIBLES IN DIFFERENT REPORTING SYSTEMS ACROSS THE WORLD

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Abstract. Companies striving to succeed within the global world markets need to report their results using methods that are concomitantly used by others. In today's global economy value is often created by intangible assets that arise from intellectual capital. The accounting standard setters try to meet the challenge of recognition and reporting the results of knowledge-based entities. The problems relating to the accounting for intangibles are international in scope. This paper briefly reviews existing national Czech, Slovak, United Kingdom and United States accounting legislation and standards in comparison with International Financial Reporting Standards. Some inconsistencies are highlighted, and evidence is provided that suggests that recognition of intangible assets is in accordance with existing accounting principles. The reported differences may then affect the manner in which the level of company efficiency is reported, particularly when using traditional methods of share indexes of profitability. In harmony with the trend of the growing share of intangible assets in the overall assets of the company it is also very desirable to achieve international comparability of the companies' economic results. This article is based on analysis and comparisons of relevant literature resources, mainly articles and conference papers, but also legislative acts and monographs.

Keywords: accounting, globalization, intangible assets, reporting systems

JEL Classification: F65, M41, O34

1. Introduction

Studies analysing publications on intangible assets mostly deal with works by American and Western European authors. There are also two more detailed and more specified classifications, which are quite exceptional in this area: The first is the basic categorisation developed by the American Financial Accounting Standard Board for the purpose of accounting reporting and already mentioned in the first part of the article, in the section on the accounting statement systems. This categorisation distinguishes seven basic categories of intangible assets based on: technologies, customers, market, employees, contracts, organization and company status. The second classification by the German working group investigating intangible assets in accounting for Schmalenbach Society includes human, customer, supplier, investment, process, allocation and innovation capital (Kaufmann & Schneider, 2004).

In the new economy, intangible assets have become the main value creators for a large number of companies and economic sectors. However, the valuation of these assets within the

accounting framework raises several problems with regard to their identification, measurement, and control (Zeghal & Maaloul, 2011).

Surveys of intangible assets and intellectual capital are classified in many different ways. Available publications on the terminology for used intangible assets may be divided into four basic groups: most authors use the basic term intangible assets, or intangibles, such as B. Lev, F. Gu, L. Canibano, P. Sanches, K. E. Sweiby. Some groups of authors use the term intellectual capital; they are J. H. Daum and others. The third group of authors slightly modifies the above two basic approaches and uses for example intangible resources, intellectual property, immaterial values – see for example O. Granstrand, T. Gunter, C. Kriegbaum and currently especially P. Sullivan. The last group does not introduce any special term and only uses the general word “knowledge” (Kaufmann & Schneider, 2004). As follows from the above classification, the basic terms and definitions in this area are not yet generally accepted. To further illustrate this variability I would like to add the following two examples: Sullivan (2000, p. 228) submits a working definition of intellectual capital in the following wording: “...knowledge that can be converted into profit“. In his opinion intellectual capital consists of two components - human capital and intellectual assets. Baruch Lev in his famous work “Intangibles – Management, Measurement and Reporting” of 2000 states on page 5: “An intangible asset is a claim to future benefits that does not have a physical or financial embodiment. A patent, a brand, and a unique organizational structure (for example, an Internet-based supply chain) that generate cost savings are intangible assets“.

According to Sweiby (1997, p. 18) “the difference between the marked value of a publicly held company and its official net book value is the value of its intangible assets. In most companies, the value of intangible assets exceeds the value of tangible assets.” Like in the case of the basic terms and definitions the authors of publications about IA/IC have not yet reached too much agreement about their sorting, classification or categorisation. All classifications in effect remain very abstract, thus not offering a real instrument for management and use of the intangible assets by corporate managers. A classification which – guessing from the number of quotations – has more significantly influenced other researchers was published in 1997 by L. Edvinsson. This classification is the simplest, and only consists of two basic categories: Human capital and Organisational, or Structural capital. Some publications do not provide any classification at all, or state that a classification would be very difficult. Other authors, with Sweiby, 1997, being one of the most often mentioned and quoted, divide intangible assets to three basic groups or levels: employee competence, internal structure and external structure. Context determines the value given to tangible assets and makes an even higher impact on the valuation of intangible assets. It is important to bear in mind that context affects the valuator's perception and that individuals assess intangible components subjectively (Axle-Ortiz, 2012).

2. Accounting for Intangible Assets

This article is based on analysis and comparisons of relevant literature resources, mainly articles and conference papers, but also legislative acts and monographs. Intangible assets represent one part of the assets showing significant differences in reporting depending on what accounting system is applied for the accounting statement preparation.

2.1 Intangible Asset Recognition Pursuant to Czech Accounting Standards

The intangible asset area is settled in the Czech accounting legislation in Standard no 013 Long-Term Intangible and Tangible Assets. This standard contains definition and pricing of long-term intangible and tangible assets, depreciation principles, procedure of account recognition on acquisition, technical valuation and asset write off. Like the other standards the Czech Accounting Standard no 013 is governed by Act no 563/1991 Coll., on Accounting, and Decree no 500/2002 Coll., executing some provisions of the Accounting Act. The standard contains the list of assets defined as long-term intangible assets. The condition for classification as long-term intangible asset is usable life of more than one year and the asset value higher than the valuation limit determined by the accounting unit. This class also includes other long-term intangible assets, long-term intangible work in progress, and advances provided for this type of assets. Initial (establishment costs) were defined as all expenditures incurred for establishment of the accounting unit until the moment of its incorporation (abolished since 2016). These costs included in particular the court and administrative fees, costs of business trips, remuneration for mediation and advisory services and rent. Costs of acquisition of long-term tangible assets and inventories, representation costs or costs related to the company transformation were not included in the establishment costs.

Intangible results of research and development (R&D) – for results of research and development to be eligible for inclusion in long-term intangible assets they need to be developed by in-house activity and intended for trading, or acquired from other parties. Rights of determinable value include for example industrial patterns, usable patterns, registered trademarks and patents. Software must be developed in-house for the purpose of trading or acquired from other parties – suppliers. Goodwill is a positive or negative difference between the valuation of the entity, or its part in the sense of the Commercial Code, acquired by purchase, deposit or asset and liability appreciation in the context of company transformation, except for change of legal status of the company, and the sum of the individually revaluated asset items reduced by taken over liabilities. Other long-term intangible assets include emission permits and preferential limits and long-term intangible assets not recognised elsewhere. The emission permits include greenhouse gas emission permits, and emission reduction units and verified emission reductions by project activities regardless the appreciation amount.

2.2 Intangible Assets in Slovakia – according to IFRS

Intangible assets are dealt with by IAS 38 – Intangible Assets, including criteria for recognition, appreciation and reporting of intangible assets. This standard became effective in 1999 and was amended in 2004. As stated in this standard intangible assets are defined as identifiable non-cash assets without physical essence. The company may report an intangible asset in its balance sheet if it is intangible asset by definition, if there are probable economic benefits following from it for the company and if the asset can be reliably priced. If an item does not meet these criteria it is recognised as cost. Features of intangible asset defined by IAS 38 Intangible Assets are as follows: identifiable – the asset is separable from the company, may be sold, leased etc. or comes from contractual or other legal rights, controllable – the company is entitled for economic benefits following from the asset and can restrict third party access to these benefits and bringing future economic benefits. The two basic types of in-house generated intangible assets include the in-house generated goodwill and intangible assets generated by in-house activities. In-house generated goodwill represents items not meeting the definition of

intangible assets but generating future economic benefits. Goodwill is often exemplified with employee knowledge, quality of product or service, environmental aspects of company activity etc. In-house generated goodwill cannot be recognised as asset and cannot be included in the balance sheet. Goodwill is not separable from the enterprise, does not follow from contractual or legislative rights and cannot be priced reliably. The research stage is represented by activities related to acquisition of new knowledge, examination of use of this new knowledge, search from and selection of alternatives for new materials, devices etc. The research stage is not recognised in the company intangible assets pursuant to IAS 38. The reason is the fact that in this stage the company is unable to determine the future economic benefits of the asset. The research expenditures are recognised as costs of the period in which they were incurred.

2.3 Intangible Assets in US GAAP

The rules of US GAAP are applied by the companies voluntarily, but in some cases the application is strictly required by an authority. The Securities Commission (SEC) has always required from all players at the US capital market to publish their financial statements pursuant to US GAAP, only recently also accepting statements based on the IFRS methodology. Like IFRS the US GAAP are not formulated by legislators but by independent experts. In the case of US GAAP these are represented by the Financial Accounting Standards Board (FASB), the non-profit non-governmental organisation with independent in-house source of financing.

The basic characteristics and examples included in the following paragraph can be found on the web site of FASB, in the document entitled “Statement of Financial Accounting Standards No. 142, Glossary”, on page 105 ”Intangible assets are assets (except for financial instruments) without any physical substance. Types of intangible assets include but are not limited to the following from: the law – patents, copyright, trademarks, trade names, broadcasting licences etc., following from contracts – agreements with employees, manufacturing agreements, consultancy agreements, publicity agreements, distribution agreements, leasing agreements etc., following from other agreements – licences for use of software, licences for use of technologies, patents, rights to mining, rights to copy books etc. Intangible assets following from technology – in-house developed computer software, manufacturing processes, technical documentations, drawings, databases, following from business relations – list of customers, suppliers, distributors, records on credit trustworthiness of debtors compiled by creditors etc. Goodwill – Decree no 142 defines goodwill also as excess acquisition value of a purchase unit over the value often sum of the acquired asset and the assumed liabilities. There is no negative goodwill pursuant to US GAAP.

2.4 Intangible Assets in UK FRS

United Kingdom Financial Reporting Standards deals with intangible assets in Section 18 Intangible Assets other than Goodwill. This section applies to accounting for all intangible assets other than goodwill and intangible assets held by an entity for sale in the ordinary course of business. According Section 18 an intangible asset is an identifiable non-monetary asset without physical substance. Such an asset is identifiable when it is separable, ie capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability. Or it arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations. General principle for

recognizing intangible assets: the entity shall recognize an intangible asset as an asset if, and only if it is probable that the expected future economic benefits that are attributable to the asset will flow to the entity; and the cost or value of the asset can be measured reliably.

No intangible asset arising from research shall be recognized. Expenditure on research shall be recognized as an expense when it is incurred. Examples of research activities are activities aimed at obtaining new knowledge. An entity may recognize an intangible asset arising from development if, and only if, an entity can demonstrate all of the following: the technical feasibility of completing IA so that it will be available for use or sale, its intention to complete IA use or sell it, its ability to use or sell IA, how the intangible asset will generate probable future economic benefits.

3. Comparison of Accounting Standards Related to Intangibles

The basic difference between Czech and international accounting standards is represented by their respective legal frameworks. Both IFRS and US GAAP focus on principles, and thus do not defined exact accounting procedures. The Czech accounting standards, on the other hand, are part of the legislation binding for all companies registered in the Czech Republic. The appearance of Czech accounting is considerably affected by the tax legislation, which may be a source of certain inflexibility of the system and may lead to acceptance of standpoints based on tax considerations rather than on the concept of faithful and fair reflection of a transaction in its essence. The Czech accounting system is formulated by legislators, which both IFRS and US GAAP are formulated by non-governmental non-profit organisation.

The Czech accounting regulations are focused on accounting from the tax viewpoint and partly from the investor viewpoint. On the other hand both international accounting systems are primarily focused on reflection of the reality for use by investors. The differences between the Czech and other regulations begin with the missing definition of intangible assets. While the Czech accounting legislation defines this term by a list of items meeting the definition, both IFRS and US GAAP define intangible assets by their properties.

Both international systems emphasize the absence of physical essence of intangible assets, and IFRS in addition mention three signs of intangible assets – they are identifiable, controllable and bring future economic benefits.

The Czech standards on the other hand emphasize usable life longer than one year and the fact that the asset value is higher than a limit specified by the company. The list of intangible asset items of the Czech intangible asset definition included establishment costs (abolished since 2016), recognised directly in costs by both international accounting systems, for pursuant to their interpretation they do not bring and future benefits to the company.

Table 1 Selected difference in reporting of intangible assets

Area	IFRS	US GAAP	UK FRS	Czech AS
Definition	Economic source managed by a company that is used to profit	no physical value, company will retain an economic advantage in the future	Identifiable non-monetary asset without physical substance	No definition, list a number of items
Evaluation	All costs directly linked to creation of capital and its usage	All costs necessary to register and establish legal contracts	Costs directly linked to IA and its usage	All direct and indirect costs linked to

				exploitation
Capitaliza-tion of R&D	Allowed only costs in development	Forbidden	Allowed only some costs in development	Allowed for costs both R&D
Depreciation	Not always compulsory	Necessary to write off capital that has a certain expiration date	Amount of IA on a systematic basis over its useful life	Following regulations expressed in the law

Source: authors results

If the assets are not purchased but developed in-house, the Czech accounting standards appreciate them on the basis of in-house costs of development. This is conditioned by the purpose of the asset, which is its trading. IFRS distinguish between the research and the development stage in this asset type. Only the development stage related costs may be activated and only after fulfilment of certain conditions - completion is feasible, the company possesses sufficient resources for the completion etc. US GAAP are the strictest in this area and only include in the asset value the costs necessary for the asset registration and legal treatment, for the other costs are not considered specifically identifiable. US GAAP do not consider research and development intangible asset at all. The international accounting standards in one of their interpretations (SIC 3) specifically deal with costs of web sites. The costs of activities related to an internet application development must be activated. The costs incurred in the course of the planning stage and the costs related to operation are recognised as costs only (Andre et al., 2013). The Czech accounting standards do not specifically deal with this.

4. Conclusion

According to OECD (2013) investment and growth in *OECD* economies is increasingly driven by investment in *intangible assets*, also known as knowledge-based capital (KBC). Earlier (Krizova, 2008) we demonstrated, via comparison of model examples, that a given company will report the highest profit when using Czech reporting standards. In contrast, the lowest profit will be reported when using US GAAP standards. The reported differences may then affect the manner in which the level of company efficiency is reported, particularly when using traditional methods of share indexes of profitability. Companies striving to succeed within the European or the world markets need to report their results using methods that are concomitantly used by others. The differences in intangible asset reporting pursuant to thefor abovementioned reporting systems also reflect in the indicators based on the financial statements, such as the asset return indicators and the equity return indicators. In harmony with the trend of the growing share of intangible assets in the overall assets of the company it is also very desirable to achieve international comparability of the companies' economic results. The issue of harmonisation of standards is currently resolved both on the level of harmonisation of the national standards of the individual countries and IFRS, and on the level of harmonisation of IFRS and US GAAP. The International Accounting Standards Board, the issuer of IFRS, and the Financial Accounting Standards Boards, the committee responsible for the issue of US GAAP, signed a Memorandum of Understanding in February 2006.

It is unlikely that the investor becomes aware of the intangible assets whilst analysing the financial statements. In view of their importance, the investor is made aware of the intangibles during various meetings with the entrepreneur (Smith & Cordina, 2014). At present the variability of recommendations for reporting elements that are not part of financial statements

continues to grow. There is growing evidence that narrative disclosure is superior under a mandatory regime (Aerts et al., 2013; Beattie et al., 2008 and Li, 2010). Data disclosed and published on a voluntary basis are typically provided by listed companies which also attached a business report to their financial statements, in their case, the financial statements contain far more items than the required minimum (Kovács, 2015). For that purpose various instruments in the form of guides, monitors etc. are produced. As my experience shows it might be beneficial to focus on extension of the "accounting technology", software, such as the eXtended Business Reporting Language (XBRL). If this reporting method was used the traditional financial statements might be complemented with tables with graphical symbols, different colour codes etc.

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STRATEGIC ANALYSIS OF INNOVATIVE PROCESS BASED ON BALANCED SCORECARD IN PRESENT-DAY ECONOMIC ENVIRONMENT

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Abstract. The paper is devoted to the applied strategic innovative analysis (ASIA) based on the innovative balanced scorecard element to be applied in the research process of the strategic innovative organization activity aspects in conditions of globalization. The methodology of the research is the Balanced Scorecard (BSC) concept introduced by R. Kaplan and D. Norton as well as the concept of the applied strategic analysis having been developed by one of the authors. ASIA is depicted to encompass comparative assessment, variances diagnostics and indicators forecast of the innovative BSC element within the steps and strategic goals of the innovative process. ASIA encompasses an analysis of the new products development expediency indicators, analysis of the indicators of the applied research and development expediency and production of the next generation product feasibility study by means of conventional technological processes, analysis of the indicators of the in-depth scientific research expediency of innovative products, analysis of the feasibility study indicators of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals, analysis of the indicators of the customer demand acceptable in terms of new products development as customer future value. ASIA commences with comparative evaluation of the of the new products development expediency outcome indicators and is finalized with factoring indicators forecast for the customer demand acceptable in terms of new products development as customer future value. The authors draw a conclusion that ASIA is a sufficiently effective instrument to research strategic aspects of the innovative organization activity in present-day economic environment.

Keywords: innovative activity, balanced scorecard, applied strategic innovative analysis

JEL Classification: L29, M19, M41

1. Introduction

A high level of the economic achievements of the developed economies is ensured by such conditions as accumulated scientific, technical, industrial and investment potential; institutional factors of technological advancement and government support of innovative transformations.

To form and foster competitive advantage of any entity (an enterprise, a firm, a company, a business unit) is one of the basic objectives for the entity to survive and prosper in the present-

day fast transforming economic environment. The objective fruition is defined by its level of innovative activity and efficiency achieved. A competition causes organizations to build reserves of economic strength both owing to a more efficient utilization of the production and financial reserves available and investment attraction for the business update and expansion. This is preceded by the innovative activity to develop alternatives of capital investment aimed at the competitive advantages determination and support. Such advantages are featured by lower risks, higher investment return compared with similar ones within a specific economic niche. The market niche may be found within a certain activity forming customer values or regional aspects, however, in any case, the anticipated business offers should have sufficient innovative justification based on the relevant information base and convincing analytical calculations.

An improvement of the analytical support of the innovative economic organization activity management is a high-priority task in the present-day environment especially in terms of its strategic aspect, as the innovative activity, in wider meaning, implies a long-term process of the investment and marketing activity.

In view of the mentioned above the authors of the article seek to consider the applied strategic analysis to be employed as the analytical support of the strategic innovative organization activity.

2. Previous Research

To enhance strategic management efficiency in difficult conditions of the present-day market economy we have developed the applied strategic analysis (ASA) to improve its information-analytical support, to evolve theory, methodology and methods of the overall strategic economic activity aspects to the level of the financial analysis being an efficient research instrument of the financial aspects of the organization economic activity based on the financial indicators and described experience.

ASA, as a strategic management function, assumes an overall research of the strategic economic organization activity aspects based on the BSC (Krylov, 2013, 2014).

The balanced scorecard concept as an analytical instrument applied in the field of strategic management was developed by American scientists Robert Kaplan and David Norton (Kaplan & Norton, 1992) at the beginning of the 90s of the XX century, evolving both in their works (Kaplan, 2008), (Kaplan & Norton, 1993, 1996), (Kaplan et al., 2010) and those of other scientists studying economics (Friedag & Schmidt, 2002), (Niven, 2014, A), (Niven, 2014, B), (Niven, 2014, C), (Niven, 2014, D), (Niven, 2014, E), (Maisel, 1992), (Olve et al., 2000), (Rampersad, 2008), and was multiply tested. At present BSC is considered to be one of the essential instruments of the organization management system.

Balanced scorecard as a whole is understood as an aggregate of parameters featuring an overall organization performance in up-to-date market economy. It reflects a balance to be brought about between short-term and long-term goals, financial and non-financial indicators, basic and auxiliary parameters, as well as internal and external factors of the organization economic activity.

The scores of the balanced system are formed depending on the outlook and strategic goals of any particular organization and have individual features. They represent a balance between

external accounting data for the owners (shareholders) and internal characteristics of the most significant business processes, innovations, training and growth that is the balance between the results of the organization performance and future growth. The system comprises a combination of objective quantity estimated data and subjective somewhat arbitrary parameters of future growth.

The main goal of the balanced scorecard is to transform a company strategy into specific tangible objectives, indicators and end up with events. The balanced scorecard is founded on the cause and effect; results attain factors and their interrelation with financial data.

The balanced scorecard encompasses four basic interrelated elements: finance, a customer, internal business processes ones as well as training and personnel development element. The BSC scores enable to characterize comprehensively an activity of commercial, government and non-for-profit organizations, the scores being relatively few (about 25 scores in average, as a rule).

It should be taken into consideration that basing on the balanced scorecard system special for any particular organization the applied strategic analysis lacks any standard methods. Hence, the ASA methods are special as well for any particular organization.

The goal of the applied strategic analysis implementation is to form analytical support for taking strategic management decisions.

The ASA accomplishment principle, a deduction principle presumes, firstly, an investigation of the general BSC indicators, then specific indicators. The principle defines general sequence of the ASA analysis according to the following leads: analysis of financial indicators, analysis of customer indicators, analysis of internal business-processes (process of after-sales service, operational process and innovative process) indicators, analysis of training and personnel development indicators.

The ASA commences from the comparative evaluation of the financial indicators and is completed by the forecast of training and personnel development.

3. Results

3.1 Concept and essence of the applied strategic innovative analysis

An applied strategic innovative analysis (ASIA), a kind of the applied strategic analysis, assumes a complex, comprehensive research of the strategic innovative organization activity aspects basing on the innovative element of balanced scorecard. It can also be considered as a facilitating function of the strategic innovative management.

ASIA subject is the innovative BSC element indicators and the factors specifying them. ASIA object is strategic organization innovative activity aspects.

The aim of the applied strategic innovative analysis is to form an analytical support of taking strategic decisions in the field of innovative activity management.

The ASIA objectives are as follows: comparative assessment of the innovative BSC element indicators, diagnostics of the BSC innovative BSC element indicators variances, forecast of the innovative BSC element indicators.

Notice, that all the objectives are closely interrelated as each subsequent objective follows from the previous one. So the diagnostics is effected by the results of the comparative evaluation of the innovative BSC element indicators and their forecast considers the diagnostics results.

Comparative assessment of the innovative balanced scorecard element implies a comparison of their real and target figures, finding a variance of the real innovative balanced scorecard element figures from the target ones and their qualitative variance characteristics. The qualitative characteristics of the innovative BSC element are real and target figures variance depends on their value (Table 1).

Table 1: Estimation of qualitative variance characteristics of the innovative BSC element's real and target figures

Variance value, %	Qualitative variance characteristics
Up to $\pm 1\%$	Fairly small
From $\pm 1\%$ to $\pm 5\%$	Essential
From $\pm 5\%$ to $\pm 10\%$	Significant
From $\pm 10\%$ to $\pm 20\%$	Large
$\pm 20\%$ and higher	Very large

Source: Krylov, 2014

The diagnostics of the innovative balanced scorecard element indicators variance is based on the cause and effect links combining BSC values, the innovative element included, into the balanced complex of general indicators and their specifying factors (results attaining factors).

While diagnosing the innovative BSC element indicators variance found are the results attaining factors, which are mostly impacting on the general or final indicators of the innovative balanced scorecard element, and determined is its value.

The innovative BSC element indicators forecast are of the purposeful nature. In case of the objective conditions the values of the innovative BSC element indicators forecast is targeted at the primordial determination and/or correction of the target values of the innovative BSC element indicators and either determination of the specific ways of their attainment or the development of the events aimed at the elimination of the variance emerged between outcome and target values of the innovative BSC element indicators in the future. Notice, that the forecast commences with the general (outcome) indicators, the factoring ones being derived from them.

The ASIA aspects imply proper strategic aspects, tactical aspects and operational aspects. Within a strategic aspect of the applied strategic innovative analysis evaluated, diagnosed and forecast are final values of the innovative BSC element indicators for the period of the developed strategy in effect, i.e. their strategic values. Within a tactical aspect of the applied strategic innovative analysis evaluated, diagnosed and forecast are interim values of the innovative BSC element indicators at the year end, i.e. their tactical values. Within an operational aspect of the applied strategic innovative analysis evaluated, diagnosed and forecast are interim values of the innovative BSC element indicators at the end of each month, i.e. their operational values. All the ASIA aspects mentioned are interrelated and agreed: the results of the analysis of the operational innovative BSC element indicators values impact on their tactical values and the results of the tactical value analysis impact on the strategic ones.

The instruments of the ASIA methods encompass an aggregate of methods ensuring that the analysis is carried out and its goals are attained. The basic ASIA method may include methods

of absolute, relative and average values, comparison, grouping, graphical and table methods, correlation and regression analysis, cluster analysis, factoring, as well as expert evaluation method.

3.2 Information base of the applied strategic innovative analysis

The ASIA information base is the innovative BSC element (Table 2), the formation comprising a number of steps: definition of the strategic innovative process goal, construction of the strategic innovative process map, selection of the innovative process indicators, definition of the target innovation process indicators values, development of the strategic innovative events.

Table 2: Innovative balanced scorecard element of the organization development

Key problem of the innovative balanced scorecard element	Strategic goal of the innovative process	Innovative process indicator	Target value	Strategic innovative event
Which goals concerning innovative process should be set to attain the aims of the succeeding operations process and after-sales services and their customers' and financial aims respectively?				

Source: the table was developed by the authors

3.3 Sequence of the applied strategic innovative analysis implementation

The applied strategic innovative analysis as a kind of the applied strategic analysis is carried out in compliance with the principle of deduction encompassing research firstly general indicators of the innovative BSC element then specific ones.

The complex elements of the ASIA are the following:

1. Analysis of the new products development expediency.
2. Analysis of the applied research and development expediency and production of the next generation product feasibility study by means of the conventional technologies.
3. Analysis of the in-depth scientific research expediency of innovative products.
4. Analysis of the feasibility study of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals.
5. Analysis of the customer demand acceptable in terms of new products development as customer future value.

The process of the ASIA analysis exercise can be presented by means of considering its main objectives i.e. diagnostics of the variance and the forecast of the innovative BSC element (Table 3).

Table 3: Matrix of the ASIA fragments

Complex ASIA element	Main ASIA objectives		
	Comparative evaluation of the innovative BSC element indicators (1)	Diagnostics of the innovative BSC element indicators variances (2)	Forecast of the innovative BSC element indicators (3)
Analysis of the new products development expediency (1)	Comparative evaluation of the new products development expediency	Diagnostics of the new products development expediency indicators	Forecast of the new products development expediency indicators

	indicators	variances	
Analysis of the applied research and development expediency and production of the next generation product feasibility study be means of conventional technological processes (2)	Comparative evaluation of the indicators of the applied research and development expediency and production of the next generation product feasibility study be means of conventional technologies	Diagnostics of the indicators variances of the applied research and development expediency and production of the next generation product feasibility study by means of conventional technologies	Forecast of the indicators of the applied research and development expediency and production of the next generation product feasibility study be means of conventional technologies
Analysis of the in-depth scientific research expediency of innovative products (3)	Comparative evaluation of the in-depth scientific research expediency of innovative products indicator	Diagnostics of the in-depth scientific research expediency of innovative product indicators variances	Forecast of the in-depth scientific research expediency of innovative product indicators
Analysis of the feasibility study of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals (4)	Comparative evaluation of the indicators of the feasibility study of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals	Diagnostics of the indicators variances of the feasibility study of the cutting-edge innovative product development acceptable to customers and overcoming likely rivals	Forecast of the indicators of the feasibility study of the cutting-edge innovative product development acceptable to customers and overcoming likely rivals
Analysis of the customer demand acceptable in terms of new products development as customer future value (5)	Comparative evaluation of the indicators of the customer demand acceptable in terms of new products development as customer future value	Diagnostics of the indicators variance of the customer demand acceptable in terms of new products development as customer future value	Forecast of the indicators of the customer demand acceptable in terms of new products development as customer future value

Source: the table was developed by the authors

Examples of the outcome and factoring indicators analyzed per every complex ASIA element are provided in Table 4.

Table 4: Examples of the analyzed outcome and factoring indicators per every complex ASIA element

Complex element of the applied strategic innovative analysis	Indicators analyzed	
	Outcome	Factoring
1. Analysis of the new products development expediency	Proportion of new products immediately meeting customer demand; Sales losses from undue marketing caused by initial design adjustments	New products promotion rate; Break-even time-period
2. Analysis of the applied research and development expediency and production of the next generation product feasibility study be means of conventional technological processes	Number of the feasible next generation products manufacturing by means of conventional technological processes	Feasibility of production process
3. Analysis of the in-depth scientific research expediency of	Number of innovative products; Proportion of innovative products	In-depth research and development feasibility

innovative products	within sales volume; New products introduction opposite to planned rival product	
4. Analysis of the feasibility study of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals	Time taken for the innovative product development; Extent of ferreted out customer preferences in terms of innovative products	Number of innovative products prototypes before the launch
5. Analysis of the customer demand acceptable in terms of new products development as customer future value	Approximate sales of anticipated new products manufactured; Approximate profit from anticipated new products sales	Types of customer preferences acceptable in connection with new products production feasibility; Rating of each type of customer preferences acceptable in connection with new products production feasibility; Pro-forma prices for anticipated new products

Source: the table was developed by the authors

4. Conclusion

To complete the treatment of the applied strategic innovative analysis concept we draw the following conclusions:

applied strategic innovative analysis as a kind of the applied strategic analysis may be considered as a sufficiently effective instrument to research strategic aspects of the innovative organization activity in present-day economic environment entailing innovative BSC element indicators' comparative assessment, variances diagnostics and their forecast within the steps and strategic goals of the innovative process implemented;

ASIA encompasses an analysis of the new products development expediency indicators; analysis of the indicators of the applied research and development expediency and production of the next generation product feasibility study by means of conventional technological processes; analysis of the indicators of the in-depth scientific research expediency of innovative products; analysis of the feasibility study indicators of the cutting-edge innovative products development acceptable to customers and overcoming likely rivals; analysis of the indicators of the customer demand acceptable in terms of new products development as customer future value.

ASIA analysis commences with comparative evaluation of the of the new products development expediency outcome indicators and is finalized with factoring indicators forecast for the customer demand acceptable in terms of new products development as customer future value;

ASIA results in ability to be employed for the long-term, medium and short-term management decisions in the field of the innovative organization activity.

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RISK OF MOBILE PHONE ADDICTION. PRESENTATION OF THE RESULTS OF INTERNATIONAL RESEARCH CONDUCTED AMONG POLISH, LATVIAN AND LITHUANIAN STUDENTS

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Abstract. Mobile technologies, especially mobile phones with the Internet access, increasingly become an indispensable tool used by young people. Year by year, the number of mobile phone owners and users use it not only for calling but also for sending text messages, using the Internet, taking pictures and finally for playing games. Using the mobile phone became so common and automatic, that more often we can talk about the abuse or technology addiction. The article presents the results of a research conducted among students in 2015 in 3 European countries: Poland, Lithuania and Latvia. 1048 students have been tested, including 690 women and 322 men over the age of 18. The aim was to characterize the mobile phone use by young people and to define the level of the risk of phonoholism. The study was carried out using a diagnostic survey method. The online surveys technique was applied with the use of Ankieta.pl portal. In addition, the study used questionnaire named *Addiction to Mobile Phone Questionnaire (AMPQ)* by A. Potemska and B. Pawłowska. The article describes the scale of mobile phone addiction in the studied group of students. It was agreed that 7.6% of the surveyed respondents exhibit the characteristics of addiction from the phone, 34.6% belong to a group of people in risk of addiction, and 57.7% use the device correctly. The highest percentage (8.9%) of phone abusers belongs to Lithuanian students, and the lowest is in Latvia- 4.5%. Among Polish students 8.6% of researched met the criteria of behavioral addiction.

Keywords: mobile phone, Internet, addiction, young people

JEL Classification: C12, I12, L82, O57, O33

Introduction

The development of the digital technologies and mobile services caused that a mobile phone and its newest equivalent, a smartphone, are classified at top positions among the items of everyday use. Day by day, the popularity of using Internet or applications by the agency of mobile phones is rising. This situation causes that the young man uses mobile phone almost

automatically and he replaces such devices as a watch or a notebook with it (Sanchez – Martinez & Otero, 2009; Grecu, 2013).

Analyzing world's developmental trends, it indicates the rapid growth of mobile telephony use at a global level – the penetration of a market with these devices in 2014 was equal to 97 pieces per 100 people. In Europe, it was 1,2 of a mobile phone per resident. For comparison, in Poland and Lithuania it was 1,5 of a mobile phone per resident. Whereas in Latvia it was 1,2 of a mobile phone per resident (The Rise of Mobile Phones ..., 2016; WDI, 2016). The number of mobile phones subscribers per 100 citizens in years 2005-2015 was rising regularly, year by year, for about 7 subscribers per 100 citizens. In 2015, in comparison to 2005, there was almost three times increase of mobile phones subscribers per 100 citizens (in 2005 there were 33,9 of mobile phones subscribers per 100 citizens, and in 2015 there are 96,8 subscribers per 100 citizens) (Warzecha, 2016, A). It is predicted that in 2017 the number of the mobile phone users will be equal to 5 billion people and in Europe this indicator will reach the level of 728 million people (Richter, 2016).

The commonness of mobile phones use causes that the rising danger of addictive use of the aforementioned device (especially in juvenile and young adult groups) is identified (Lopez-Fernandez et al., 2014; Krzyżak-Szymańska, 2014). M. Griffiths identifies this behavior as the technological addiction in which there is a dependence between the machine and a man with a simultaneous lack of physical toxicosis (Griffiths, 1995). The overuse of a mobile phone, so called phonoholism or nomophobia, can be mentioned among the dangers.

M. Griffiths described the diagnostic criteria of the above- mentioned addictions and he classified those criteria as follows:

1. Tolerance (understood as a rising need for the use of a specific new digital technology in order to obtain required level of excitation);
2. Domination (appearing when the use of the Internet or computer games becomes the most important activity in a life and it dominates thoughts, feelings and behavior);
3. Modification of mood (happening when the person uses the technology to escape from the thoughts about problems and to cope with the depressed mood);
4. Withdrawal symptoms (including e.g.: unpleasant feeling or/ and physical effects appearing after ceasing the use of technology or after the drastic cessation);
5. Conflicts (they are identified as the internal conflicts concerning the loss of control over own behavior, the conflict between the user of specified technology and other kinds of his activity, the conflict with social environment);
6. Regressions (determined as the tendency to the fast throwback to e.g.: the Internet overuse) (Griffiths 2005; Pedrero Pérez et al., 2012).

It is assumed that fulfilling at least three out of all above mentioned factors may indicate the problem with the overuse of digital technologies (Kaliszewska 2007).

Moreover, in the subject literature there is no conformity when it comes to terming the discussed behavior as the addiction because in official health classifications (ICD-10; DSM-V) such a medical unit was not set apart, which is a result of the problems with the determination of explicit diagnostic criteria. That is why the researchers refer to this behavior as overuse, problematic or pathological use or dependence on the mobile phone (Ezoe et al, 2009; Bianchi & Philips, 2005; Takao et al., 2009).

The empirical data indicate the scale of this phenomenon on the 6% level among Italian teenagers (Martinotti et al., 2011) and on the 20% level among Spanish teenagers (Lopez-Fernandez et al., 2012). There is a deficit of Polish research concerning the use of mobile phones, and the rare examples suggest that 3% of young people are addicted to mobile phones and 35% - in danger of addiction (Potembska & Pawłowska, 2009). Additionally, it is indicated that women more often than men overuse mobile phones (Potembska & Pawłowska, 2009; Pawłowska & Potembska 2012, Warzecha, 2016, B). The aim of this study is the definition of the risk level of the danger concerning the addictive mobile phone use among the students from countries located on the Baltic coast i.e.: from Poland, Lithuania and Latvia and the indication of the statistically significant differences between the studied groups of students in the range of intensification of symptoms of the addiction to mobile phone.

1. Presentation of the results of own research

1.1. Methodological aspects of the research

The research was conducted online with the use of Ankieta.pl portal in 2015. The main mode of action was diagnostic survey method within which *Addiction to Mobile Phone Questionnaire (AMPQ)* by A. Potembska and B. Pawłowska was used (Potembska & Pawłowska, 2009; Pawłowska & Potembska 2012; Krzyżak-Szymańska & Szymański, 2013).

There were 1048 students tested, they came from three European countries: Poland- 446 people, Latvia- 268 people and Lithuania- 314 people. The tested students were over 18 years old. In the group of surveyed people, 28% were between 18-20 years old, 29% were between 21-23 years old and 43% were 24 or more. There were 2/3 of women and 1/3 of men among the respondents.

1.2. Compulsive use of mobile phones by students

On the basis of the collected results in the general scale of *AMPQ* it was established that 7,6% of respondents reveal the traits of mobile phone addiction, 34,6% are in the group of people in danger of addiction and 57,7% use the aforementioned device correctly. The data from this field is included in Table 1.

Table 1: The scale of excessive use of mobile phones by respondents with the division into countries

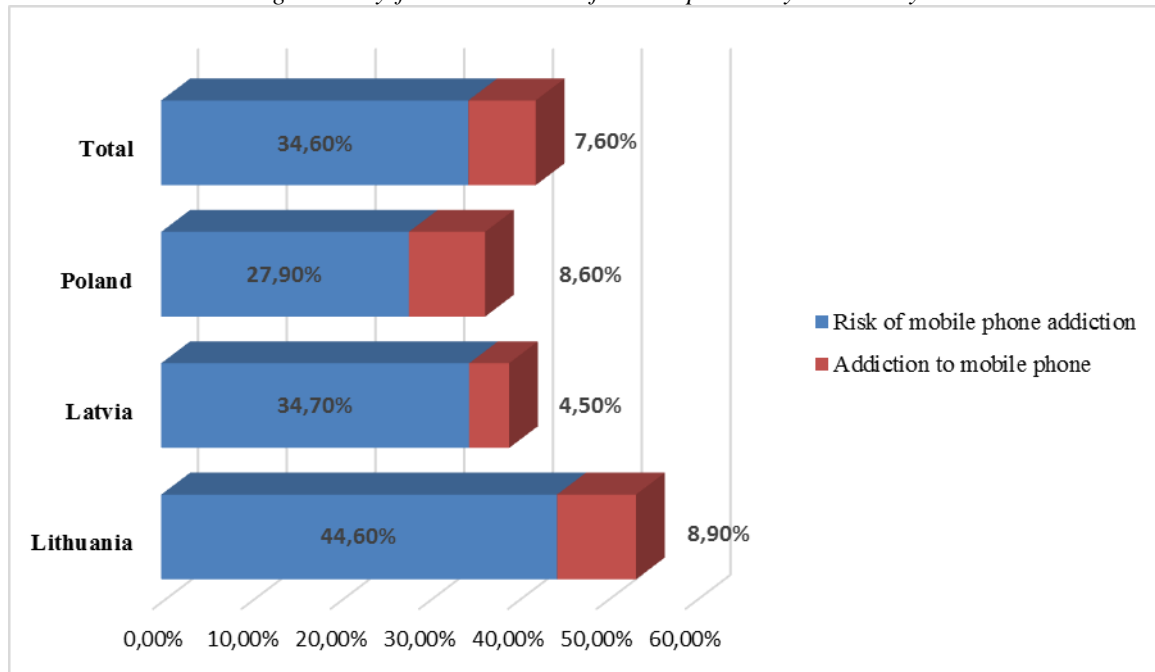
Level of use	Country						Total	
	Poland		Latvia		Lithuania			
	N	%	N	%	N	%	N	%
Correct mobile phone use	296	63,5	163	60,8	146	46,5	605	57,7
Risk of mobile phone addiction	130	27,9	93	34,7	140	44,6	363	34,6
Addiction to mobile phone	40	8,6	12	4,5	28	8,9	80	7,6
Total	466	100,0	268	100,0	314	100,0	1048	100,0

Source: own study

Moreover, the tested group was analyzed as regards the dysfunctional use of mobile phone, taking into consideration the countries the students come from. It was established that 42,2%

of respondents reveal the symptoms of dysfunctional use of mobile phone¹². The most numerous group was noted among Lithuanians i.e. 53,5% of Lithuanian sample (Figure 1).

Figure 1. Dysfunctional users of mobile phones by nationality



Source: own study

The obtained results are classified according to gender as well. The women slightly more often reveal dysfunctional behavior in the scope of discussed problem (43%) than men (39%). This difference is particularly visible in Polish sample, in which dysfunctional use of a mobile phone was noted in 39% of women and in 25% of men. In Latvian students sample there were 48% of women and 33% of men. Whereas in Lithuanian students sample there was the same amount of female and male dysfunctional users.

Another aspect which was subjected to analysis was the results of subscales of AMPQ. The authors of the test distinguished within its framework four subscales which included different ranges of the mobile phone overuse (Table 2).

Table 2: The mean results of AMPQ test subscales among functional and dysfunctional users of mobile phones

Subscales of AMPQ (Addiction of Mobile Phone Questionnaire)	Correct use of mobile phone			Pathological use of mobile phone (including the risk of addiction)		
	mean	SE	significance in the general result of the test	mean	SE	significance in the general result of the test
Scale of acceptance and closeness (0-32) 8 questions	3,71	3,58	20,5%	14,16	5,72	27,4%
Scale of addiction to photo camera functions (0-32) 8 questions	10,50	4,86	58,4%	17,14	4,99	33,2%

¹² By dysfunctional use of mobile phone the authors mean people who reveal symptoms of behavioral addiction or people who are at risk of addiction.

Scale of addiction to sending text messages and to phone calls (0-40) 10 questions	1,69	2,23	9,3%	10,45	8,99	20,2%
Scale of intermediary communication (0-28) 7 questions	2,33	2,55	12,7%	9,86	5,61	19,2%
General result of AMPQ (0-132) 33 questions	17,96	7,47	100%	51,65	19,40	100%

Source: own study

Analyzing gathered data, the percentage share of particular subscales in the general test result is especially significant. As it results from the data included in Table 2 the biggest difference concerns the subscale of addiction to sending text messages and to phone calls, which consists of 9,3% of the result for functional users and as much as 20,2% for dysfunctional users. This difference is significant because the result of this scale concerns mostly the symptoms of mental excessive use of a mobile phone e.g.: the need of constantly being in touch with others. That is why it is possible to indicate that in the group of people who use mobile phones in a dysfunctional way the issue of mental devotion to communicating with others is particularly important.

In the next phase of the research the results in general scale and in subscales of AMPQ obtained by the students from Poland, Latvia and Lithuania were compared with the test “t” (Table 3, 4, 5).

Table 3: The comparison of mean results from AMPQ test by B. Pawłowska and E. Potembska in general scale and in subscales obtained by Polish and Latvian students

Analyzed scale	Poland		Latvia		t	p
	m_1	S_1	m_2	S_2		
Result in the general scale of AMPQ	31,55	22,26	28,63	17,81	1,949	0,052
Acceptance and closeness	7,58	6,94	7,18	6,09	0,766	0,444
Addiction to photo camera functions	13,77	5,65	11,85	6,30	3,876	0,001
Addiction to sending text messages and to phone calls	5,41	7,94	3,90	5,45	3,031	0,003
Intermediary communication	4,79	5,70	5,70	4,97	-2,191	0,029

Source: own study

Table 4: The comparison of mean results from AMPQ test by B. Pawłowska and E. Potembska in general scale and in subscales obtained by Polish and Lithuanian students

	Poland		Lithuania		t	p
	m_1	S_1	m_2	S_2		
Result in the general scale of AMPQ	31,55	22,26	36,22	23,06	-2,832	0,005
Acceptance and closeness	7,58	6,94	9,88	7,29	-4,405	0,001
Addiction to photo camera functions	13,77	5,65	13,80	5,85	-0,062	0,951
Addiction to sending text messages and to phone calls	5,41	7,94	6,76	8,04	-2,267	0,024
Intermediary communication	4,79	5,70	6,48	5,68	-4,024	0,001

Source: own study

Table 5: The comparison of mean results from AMPQ test by B. Pawłowska and E. Potembska in general scale and in subscales obtained by Latvian and Lithuanian students

Scales of AMPQ test	Latvia		Lithuania		t	p
	m_1	S_1	m_2	S_2		
Result in the general scale of AMPQ	28,63	17,81	36,22	23,06	-4,476	0,001
Acceptance and closeness	7,18	6,09	9,88	7,29	-4,773	0,001
Addiction to photo camera functions	11,85	6,30	13,80	5,85	-3,657	0,001

Addiction to sending text messages and to phone calls	3,90	5,45	6,76	8,04	-4,949	0,001
Intermediary communication	5,70	4,97	6,48	5,68	-1,727	0,085

Source: own study

As it results from the data included in Table 3-5, the difference between obtained test results in the group of students from Poland and Lithuania and in the group from Latvia and Lithuania in the range of symptoms of mobile phone addiction measured with the use of AMPQ scale is statistically important ($p < 0.05$). The general results of AMPQ test obtained by Lithuanian students ($m_2=36,22$; $S_2=23,06$) are significantly statistically higher than the results of AMPQ test obtained by Polish students ($m_1=31,55$; $S_1=22,26$) or Latvian students ($m_1=28,63$; $S_1=17,81$).

The research confirmed also statistically significant differences in mean results of AMPQ test obtained by the students from tested countries in particular subscales (the differences highlighted in yellow color).

2. Conclusions

The conducted research indicates that there are statistically significant differences between students from Poland, Latvia and Lithuania in the range of intensification of symptoms of addiction to mobile phones which was measured with Addiction to Mobile Phones Questionnaire by E. Potembska and B. Pawłowska.

The students from Lithuania obtained significantly higher results than students from Poland and from Latvia in the range of intensification of dysfunctional use of mobile phones. The obtained results indicated as well that the students from Lithuania and Poland prefer phone calls and sending text messages over the personal meetings face to face in the real world.

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EXIT TAX IN THE WORLD OF INTERNATIONAL MIGRATION OF COMPANIES AND INDIVIDUALS

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Abstract. Globalization of the world economy enables companies and individuals to move across borders and seek new opportunities and business options in other countries. To do so persons may need to transfer residency or shift assets of permanent establishment. The adverse side of such a migration lies in the loss of tax revenues from taxation of capital gains that occur when shifted assets are sold in new country, frequently low-tax jurisdiction. Original home country can prevent loss of tax revenues from taxation of capital gain by imposition of an exit tax. Despite rationale of exit tax its impact in globalized world might be controversial, as it represents barrier to free movement of capital and persons and freedom of establishment, which was mirrored especially in a number of controversial decisions of the CJ EU. This paper investigates presence of the exit tax in the OECD and EU Member States and focuses on the most problematic provision – timing and possibility to defer payment of exit tax until the asset is sold which can soften adverse effect of exit tax on international movement of persons. This is subject of harmonisation of anti-tax-avoidance measures in the EU however the OECD anti-avoidance package (BEPS) does not include exit tax.

Keywords: international mobility, companies, capital gains, exit tax, tax avoidance harmonisation

JEL Classification: F22, F60, H26, K33, K34

1. Introduction

Exit tax is a name for taxes paid by individual or business company when the person shifts his residence from the original state of residency to another state. Exit tax is also imposed when assets of permanent establishment located in one State is transferred to a permanent establishment abroad. The subject of the exit tax is unrealized capital gain which may appear after transfer, when assets are sold. Potential sources of unrealized capital gains are assessed assets of the persons, who long-term, usually at least 5 - 10 years, had been tax resident of the country they are leaving. Tax rates vary country-by-country; they are usually at the level of about 30% of the tax base. Some countries impose flat tax rates, others progressive tax rates. Tax base is a difference between original acquisition price of asset and its market price at time when person's residence or assets are transferred abroad. Taxation of income through exit tax is part of non-contract specific rules against cross-border tax avoidance.

The purpose of exit taxes is to prevent speculative, tax motivated transfers of the tax residency and loss of potential tax revenues resulting from not taxing capital gains of leaving

taxpayer. It is also a way how to keep international tax fairness. Exit tax is a way how to ensure horizontal tax fairness between residents who stay and resident who leaves home country – as both of them eventually will pay capital gains tax. The only difference is in timing: while person who stays in home State pays tax out of *realized* capital gains, while leaving person pays exit tax – a tax on *unrealized* capital gains. Exit tax also ensures territorial principle of taxation. The opposite side of the argument is that only some, but not all tax jurisdictions levy exit taxes. States can directly create comparative tax advantage for settlement of persons or companies in the jurisdictions, which do not apply exit tax in case of emigration of subjects, who had residency in their territory. Absence of exit taxes can create a comparative advantage and be an efficient instrument of international tax competition.

In the research and professional literature the exit tax topic is vibrant. Tax competition issues are very closely related to the anti-tax avoidance measures. Tax competition issues were subject of analysis for example in works written by Bukovetsky (Bucovetsky, 1991), Wilson (Wilson, 1986), Borck and Pflüger (Borck & Pflüger, 2006), Davies (Davies, 2005), Devereux et al (Devereux, Griffith, & Klemm, 2002), Fuest and Huber (Fuest & Huber, 1999), Haufler (Haufler, A. & Wooton, 1999), Ottaviano and Ypersele (Ottaviano & Ypersele, 2005), Devereux and Loretz (Devereux & Loretz, 2012). Several authors surveyed compliance of exit tax provisions with European law, among them Langenmayer (Langenmayer, 2015), Cerioni (Cerioni, 2015), and Broecke (Brocke & Muller, 2013). Mann shed light on the contradicting views on exit tax under the OECD Model Tax Convention and Treaty of Functioning of the European Union (Man & Tiu, 2011). Commission of the European Communities proposed coordination of the exit tax in 2006 (Commission of the European Communities, 2006). In July 2016 Council of the European Union proposed a Council Directive laying down rules against tax avoidance practices (Council of the European Union, 2016).

This paper examines recent tendencies of the exit tax with special focus on the OECD and the EU MSs. Next part examines compliance of exit tax provisions with EU Law and includes review of the case law on exit tax. Part three provides reasons of harmonisation of exit tax provisions and briefly defines harmonised exit tax rules in the EU. Part four shows which EU Member States will have to introduce exit tax legislation. Finally, conclusion states that harmonisation of exit tax rules will have impact principally on post-communist EU Member States.

2. Compliance of exit tax rules with the EU law

Levying exit tax has logical reasoning. It would be possible to accept exit taxes and consider them as justified and logical part of the national tax systems. Thus exit taxes could pass the merits test. Nevertheless, national exit tax provisions in several EU MSs have been facing several investigations, and this part of paper provides brief explanation of this issue.

The primary source of EU law, Consolidated version of the Treaty on European Union, guarantees to European citizens fundamental rights, among them the right of establishment. It is guaranteed by the Article 49 of the Treaty of the Functioning of the European Community (TFEU), and it states, that "...restrictions on the freedom of establishment of nationals of a Member State in the territory of another Member State shall be prohibited. Such prohibition shall also apply to restrictions on the setting-up of agencies, branches or subsidiaries by

nationals of any Member State established in the territory of any Member State. Freedom of establishment shall include the right to take up and pursue activities as self-employed persons and to set up and manage undertakings, in particular companies or firms ... under the conditions laid down for its own nationals by the law of the country where such establishment is effected.” The issue of imposing exit taxes in the EU Member States is due to the fact that they may violate freedom of establishment that is a fundamental right guaranteed pursuant to Art 49 TFEU since the decision to transfer residency of person or assets of permanent establishment from one to another EU Member State gives birth to exit tax liability and thus breeds tax disadvantage. This is because those taxpayers who decide not to transfer their residency or assets to other Country are not obliged to recover immediately a capital gains tax from unrealized profit. In this sense taxpayers who transfer their residence or assets to other country suffer from less advantageous tax treatment, they face to the violation of freedom of establishment. In addition, an adverse impact of the exit tax provisions is contradictory to real possibilities to take advantages from free movement and doing business within the EU internal market.

Competences to adopt national tax law on direct taxes, including exit tax, remain in the hands of the EU Member States. However, no tax provisions can violate fundamental rights guaranteed by the EU law. Court of Justice of the European Union (CJ EU) has right to investigate whether national tax provisions comply properly with EU law. Below there are operative parts of the landmark cases in the field of exit tax decided by CJ EU (former European Court of Justice, ECJ). Table 1 lists landmark cases and infringement proceedings on exit tax provisions in the EU MSs where CJ EU launched decisions. It also provides answers of the CJ EU on three core questions: Let’s focus on three key issues: first, whether the interrogated national exit tax provisions restrict the freedom of establishment; second, whether such a restriction can be justified; and finally, whether justified provisions are proportionate to the goals they were intended to pursue.

In the case *Hughes de Lasteyrie du Saillant (C-9/02)* the Court ruled, that „The principle of freedom of establishment laid down ... Article 43 EC must be interpreted as *precluding* a Member State from establishing, in order to prevent a risk of tax avoidance, a mechanism for taxing as yet unrealised increases in value such as that laid down by Article 167a of the French Code Général des Impôts, where a taxpayer transfers his tax residence outside that State. “

In the case „*N*“ case (*C-470/04*) the Court ruled, that „Article 43 EC must be interpreted as *precluding* a Member State from establishing a system for taxing increases in value in the case of a taxpayer's transferring his residence outside that Member State, such as the system at issue in the main proceedings, which makes the granting of deferment of the payment of that tax conditional on the provision of guarantees and does not take full account of reductions in value capable of arising after the transfer of residence by the person concerned and which were not taken into account by the host Member State.”

In the case *National Grid Indus case (C-371/10)* the Court ruled, that “...the Article 49 TFEU must be interpreted as: first, *not precluding* legislation of a Member State under which the amount of tax on unrealised capital gains relating to a company’s assets is fixed definitively, without taking account of decreases or increases in value which may occur subsequently, at the time when the company, because of the transfer of its place of effective management to another Member State, ceases to obtain profits taxable in the former Member State; it makes no difference that the unrealised capital gains that are taxed relate to exchange

rate gains which cannot be reflected in the host Member State under the tax system in force there; second, *precluding* legislation of a Member State which prescribes the immediate recovery of tax on unrealised capital gains relating to assets of a company transferring its place of effective management to another Member State at the very time of that transfer.”

Besides several individual exit tax cases Commission sent to several EU MSs *reasoning opinion* and claimed to change within 2 months their exit tax provisions so that they comply fully with the EU law. Commission referred to CJ EU Portugal, Denmark, the Netherlands, and Spain as their national exit tax rules had not been compatible with the EU. Table 2 lists infringement proceedings of the CJ EU when European Commission referred several EU Member States due to the failure to comply with EU Law, mainly violation of the freedom of establishment, in their national exit tax provisions. Below there is brief summary of CJ EU *infringement proceedings*.

In *EC vs Portugal (C-38/10)* the Court declares that, „...by adopting and maintaining in force Articles 76 A and 76 B of the Corporation Tax Code ..., which are applicable in the case of transfer, by a Portuguese company, of its registered office and its effective management to another Member State or in the case of transfer, by a company not resident in Portugal, of some or all of the assets attached to a Portuguese permanent establishment from Portugal to another Member State, and which prescribe the immediate taxation of unrealised capital gains relating to the assets concerned but not of unrealised capital gains resulting from purely national operations, the Portuguese Republic *has failed to fulfil its obligations under Article 49 TFEU*.“

In the *EC vs Spain (C-64/11)* the Court declares that, „...by adopting Article 17(1)(a) and (c) of the re-cast text of the Law on corporate taxation, approved by Royal Legislative Decree 4/2004 of 5 March 2004 ..., pursuant to which, in the case of a transfer to another Member State of the place of residence of a company established in Spain and of the assets of a permanent establishment situated in Spain, unrealized gains form part of the tax base for the financial year, whereas those assets have no immediate consequences in terms of tax if those transactions tax place in Spanish territory, the Kingdom of Spain. “

In the *EC vs Denmark (C-261/11)* the Court declares that, „...by adopting and maintaining in force Paragraph 8(4) of the Law on taxation of the income of share companies and other matters ..., concerning the immediate taxation of the income of share companies, and consequently a tax system providing for the immediate taxation of unrealized capital gains relating to a transfer of assets by a company established in Denmark to another Member State of the European Union or to a non-member country party to the Agreement on the European Economic Area of 2 May 1992, the Kingdom of Denmark ... “

In the *EC vs Netherlands (C-301/11)* the Court declares that, „...by adopting and maintaining in force a national rule providing for the taxation of unrealized capital gains on the transfer of an undertaking or when transferring a company's registered office or actual head office to another Member State, the Kingdom of the Netherlands *has failed to fulfil its obligations under Article 49 TFEU*. “

Table 1: Review of CJ EU rulings in exit tax cases and infringement proceedings

case No	short case name	applicant	defendant	CJ EU answers		
				Q1	Q2	Q3
C-9/02	du Saillant	Hughes de Lasteyrie du Saillant	FR	yes	no	no
C-470/04	„N“ case	Mr. N	NL	yes	no	no
C-371/10	NGI	National Grid Indus BV	NL	no	no	no
C-371/10	NGI	National Grid Indus BV	NL	yes	yes	no
C-38/10	EC vs Portugal	Commission	POR	yes	no	no
C-64/11	EC vs Spain	Commission	SPA	yes	no	no
C-261/11	EC vs Denmark	Commission	DEN	yes	no	no
C-301/11	EC vs Netherlands	Commission	NL	yes	no	no

Legend: Q1 states for Question 1: Do interrogated national exit tax provisions restrict the freedom of establishment guaranteed by Art. 49 of the TFEU? Q2 states for Question 2: Can interrogated national exit tax provisions be justified? Q3 states for Question 3: Are interrogated national exit tax provisions proportionate to the goals they were intended to pursue?

Source: author's own compilation

3. Need for coordination of exit tax provisions in the EU

In this part there are discussed main reasons why national exit tax provisions have been controversial with the EU law, even if there are sane reasons to levy exit tax.

- **First issue: Exit tax is imposed on emigrating residents or their assets only.** In contrast, exit tax is not levied on those residents or assets who do not emigrate from home country. Emigrating persons (individuals, companies) are taxed upon the changes of residence, emigration to arrival state, or when there is move of permanent establishment or transfer of some or all assets to arrival state. Domestic companies which do not emigrate or move permanent establishment or transfer assets abroad are not subject to exit tax.
 - *The rationale behind: International tax fairness and equity.* There is rationale for national exit tax rule which impose tax only on emigrating resident or assets. The underlying reason behind this kind of tax treatment of emigrating residents is international tax fairness. By spending general government budget expenditures, funded by tax revenues, home country of emigrating residents or assets had provided positive environment which contributed to developing and increasing of transferred assets market value. The logic of levying exit tax on emigrating residents or assets for tax fairness purposes is obvious. It would be unfair, if arrival country takes capital gains tax revenues resulting from selling assets abroad immediately or within short period of time after emigration or transfer.
 - *The problem with exit tax in the EU: Discrimination.* Pursuant the Article 18 TFEU which states, that „within the scope of application of the Treaties, and without prejudice to any special provisions contained therein, any discrimination on grounds of nationality shall be prohibited.“ In case of national exit tax rules those residents who decided to emigrate and change their status either by transferring their residence or assets to abroad are treated less favourably and thus discriminated in comparison to tax treatment of those citizens, who do not emigrate.
- **Second issue: Exit tax is anti-tax-avoidance measure.**
 - *The rationale behind: Equality of taxation of all residents of home country.* Another issue related to tax fairness is equality of taxation of residents and assets in home

country: exit tax ensures equal taxation of all residents or assets no matter whether they stay or emigrate from home country. If exit tax was not levied on emigrating resident or asset, emigrating persons may avoid capital gain tax which is payable by residents, but upon realised capital gains.

- *The problem with exit tax in the EU: Proportionality.* Imposition of exit tax upon emigration creates problem to emigrating taxpayer with cash flow as transferred assets are not sold at time of transfer to arrival country. It means that exit tax is levied on unrealised capital gains and it must be paid from other, already existing cash.
- **Third issue: Time when exit tax must be recovered.** National exit tax rules claim emigrating taxpayer to recover exit tax immediately upon the time of emigration of residence or transfer of assets of permanent establishment.
 - *The rationale behind: Difficulties in tracing emigrating assets locations and changes in their value.* There is rationale for leaving exit tax on unrealized capital gains immediately upon emigration, because original home country will not have efficient mechanism to trace assets transferred abroad, and also transferred assets may change their value during the time, which is the base to compute exit time.
 - *The problem with exit tax in the EU: Proportionality.* The key here is time, namely how much time emigrating resident or asset had spent in home country utilizing its public resources, and how long after emigration assets are sold. Reasonably long period of time spent in home country and immediate or within short time period after emigration selling of assets will create international tax unfairness, when capital gain tax revenues would be unfairly taken by arrival country.

Above listed issues represent main reasons for which CJ EU (ECJ) considered national exit tax rules justifiable but not proportionate to goals they anticipates. Rationale behind levying exit tax (elimination of capital gains tax avoidance) on one hand and number of exit tax cases decided by CJ EU where national exit tax provisions were found justifiable but not proportionate twisted European Commission to propose coordination of exit tax provisions. Commission of the European Communities launched first initiative towards cooperation in exit tax legislation in 2006 (Commission of the European Communities, 2006).

Recently Council of the European Union proposed a Council Directive laying down rules against tax avoidance practices that directly affect the functioning of the internal market (hereinafter the Anti-tax avoidance package, ATAP). Pursuant to the Article 5 para 1 of ATAP a taxpayer shall be subject to exit tax at an amount equal to the market value of the transferred assets, at the time of exit of the assets, less their value for tax purposes. This means, that European Union eventually justifies fully necessity of having an exit tax in national tax systems even if freedom of establishment must be also maintained. To support compliance exit tax with freedom of establishment, the European Union introduces for taxpayers two options how to recover exit tax: first, immediately upon emigration of residence or transfer of assets, or second, instead immediate recovery taxpayer can opt for deferral of exit tax and pay it within 5 years by instalment payment, in which case taxpayer may be charged interest payment. The deferral of instalment payment will be immediately discontinued upon selling of assets subject to exit tax. By harmonising of the exit tax provisions on the EU level the EU can “have its cake and eat it at the same time.”

4. Which countries will be mostly affected by the coordination of the exit in the EU?

Article 1 of the ATAP Directive sets scope of the Directive application. The ATAP provisions are applicable to all taxpayers that are subject to corporate tax in one or more Member State, including permanent establishments in one or more Member State of entities resident for tax purposes in a third country. EU Member States must transpose provisions on exit tax to their legislation by 31 December 2019 and apply them from 1 January 2020. This part of the paper presents EU MSs those are most likely to be more seriously affected by harmonisation of the exit tax provisions in the EU. Table 2 summarizes presence of the exit tax legislation in all 35 OECD Member States and in all 28 EU Member States. Out of 35 OECD Member States 22 are also EU MSs.

Out of 35 OECD MSs, 20 levy exit tax, and 13 of them are EU MSs. The resulting 15 OECD MSs do not levy exit tax. When searching for the presence of exit tax provisions in the EU MSs, 13 EU MSs impose exit tax on unrealised capital gains, while 15 EU MSs do not apply exit tax at all.

Table 2: Presence of exit tax legislation in the OECD and the EU Member States in 2016

presence of exit tax							
yes				no			
		OECD MS	EU MS			OECD MS	EU MS
1	AUS	1	1	1	CZ	1	1
2	BEL	1	1	2	EE	1	1
3	DEN	1	1	3	GRE	1	1
4	FIN	1	1	4	HUN	1	1
5	FRA	1	1	5	LAT	1	1
6	GER	1	1	6	POL	1	1
7	IRE	1	1	7	SLO	1	1
8	ITA	1	1	8	SVK	1	1
9	LUX	1	1	9	SWE	1	1
10	NL	1	1	10	AUL	1	0
11	POR	1	1	11	CHL	1	0
12	SP	1	1	12	KOR	1	0
13	GB	1	1	13	MEX	1	0
14	CAN	1	0	14	NZ	1	0
15	ICE	1	0	15	TUR	1	0
16	ISR	1	0	16	BUL	0	1
17	JAP	1	0	17	CROA	0	1
18	NOR	1	0	18	CYP	0	1
19	SWZ	1	0	19	LIT	0	1
20	US	1	0	20	MAL	0	1
				21	ROM	0	1

Source: author's compilation based on the national tax legislation of the OECD and EU MSs.

5. Conclusion

The purpose of this paper was to investigate tendencies in exit tax legislation in the OECD and EU Member States. The paper first presents nature and rationale behind levying exit tax,

and then then it focuses on the compliance of exit tax provisions with freedom of establishment guaranteed by EU law. It is shown, that the ECJ, later CJ EU ruled that right of establishment precludes exit tax provisions, especially the requirement to recover exit tax immediately. Nevertheless, as exit tax seems to be justifiable due to its anti-tax-avoidance effect, the EU recently proposed harmonisation of exit tax. The paper presents review of recent existence of the exit tax legislation in the OECD and EU MSs. The main finding is that exit tax is levied especially by the most developed OECD and EU MSs. To the contrast 15 EU MSs, majority of them post-communist countries that went through transition period and entered the EU in one of two latest accession waves, either in 2004 or 2010, do not levy exit tax. The list of the EU MSs that have never before imposed exit tax consist mainly of former communist Central European Countries, namely: Czech republic, Estonia, Hungary, Latvia, Poland, Slovakia, Slovenia, Bulgaria, Croatia, Lithuania, and Romania. Other EU MSs that do not apply exit tax are: Greece, Cyprus and Malta. There is not any tradition in levying exit tax in history of their tax systems. Harmonisation of exit tax provisions in the EU will lead to the introduction of a completely new tax in 10 EU MSs, former transition countries.

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THE INFLUENCE OF GLOBALIZATION ON SMALL AND MEDIUM-SIZED ENTERPRISES

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Abstract. The process of globalization leads to establishing the common global economy with free movement of capital, goods, knowledge and services. The liberalization of markets and changing conditions of the world economy offers promising perspectives in international activities even for small and medium-sized businesses, which have their irreplaceable roles in the economies of individual countries and function as major employers persistently stimulating competition, thus contributing to a healthier business environment. Although their major advantage compared to big companies is their ability to instantly adapt to changing market requirements, small and medium-sized businesses have limited access to financial resources, information and knowledge due to their size and position in the market. This results in their reduced ability to respond to various business risks, such as an increase in input prices, loss of key markets, potential legislative restrictions, lack of skilled workers due to limited wage costs and lower image. Since one of the possible alternatives for further development of a small business is its entry to a foreign market, this paper aims to clearly define the impact of globalization on the Czech business environment and identify factors that influence the success of small and medium-sized businesses in their expansion to foreign markets.

Keywords: globalization, business environment, small and medium-sized business, expansion to foreign markets

JEL Classification: M21, L26, F23, F60

1. Small and medium-sized enterprises in the Czech economy

Small and medium-sized enterprises are an important part of any developed economy and they are especially important for the state in terms of employment and the economic performance of the society as a whole. In total, small and medium-sized enterprises account for more than 1 million economic subjects in the Czech Republic. The SME sector is a major driving force for growth, innovation and competitiveness, as well as being an important employer. According to the Ministry of Industry and Trade [MIT] (2015), the share of small and medium-sized enterprises in the overall number of active business subjects was 99.84% in 2014. The share of value added for small and medium-sized enterprises was 53.11% in 2014, and the share of employees in small and medium-sized enterprises from the overall number of employees in the business sector in the Czech Republic was 59.39% in 2014.

The Czech Republic's internal market is relatively small and can easily become inadequate for a growing business. However, a saturated market is not the only reason for international

expansion, as the motivation to enter a foreign market differs between individual companies. Other reasons for carrying out business or production abroad are, for example, lower labour costs, more favourable legislation, the possibility to export surplus production, the utilization of production capacities, achieving lower costs through economies of scale, a wider range of consumers, intensifying competition in the local market and lowering business risk.

In relation to globalization it can be stated (Government Office, 2012) that the Czech Republic is a small, open economy, focusing on exports, which is why it is heavily dependent on the international division of labour, on external economic relations and on the growth of the countries' economies which Czech exports are predominantly aimed at. The following points relate to the advantages of the domestic market in terms of participating in globalization:

- Transit position of the CR
- Adequate infrastructure
- High level of industrialization
- Open economy
- Wide range of direct foreign investment
- High level of education (qualified workforce)
- Relatively low wage levels
- Developed cultural environment
- Stable social environment

On the other hand, there are many unfavourable circumstances within the CR which negatively affect the operation of small and medium-sized enterprises in the domestic market:

- The role of a so-called transport (non-manufacturing) country
- Small geographical area with limited raw-material base
- Climatic conditions limiting agricultural production
- A small population related to the volume of labour and market size
- Increasing imports means increased competition for Czech manufacturers
- Filling job vacancies with foreigners
- Lack of domestic capital
- Protracted work of the courts significantly impacts on low law enforcement
- High level of corruption and minimal countermeasures
- The state finances expensive investment stimuli with the risk of their abuse and the subsequent departure of international entities from the CR
- Low level of manufacturing competitiveness

Due to the fundamental importance of small and medium-sized enterprises for the national economy, both the Czech Republic and the European Union are trying to support these enterprises by creating the ideal conditions for their development, so that they might become competitive. Kunday & Senguler (2015) also pointed this out in their study, which on the basis of extensive research identified innovation as a crucial factor for increasing the exports of small and medium-sized businesses. They, therefore, stressed the importance of programmes from governments of individual countries which focus on promoting company innovation.

One current example is the Czech Republic Ministry of Industry and Trade's *Concept for the support of small and medium-sized enterprises for the period 2014–2020* (BusinessInfo.cz, 2013), the aim of which is to create priority areas of support which will be financed by the

EU's structural funds and supplemented by national resources. One important aspect is the fact that the *Concept* places much greater emphasis on the provision of financial tools, such as preferential loans and credit, and offers support through capital inputs. However, subsidy programmes are still the most important tools of support for small and medium-sized enterprises, and the greatest emphasis is placed on strengthening their competitiveness through helping to create and expand innovation. One important area of support for improving competitiveness, which has a positive impact on the environment, is to reduce the energy demands of small and medium-sized enterprises.

Furthermore, in December 2015 the Czech Republic Council of Economic and Social Agreement approved the *Action plan of support for small and medium-sized enterprises for 2016* (MIT 2015), which is divided into four prioritized areas – a favourable business environment for small and medium-sized enterprises, access to finance, the internationalization of small and medium-sized enterprises, and energy savings in their business. In terms of internationalization, this involves establishing links with international programmes (e.g. through research co-operation – Horizont 2020 etc.) which introduce or expand appropriate forms of export financing and insurance, and support for the participation in trade fairs and exhibitions (e.g. the programme Marketing and the Czech Official Participation at International Fairs and Exhibitions programme, etc.).

The European Commission oversees *The Programme for the Competitiveness of Enterprises and Small and Medium-Sized Enterprises* (COSME), through which investment funds from venture capital or from private investors promote the growth and development of small and medium-sized enterprises, particularly with an impact on border regions (MIT, 2014). Also as part of the *Operational Programme for Enterprise and Innovation* (OPEI), small and medium-sized enterprises can access a whole series of support programmes. The operational programme is aimed at increasing the number of firms which are capable of fully utilizing technological innovations within their field, and an emphasis is placed on the development of enterprise, research, development and innovation and linking these to the surrounding environment. It also aims to simplify the development of business, services and the access to government services through high-speed internet (MIT, 2015).

2. The influence of globalization on small and medium-sized enterprises

As part of his research using a sample of 21 businesses from various sectors, Jakša (2010) discovered the specific impact of globalization on small and medium-sized enterprises. Most businesses (85%) viewed the impact of globalization positively and only 3 negatively. Some of the most frequently mentioned positives included new opportunities for (often cheaper) supply services from international companies, opportunities for collaboration, the use of new IT and communication technology, and the fast movement of goods and services. Amongst the negative aspects were increased direct competition, pressure on sales prices and forced redundancies. Unfortunately, only a quarter of the firms used the opportunities to benefit from the various financial supports.

When comparing the impact of globalization on Czech small and medium-sized enterprises with international research into this area, then similar conclusions have been reached. For example, in their study Ocloo et al. (2014) investigated the extent to which globalization affected small and medium-sized enterprises in Ghana. They found that with globalization,

poorer nations became even more dependent on the economic activity of the world's more developed countries. Small and medium-sized enterprises form the backbone of the private sector in developing nations and Ghana is no exception. Due to the fact that in the first decade of this century Ghana was showing a year on year growth in GDP of approximately 5%, many international firms entered the market with their products (e.g. clothing, electronics), which were of a higher quality than the local market offered. The result was a significant decline in the competitiveness of local businesses, which was compounded by the country's poor infrastructure. From a sample of 250 small and medium-sized enterprises, 80% of them had encountered problems as a result of globalization. Other factors relating to the competitiveness of enterprises in less-developed countries were highlighted by King and McGrath (2002), who showed that one cause was the lack of qualified management personnel in small and medium-sized enterprises due to inadequate academic preparation or poor managerial skills. Another problem area was their lack of awareness in marketing, which results in a lack of awareness about their own market, which is why, paradoxically, "foreign" firms are better suited to the Ghanaese market.

3. The expansion of small and medium-sized enterprises on international markets

As part of qualitative research into a sample of small and medium-sized enterprises from different sectors which are successfully expanding into international markets, Nesibová (2012) discovered that all of the businesses found trading abroad profitable, while it was also consistently shown that they achieved lower profits in the domestic market in comparison with foreign markets. The most common reasons for deciding to enter into external markets were the following:

- Small domestic market
- Poor payment ethics in the CR
- Poor claims enforcement in the CR
- Strong competition in the domestic market
- Specific area of activity

The fundamental criteria for choosing a potential market for future expansion were as follows:

- Geographical distance
- Knowledge of the business environment
- Size of market or demand
- Market economic stability
- Competition in the particular foreign market
- Interest on the part of foreign subjects

Regarding the use of the various support mechanisms by small and medium-sized enterprises for their international expansion, companies confirmed the successful utilization of the following subsidy programmes, which suggests a good awareness of the various types of support:

- SAPARD¹³ - subsidy for expanding production area
- MARKETING¹⁴ programme – subsidies to cover the costs associated with foreign trade fairs and exhibitions
- DEVELOPMENT¹⁵ programme – subsidies for the purchase of new machines and handling equipment, for acquiring new technology, etc.

In the preparatory phase to entering a foreign market, businesses usually took on new employees with experience of the new market, knowledge of the language, the relevant expertise to ensure clear communication with customers, and an understanding of how the new market operates. All of the firms chose the simplest way to enter the foreign markets through import and export operations, most often involving direct export. The largest problems associated with foreign expansion were:

- Initial mistrust of customers
- Legislation of the specific market, special product certifications
- Customs barriers
- Logistical problems associated with the distance of the market

The respondents' opinions about the factors which affected their success abroad were very interesting:

- Product quality
- Product specificity
- Product reliability
- Related services
- Pricing policy
- Production tradition
- Credibility and experience
- Good business relations

Zapletalová (2012) carried out her research on a representative sample of 67 small and medium-sized Czech enterprises from different sectors, operating in the same area and expanding abroad. She discovered that it was impossible to identify a single model (or process) which these businesses would use for their entry into the foreign markets, as each business conducted its foreign activity based on different levels of knowledge of the target foreign markets and with respect to their financial means. At the same time, the aforementioned facts are the most important factors influencing the start and development of foreign expansion. It

¹³ The SAPARD programme is an abbreviation of the Special Accession Programme for Agriculture and Rural Development. As proposed by the European Commission, the SAPARD programme helps participating nations in dealing with specific issues when implementing *acquis communautaire* relating to the Common Agricultural Policy, structural changes to individual agricultural sectors and to the countryside (Ministry of Regional Development, 2004).

¹⁴ This programme implements the OPEI's priority "Services for enterprise development". The MARKETING programme aims to strengthen the international competitiveness of small and medium-sized enterprises in the CR through individual and joint participation in foreign trade fairs and exhibitions (MIT, 2007).

¹⁵ This programme implements the OPEI's priority "Enterprise development". The aim of the DEVELOPMENT programme is to improve the competitiveness of small and medium-sized enterprises through the implementation of progressive technology leading to an improvement of the market position and maintaining this position, as well a growth in the number of jobs (MIT, 2007).

was also shown that the level of international business activity did not depend on the particular sector an enterprise was involved in. The critical area of entry into the foreign market was shown to be the managers' knowledge of the international business, which frequently caused doubts or even an unwillingness to expand operations abroad.

The data obtained from the quantitative research of Kubičková et al. (2015) carried out on a sample of 194 small and medium-sized Czech enterprises operating in the engineering industry and expanding abroad showed that one of the basic motivations behind a company's internationalization is to increase sales and, therefore, revenue, by expanding their portfolio of customers. As for the so-called reactive motivations, the main one was foreign demand for products or services. According to the management of these firms, there were three main factors for successfully operating in international markets:

- High product quality
- Flexibility and adaptability
- Employees' qualifications

In other research, Kubičková (2015) focused on the key risk factors in the process of internationalization of 161 small and medium-sized Czech enterprises operating within the textile industry, part of which showed that the largest negative influence on the process of expansion into foreign markets was a shortage of capital, information about the international markets and high transportation costs. Language barriers, management inexperience and high product pricing were also cited as factors which prevented the successful process of internationalization.

As is clear from the research carried out by such academics as Wolf & Pett (2000), there is no significant difference between the export intensity of small and medium-sized enterprises compared with larger companies. On the contrary, small firms are able to quickly adjust to unfavourable internal conditions (e.g. currency fluctuations), are more flexible overall in their responses to changes and are often willing to take on greater risks than large firms. Using a sample of 247 small and medium-sized Slovenian businesses, Ruzzier & Ruzzier (2015) also examined the companies' position following their entry into foreign markets, and discovered that the successful internationalization of companies does not depend on their size in terms of the number of full-time staff, and that the quality and accessibility of the required human resources increases in line with the level of a company's links with international trade. Also Westhead et al. (2001) stated that the ability to export is not related to the size of a firm and how long it has been operating on the market. Instead, this ability derives from the personality of the entrepreneur and the quality of the firm's internal resources. Their assertion ties in with conclusions from a study of 105 small manufacturing companies in the USA, on the basis of which Fillis (2001) discovered that entrepreneurial spirit, in the sense of innovative thinking and the intuitive recognition of opportunities and risks, significantly increases the international growth of a company by increasing the number of employees, the volume of sales and the market share.

In addition, Ruzzier & Antončič (2007) stress the very positive influence of strong personal connections in the company management and its internationalization. Similarly, Manolova et al. (2010) discovered in their study of 623 Bulgarian companies that the founder's personal network is a positive influence in the search for opportunities abroad and the success of the internationalization process. The existence of this personal network becomes a prerequisite for the establishment of an inter-company network, which is particularly beneficial at the start of a

company's international operations. The results of Zhou & Wu's study (2014) of a sample of newly internationalized companies in China demonstrates that the early entry of a firm into the international market contributes very positively to its solid performance and leads to a growth in revenue. Therefore, "young companies" do not have to overcome internal barriers associated with the routine practices introduced onto the domestic market, which Ruzzier & Ruzzier (2015) agree with, and in addition to this, these companies are able to adapt quickly to the new environment and dynamically innovate, thereby increasing much-needed information capital for the company, through which it is possible to attract interesting business partners (Autio et al., 2000).

4. Conclusion

In general it can be said (Kubíčková & Procházková, 2014) that small and medium-sized enterprises are characterized by a simple organizational structure with a lower number of managers which enables a flexible response to the market's current situation. Decision making occurs without a superfluous flurry of communication, which also keeps internal-company conflicts between employees to a minimum. Although a simple organizational structure results in lower costs for enterprise management and less bureaucracy, small and medium-sized enterprises are more seriously threatened by secondary insolvency than larger companies, making them a more dangerous and less attractive sector for banks. Difficulties in financing are also connected to restricted finance for employees' pay and benefits, which is why it is difficult or almost impossible for small and medium-sized enterprises to hold onto their qualified employees who are essential for their operation. Therefore, although this business sector is continually undergoing development, introducing new technology and implementing innovation stemming from the needs of its customers (to whom small and medium-sized enterprises are much closer in comparison with larger companies), the most important thing for small and medium-sized enterprises are those qualified and experienced employees. As is shown by Kubíčková & Procházková (2014), penetrating foreign markets is also more complicated for these companies due to the fact that they lack precise information about potential foreign partners, the local market, as well as the laws of the particular country.

The aim of this review article was to first of all identify those factors which have an effect on the successful expansion of small and medium-sized enterprises into foreign markets. The most frequently mentioned decisive factors mentioned in the research were product quality, employees' qualifications, knowledge of the target market, adaptability and credibility. The strength of the relationship between collaborating firms is often crucial for the stable performance and future operation of a company abroad. Institutions with programmes aimed at supporting the foreign activities of small and medium-sized Czech enterprises play an important role in the development of international business, as the expansion of these activities is an important factor in the development of every country's national economy. As has been established by the aforementioned conclusions from Nesibová's research (2012), if Czech companies are well informed and have within their management someone who has experience acquiring subsidies, then at present they have the opportunity to successfully capitalize from the financial support of various programmes.

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ANALYTICAL MODELLING OF GLOBALIZATION IMPACT ON VAT GAP LEVEL VARIATION IN EU COUNTRIES

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Abstract. The economic and social changes associated with globalization tighten financial pressures on state budget of high-income countries by increasing the demand for government spending while making it more costly to raise indirect tax revenues. In most countries, value-added tax (or goods and services tax) is of the highest significance to the national budget among the indirect taxes. In terms of the European Union, even though each EU country applies unified fiscal regulation principles, historical-moral factors that affect shadow economy, competitiveness, consumption levels, etc. still exist. Globalization of the economic environment and structural changes resulting from information and communications technologies render classic taxation systems outdated. National tax systems face stronger competition as a result of the globalization of the economy. VAT is a tax whose main specification are determined at the European Union Level. The fight against abusive practices is not an option for the Member States but a prerequisite for the effectiveness of the EU common system (Directive 2006/112). Tax competition favors certain taxpayers to the detriment of others, and the same holds true for Member States when they compete on taxation to attract economic activity or tax revenue (Remeur, 2015). Understanding about the globalization impact and the determinants that influence the VAT gap could potentially help to change and reduce it by using fiscal and macroeconomic levers. Research is based on an analytical approach combined with a systematic, logical and comparative analysis of scientific literature.

Keywords: globalization impact, VAT gap, tax evasion, analytical modelling

JEL Classification: F60, F65, H26

1. Introduction

The actual economic era is coming to an end over the next thirty or so years, the global economy is going to change massively, argue Deutsche Bank strategists Reid, Burns & Chanda. Current economic age, which began sometime in the thirty years before in generally were characterized by endeavour globalization, change in the world's demographics, which has boosted growth and increased productivity (Reid et al., 2016). In case, world is staring down more of subdued growth, lower profits, higher inflation, and dwindling global trade and in past time fundamental change in the global economy. It is likely that in next decade (possibly longer) we will see real growth rates returning close to their pre-crisis, pre-leverage era levels. It seems likely that in next period economy evolution will be marked by lower GDP, higher real wages, higher nominal GDP (for most), greater controls on immigration, higher taxes for

the wealthy, and lower levels of international trade. So role of VAT tax only increases, especially with aging population trend and increasing emigration crisis in EU.

In the past decades, the new economy changes and complements the old one. Many modern industries are found while the old economy is transferred to virtual platforms. The new digital economy is forming. Its' aspects like digital products, systems significantly increase. Given that the Internet and data transfer speeds are growing, there is no indications that this process will stop. An opposite situation occurs in the old economy, which is closely related to physical objects. While some spheres remain stable, a large proportion of them descend to digital platforms and processes are automatized. The new economies', which is related to digital relationship, automation and engineering, comparative value will double or triple in the upcoming decade. A new economic circle will arise, in which the driving force will be the digital industrial revolution, Internet, personalized mass production, and new smart globalization forms (WEF, 2016). For fiscal policy, the implications of the Fourth Industrial Revolution are likely to be complicated. If robotics and digitalization are disrupting jobs, there will be an impact on tax revenues. The negative implications for tax revenues can potentially be reinforced by digitalization of retail sales and VAT. The digital age is being characterized by a race between technology and education. Technological change also has implications for income distribution, and this reinforces the upwards pressure on government expenditures and increase tax avoidances in new digital playground - an erosion of taxes and a need for higher expenditure is undermining the long-term sustainability of fiscal policy (Borg, 2016).

The non-decreasing tax shadow and economic changes force us to search for new tax collection assurance models. A particular task goes to the VAT gap decrease. The digital era raises a lot of challenges to the tax policy as well, especially in the VAT collection, taxation place determination and avoidance/evasion/fraud reduction context.

2. Literature review

The rapid emergence of a multipolar and highly integrated global economy is making globalization the single most important issue facing companies today. In this new era, virtually every industry is a global industry and every business a knowledge business (Gupta & Westney, 2003).

Many countries with long-standing VAT are considering reform to improve the structure and the implementation of the tax, and to deal with the new challenges posed by globalization and the growth of digital trade. Globalization and digitalization both trigger a need to update and adapt tax systems. They offer the opportunity to modernize tax systems generally considered as complex and consequently having the side effect of creating undesirable potential for avoidance and evasion (Remeur, 2015).

Globalization also exposes the firm to strategic and organizational challenges emanating from a dramatic increase in diversity, complexity, and uncertainty - external as well as internal to the firm. How managers address these challenges determines whether globalization yields competitive advantage or disadvantage and makes the company stronger or weaker (Gupta & Westney, 2003).

After latest financial and economic crises, policy-makers are looking to reform approaches and growth models. If "Smart" globalization is the ability to capture the benefits and minimize the costs and risks, we have open question about rising income inequality is the many

economic and social ills, from low consumption to social unrest. Yet little in the way of concrete policy guidance has emerged in order to channel economic growth into improvements in living standards, but here the main question have taxation policy and possibilities to reduce shadow economy and tax evasion (Orviska & Huhady, 2014). Developments in globalization have important implications for taxation (Evertsson, 2016).

Analyses of economic trends in the economic cycle highlight the problem of the shadow economy, especially in VAT collections and amounts missed in it. Not only national question - increasing mobility of factors of production, capital, explosion of financial flows, and rapid transmission of technological innovation causes challenges reducing potential tax evasion, as changes in tax systems have resulted from globalization and digitalization of the economy, which has substantially increased geographical tax mobility. The fight against tax evasion, fraud and avoidance is not only to recover unpaid revenue from taxation, but also to strengthen fiscal justice (Ufier, 2014). As it is known the VAT is a key source of fiscal revenue in all EU countries, so the matching principles of the free movement of services and non-discrimination become challenging. The main aspect is the determination of the taxable activity location. This is important, since tax matters are not fully harmonized and national provisions vary substantially.

Fedeli & Forte (2011) analyzed the VAT frauds issues in the EU after the abolition of the internal customs. Zidkova (2014A) briefly described the calculation methods used quantifying the VAT gap in various countries. VAT evasion and VAT gap phenomenons were analyzed by Kostakova & Zidkova, 2015, Slahor, 2015, Zidkova, 2014.

Taxation trends in capital income tax raise concerns about a possible race to the bottom or harmful competition. Second, lack of tax policy coordination results in large losses in tax revenue due to profit shifting by multinational corporations. These practices undermine revenue mobilization in the least developed countries, which also suffer from capital flight and other forms of illicit financial flows (Ndikumana, 2014).

Consumption taxes, such as the Value Added Tax (VAT), tend to fall on consumers who are generally less mobile than capital holders and producers (Slahor & Bartekova, 2015). The latter groups possess a greater ability to respond to taxation by strategically adjusting their economic choices to minimize their tax liability (Gemmell & Hasseldine, 2014). In recognition of this propensity, VAT is more desirable from other taxes, since it preserves production efficiency and does distort less consumption (if tax rate is uniform and exemption is not much). From a global perspective, taxation policy can also play an important role in advancing global initiatives governments seek to stabilize revenues and limit the economic distortions stemming from tax planning by levying taxes in circumstances, and with respect to resources, that are less responsive to tax; the result has been, inter alia, a worldwide rise of the VAT and a corresponding aversion towards the taxation of capital.

With economic globalization, it is getting harder to tax mobile factors such as capital. Taxation on mobile resources is becoming more distortional, distorting resource allocation and increasing tax avoidance activities. Value Added Tax, which is now the most widespread form of consumption tax. The rationale for this form of taxation was that it is the least distortional way of taxing private consumption (Baker & McKenzie LLP, 2013).

VAT as taxation on consumption may be suitable to the era of economic globalization and have different aspects of VAT impact for tax competition to:

1. Firms
2. Countries
3. Growth friendly oriented tax structure.

There is also a risk that revenues from VAT will be affected, because goods from firms are moving freely in different countries and many online services are acquiring rights to use a digital product. The risk for tax migration in a globalized world is obvious, in any way standard economic theory of taxation states that the tax wedge on labour is the combination of income tax, social fees and value-added taxes, so growth friendly oriented tax structure is essential condition.

Nevertheless, along with these challenges in addition to significant importance of digital economy and continuous growth, E-commerce is the fastest growing retail market in Europe. Depending on sources growth in 2014: between 17% to 18.4%, forecast until 2016: continue the growth at similar rate. Share of online retail sales to increase from 12.7% (2012) to 21.5% by 2018 (Caraman, 2015).

3. Selection of variables used in the model

EU specifically addressed the need for harmonization of domestic provisions on indirect taxation because of their potential distorting effect on the single market (Remeur, 2015). The most important point is the extreme variation across countries in the revenue performance of VAT, reflecting a very wide range of factors including differences in tax design, differences in economic environment, and different characteristics. Hereinafter aspects of globalization impact on VAT gap level are presented (see Table 1).

Table 1: Aspects of globalization impact on VAT gap level

Variables	Aspects
Determination	<ol style="list-style-type: none"> 1. Territorial - relating to dependent, overseas and associated territories. Determination of the location of a taxable activity (for instance a transaction between two parties in two Member States can be realized in another Member State). This is of particular importance since tax matters are not, or not fully, harmonized and national provisions can vary substantially (including differences in rates). 2. Actors and acts in tax policy - Member States are free to choose the tax system they consider most appropriate and according to their preferences, provided that they comply with EU rules to take account of the principles of subsidiarity and proportionality. 3. Private person (PP) for sales to private persons an origin-based system is applied, whereas for taxation between taxable persons a destination-based system applies. In this case, the cross-border movement of goods is split into two different transactions: an intra-EU exempt supply, which is exempted from VAT, and an intra-EU acquisition, which is VAT-taxed in the country of destination. These transitional arrangements have significant compliance costs, as well as generating room for fraud linked to the possibility to buy goods free of VAT (carousel fraud), and for a collection gap (VAT gap). 4. Legally binding instruments 5. Structure (of a tax system) 6. Digitalization
Cooperation	<ol style="list-style-type: none"> 1. Of the fight against abusive practices; 2. Among national agencies (tax administration, custom administration, police,

	ministry of Justice, etc.) 3. Between different countries (implementing a policy increasing the number of criminal complaints filed against most abusive evasion schemes) 4. Sharing information among EU Member States 5. Sharing information among other countries on the basis of the bilateral tax treaties.
Tax policy indicators	1. Tax-GDP ratio 2. National taxes, local taxes and social contributions 3. Major types of taxes: direct, indirect and social contributions 4. Breakdown by economic function - (consumption, labour, and capital) 5. Internal market; 6. Competition policies - as a tool for particular policy objectives (Taxes related to the environment, Health-related taxes – (Fat taxes); Taxes related to financial services (Financial Activities Tax – FAT; financial transaction tax – FTT)

Source: compiled by the authors using Llorca, 2015.

The International VAT/GST Guidelines promote the principle of “taxation at destination” as the standard for applying VAT in an international context. The B2C Guidelines first present two “general rules” for allocating the taxing rights over the most common types of services and intangibles supplied by businesses to final consumers, in accordance with the destination principle. Recommendation taxing rights over “on-the-spot supplies” be allocated to the jurisdiction in which the supply is physically performed; and that the taxing rights over other supplies and services (including supplies of digital products) be allocated to the jurisdiction in which the customer has its usual residence.

In global context the destination principle between various EU members and jurisdictions become more complex, as has ensuring tax neutrality for B2B supplies and taxation consumption for B2P.

Notably identified a number of challenges for the application of VAT in the digital economy. One of the main challenges relates to the growing volume of imports of low value parcels from online sales by final consumers that are treated as VAT-exempt in many jurisdictions. These low value import relief regimes are motivated mainly by the consideration that the costs of collecting the VAT on imported low value items are likely to outweigh the revenue gained. However, the increase of low value imports from online sales on which no VAT is collected has resulted in growing tax revenue losses and the growing risk of unfair competitive pressures on domestic retailers (OECD, 2015).

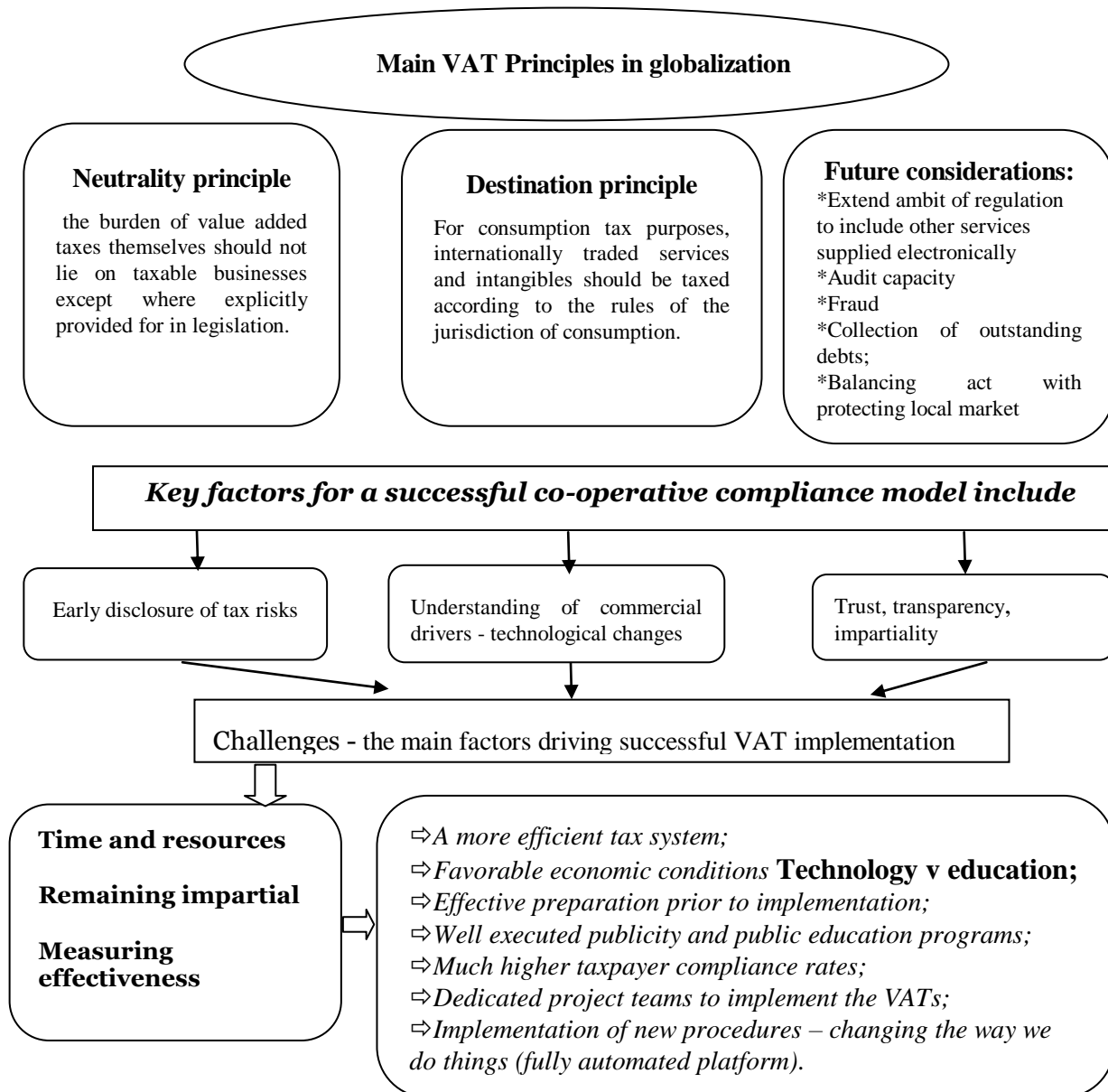
VAT also must be neutral in an international context (applying tax in the country of consumption or use of the goods or services), it must also remain neutral for businesses. The problem for fiscal policy is that there is also an upwards pressure on government expenditures. The most obvious way for policy-makers to meet technological disruptions is to increase investments in education and re-education.

4. Construction and analysis of models

Neumann et al. (2007) found that governments retain the ability to collect taxes even in the face of increasing globalization, that is, the taxpayer remains immobile, but taxed factors of production move between countries to escape higher domestic tax burdens. Many of studies find no negative relationship between globalisation and the nation's ability to conduct independent fiscal policies (Schulze & Ursprung, 1999). Hines & Summers (2009) argue that the small open economy is more reliant on consumption taxes and taxes on international trade,

reflecting the fact that a well-designed tax system based on consumption taxes may create less economic distortions than tax on corporate profit and PI. The degree of globalization and capital mobility is difficult to measure, but different qualitative and quantitative variables and principles can be used as proxies.

Figure 1: VAT cross-border co-operative compliance scheme



Source: compiled by the authors using Waerzeggers, 2015; Teuber, 2015

Coordination and harmonization of tax policy may take place at the regional and international levels by mentioned principles. The gains from harmonization in terms of revenue mobilization are maximized if full information on taxation and systematically enforce a common regime such as a residence-based taxation. Simplifying VAT rules – legislative proposals to reduce the administrative burden on businesses arising from different VAT regimes.

Cross-border coordination depend on domestic tax systems and exchange main factors between countries. In particular, a key determinant of the feasibility of coordination and the gains from it is the degree of capital mobility across countries. Basic trend towards capital account deregulation, harmonization efforts at the regional level need to be effectively coordinated with initiatives at the international level.

5. Conclusions

This paper has identified a number of challenges arising from the implications of globalization for taxation (focusing on VAT) that face both developed and developing countries. Main conclusions can be summarized as follows:

- VAT as taxation on domestic consumption may be suitable to the era of economic globalization.
- There is a need for enhanced international cooperation in the area of VAT and necessary developing simple standards with **Neutrality - Destination** principles.
- Ensuring Taxation from the Digital Economy is a major concern.
- Co-operative compliance models are on the rise: enhanced international cooperation could help in addressing some of the uncertainties resulting from different approaches across jurisdictions.

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INNOVATION PROCESS MANAGEMENT WITHIN COOPERATION OF COMPANIES

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Abstract. On the present is innovation an important tool for keeping company's position on market and increasing its competitiveness, because for preserving customers' interest and keeping step with competitors companies can't do without innovation. Company's competitiveness can be increased through product, process, and service innovation or their various combinations. For a successful implementation of innovation is important their managing, i.e. management of innovation processes of the company. Complexity, financial and technological demandingness of a more complex innovation may represent for the company a serious obstacle to its implementation. For this reason many competing companies are cooperating with each other in creating innovation, however these innovative processes are also essential to manage. By selecting an inappropriate innovation strategy, inappropriate implementation, or there are mistakes in the management of innovation activities of the company, even the best innovation idea can fail. This article aims to offer recommendations on how to create innovation and properly manage innovation processes, which are taking place in the cooperation of companies. These recommendations are based on a single, comprehensive model of creation and management of innovation processes in a company that uses cooperation forms with other companies or research institutions. The model will help companies to identify innovative processes in the company with effective management.

Keywords: Cooperation. Innovation. Innovation process. Management.

JEL Classification: O32, F63, I25

1. Introduction to the Topic

The topic of cooperation of companies for the purpose of creating innovation is not new, but is still up-to-date, because *“innovation is not an isolated process of individuals or firms but is the outcome of the interaction between firms, customers, suppliers, competitors and various other private and public organizations in a system”* (Lundvall, 1992). Relationships between social actors, e.g., individuals or companies, have been assumed for long to be either cooperative or competitive. Today is the situation different and relationships between companies are often cooperative. Cooperation refers to the paradox of simultaneous cooperation and competition in relationships between two or more social actors, and it can be studied on three independent levels: the macro level covers relationships between countries, the meso level deals with relationships between companies or organizational networks, and the micro level targets intraorganizational relationships such as departments or project groups (Strese et al., 2016).

There has also emerged innovation-oriented cooperation between public and private actors due to the substantial growth in knowledge and technology accompanied by globalization and the invasive character of the new informational paradigm. Public–private innovation networks mobilize complex knowledge and technology to produce technological innovation, mainly in manufacturing sectors. In such networks, public and private actors collaborate and interact to mobilize complex knowledge that is used to produce technological innovation. An innovation network consists of different actors, such as private companies, universities, innovation centres, educational and financing institutions, industry associations, and government agencies; intensively communicating and cooperating in a social, dynamic, and economic environment, which assures the diffusion and production of innovation output (Morrar, 2015).

University knowledge production is important for industrial innovation, because the growing specialization and interdependence of societies as well as their rapid technological and economic transformation have increased the level of uncertainty and complexity in decision making in companies (Hämäläinen, 2015). Companies choose universities as R&D cooperation partners in cases of multi-purpose problems and learning-focused projects in areas involving new science and producing long-term benefits, such as strengthening their absorptive capacities and radical innovation. In specific cases companies cooperate with universities and public research labs to access new ideas and government funding, develop internal expertise and reduce time to market with new technologies, particularly for process innovation and new market penetration (Maietta, 2015). There is also difference between SMEs (small and medium companies) and large companies in terms of acquiring knowledge. The most important aspect distinguishing SMEs from large companies is their propensity to overcome the constraints deriving from their limited size by exploiting relationships developed outside the company. This external resources are physical or other assets over which has company no direct ownership, but the company can access it through its relationships with other companies and research organizations (Grandinetti, 2016).

Although companies benefit from the movement of knowledge among partners, the benefits depend on whether these partners maintain in simultaneously cooperative and competitive relationships. While companies expect to maximize the knowledge they acquire from partners, they also risk having partners imitate or appropriate their specific knowledge and expertise. Therefore, companies potentially risk knowledge leakage or loss, especially when the partners are opportunistic (Jiang et al., 2016). This risk is smaller when company cooperates with university, because academia cannot be a direct competitor of the company. Publicly funded research at universities and subsequent technology transfer and commercialization is considered by many researchers to be one of the most important and direct outcomes of public R&D (Jung et al., 2015). The relations between companies, research centres, universities, government and other relevant players also participate on the creation and diffusion of innovation as a strategy for regional development (Zambanini et al., 2015).

Managing relatively independent organizations is difficult. The term **cooperation management** represents “*a way of managing and developing collaboration in a competitive environment*” (Lafleur, 2005). Another definitions state that cooperation management represents “a term for integrated management of company networks” (Ray, 2002) or “a cooperative decision making within heterogeneous preferences (Staatz, 1983).

2. Innovation and Innovation Process

According to the opinion of many experts, innovation is considered as a major source for long-term economic growth of the company. Most studies suggest that the innovative research helps companies to identify economic orientations, opportunities from the environment and also helps increase the production rate. Generally, we can say that the innovation happens, when a new invention relates to stable or new products, services, and processes.

“Innovation as a new idea which is used in problem solving and totally contains the formation and the process of accepting new ideas, products, and services” (Kanter, 1995).

According various authors innovation is the introduction of a new product, service, or process to the external market or the introduction of a new device, system, program, or practice in one or more internal units (Klein & Sorra, 1996; Walker, Damanpour, & Devece, 2011).

The main purpose of innovation is to transform the innovation activities outcomes to commercially successful products, services, processes, etc. In scientific literature, it is possible to find many expert options, to the topic of areas and types of innovation. Brief overview of the types of innovation by individual authors is shown in the table 1.

Table 1: Overview of innovation typology

Innovation	Product /Service	Process	Human resource	Context (administrative and organizational)	Conceptual, systemic, strategic
Daft (1983)	New products	New production methods (technologies)	Human resource	Administrative	
Schumpeter (1987)	New products	New production methods (technologies)		New resources offer, new ways of organizing trade examining, new markets	
Egri and Frost (1991)	Combination product with administrative innovation			Combination product with administrative innovation	
Mulgan and Albury (2003)					Radical, incremental, transforming
Hartley (2005)	Service innovation		Targeted audience	Institutional (governance)	Strategic
Alberti and Bertucci (2006)		Process		Organizational, institutional	Conceptual

Source: Staroňová et al. (2012)

Zaušková, Loučanová (2008) explain the innovation process is a process that includes activities from research, through the application of results to commercial use, and therefore it is very important cooperation of companies with other partners. Important partners for the development of innovation as customers, suppliers as well as cooperating universities and scientific research institutions.

Jac et al. (2005) explain the purpose of the innovation process is the transformation of the innovation initiative to the competitive advantages of the new product, its high quality, reasonable prices and well-timed entry on market. The innovative process is a process that includes activities from research, through the application of results to their commercial use, and therefore the need for cooperation with other venture partners. The most important partners for the development of innovation as customers, suppliers, as well as cooperating universities.

Sabadka a Lešková (2002) understand the innovation process as new product development by obtaining ingenuity to introduce products to the market. The result of the innovation process is executed as innovation, capitalize on change. On this basis, these authors shared in accordance with Schumpeter's approach innovation process into three phases (Table 2).

Table 2: Innovation Process

1. Creation of invention		
1.1 Phase generating ideas	1.2 Survey phase	1.3 Business analysis phase
2. Creating innovation		
2.1 Preparation phase of the innovation program	2.2 R & D stage	2.3 Production phase
3. Diffusion (penetration) innovation		
3.1 Commercialization phase	3.2 Use phase	

Source: edited by Sabadka a Lešková (2002)

Based on the definitions the innovation process can be described as the preparation and gradual implementation of innovation by collecting ideas from stakeholders to the development and implementation of innovation (improved product or service) on the market.

Innovation Process Management (IPM) is a systematic approach to nurturing the creative capabilities of employees and creating a workplace environment that encourages new ideas for workflows, methodologies, services or products (Rouse, 2016). Author highlights the following sections (Rouse, 2016):

- *Strategize and plan.* Settle on an agreement of the vision for the initiative that is also in line with business goals. Then establish the resources and budget, and integrate the vision with IT and business plans.
- *Develop governance.* Establish a process for making decisions. This includes identifying and engaging stakeholders, agreeing on who is in charge and what the flow for decision making is, and also having feedback mechanisms in place.
- *Drive change management.* Have systems by which people can communicate and socialize via multiple channels; get buy-in from stakeholders at all levels; and assess which open innovation initiatives and cultural shifts will help the company optimize contributions to innovation.
- *Execute.* Make sure to draw from a wide range of sources to generate ideas for innovation that will transform the business, align the initiatives with business goals, and then update and drive new elements of the initiatives in response to changing business requirements.
- *Measure and improve.* Once the innovative initiative is in place, monitor and measure how it has affected business outcomes. It is also important to seek feedback from stakeholders and to continue to study innovation best practices and case studies from

other organizations. Also make sure to continually drive improvements through process changes and upgrades.

3. Discussion

Based on an analysis based on findings from domestic and foreign literature, we proposed a model of creation and management of innovation processes in the company cooperating with other organizations on creating and implementing innovation. The proposed model supports work with innovative ideas. Innovative ideas most often come from customers and employees, but also from other stakeholders (suppliers, competitors and others). Employees know how different parts of the company works from their day to day job responsibilities, they know where are both main problems and opportunities. Every employee in the company should be able to describe and publish their idea, have access to the ideas of others, evaluate and comment the ideas of others. Therefore every innovation idea should include following:

- exactly described changes in the company, that will bring implementing of the idea,
- indicative intensity idea to implementation and impact of the implementation to the rest of the company,
- benefits for the end user of innovation idea,
- benefits for the company,
- and in case of cooperation on innovation also expected benefits for each participating partner.

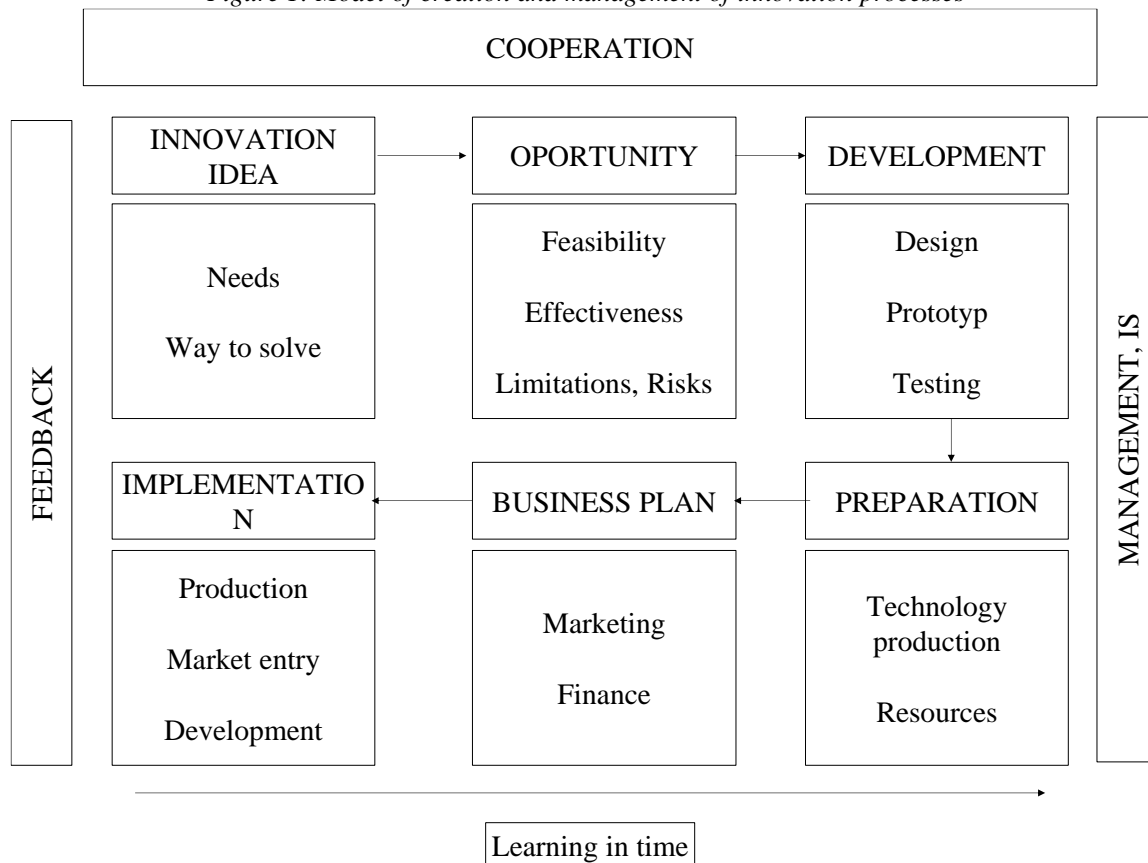
As was mentioned above, it is important to use a *wide range of sources* to generate ideas for innovation as a response to changing business requirements. Therefore is useful to save every innovative idea from stakeholders. Those ideas which are not implemented immediately should company save to information system for the future use. It is also necessary for the right people to have access to the right information at the right time, ensuring the appropriate Information System. Ensuring interconnection of knowledge between experts from different business units (production, research and development, logistics, marketing etc.) also supports knowledge flow inside the company.

Each phase of our proposed innovation process (Figure 1) has an opportunity for cooperation between two or more organizations, which could be represented by competitive companies, stakeholders (customers, suppliers etc.) or research institutions, such as universities. In the **phase of innovation idea** can companies cooperate in gathering ideas from stakeholders (shared information system, boxes for ideas and so on), but huge potential is hidden in customers (market research and analysis) and many ideas can come from universities and their research activities. In **opportunity phase** companies can join resources which can make even most expensive innovation accessible and feasible. Together they can also bear the risks more easily. In **development phase** can companies create a joint centre where experts from cooperation companies will work together in the development of innovation (design, prototype, testing). In this phase can be universities helpful, too. Many of them have science parks with incubators and latest technology devices. **Preparation phase** consists of technology production and resources. Companies can share human, financial, informational or material resources. Resources sharing provide higher efficiency, lower costs and higher profits. Next phase is the **business plan**, which represents an excellent opportunity to share marketing

or finance. The last phase is **implementation phase**, which is for cooperative companies easier to enter the market, they can also produce larger quantities at lower cost.

Important part of each innovation process is feedback to each stage of the process and learning from feedback (in time). Except managing the innovation process is also necessary to manage the cooperation that takes place in this process. Necessity is having set common goals that should be achieved by cooperation, and also every required legal essentials. The feedback from innovation process should also lead to cooperation.

Figure 1: Model of creation and management of innovation processes



Various management functions can be used for managing the innovation process, such as working with people, organizing, controlling, and communication. For successful innovation management are important areas, such as *creativity* (the creation of new ideas), *setting priorities* (the allocation of corporate resources), *efficiency* (the realization of products for the mature market and their implementation) and *leadership* (bringing together people with different functions, cultures and mentalities).

4. Conclusion

Creation and management of innovation processes have very important role for the company and its economic and social growth. Corporate executives are increasingly beginning to realize the importance and significance of innovation. Through this article we created a single, comprehensive model of creation and management of innovation processes in a company that uses cooperation forms with other companies or research institutions in creating

and implementing innovation. This model will help companies to identify innovative processes in the company with effective management.

The using of cooperation within the innovation process has benefits for each participant, such as saving costs, increasing efficiency and accelerating the processes. Specifically cooperation between companies and universities is beneficial for companies in terms of accessing external knowledge

Acknowledgment

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GLOBALIZATION AND MIGRATION: THE EMPIRICAL STUDY OF PANEL DATA OF THE MIGRATION IN THE CZECH REPUBLIC AND SLOVAK REPUBLIC

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Abstract. Globalization is closely related to migration, because the movement of the labour force is one of the factors of globalization, and as is known the migration is very relevant topic in this time. The phenomenon of migration and globalization is not important only for economics, but the very important role plays in other society discipline as are the sociology or political science. There exist some models of migration, which are different in definition of consequences of migration to the economic growth in the theories: some of these theories are optimistic and say that the migration supports the economic growth, some are pessimistic and suggest that there are many negative effects of migration in current world. The topic globalization and migration is very actual, also for V4 countries, so also for the Czech Republic and Slovak Republic. The aim of this paper are: to define of the relationship between globalization and migration, to find out how are ongoing the migration flows in the Czech Republic and Slovak Republic and to find out how are contributing the selected economic indicators to changes in the migration in these states. This paper is used the Granger Causality Test for examine the impacts of globalization and migration to the Czech Republic and Slovak republic. The data which are used in this paper are coming from Eurostat Database.

Keywords: globalization, migration, panel data, Granger Causality Test, economic indicators

JEL Classification: C1, C2, F2, F6, J6

1. Introduction

Globalization brings many positive effects. The most of researches talk about globalization like a process of greater integration in the world economy through the movement of goods, services, capital, technology and work. Globalization causes that more and more economic decisions are influenced by global conditions what means that globalization leads to a global market (Held, 1999). Globalization takes place across continents, time, cultural values, economics, political and social approaches. Globalization is a very extensive theme and relatively complex (Hejduková, 2015). Globalization can be understood as a process which is eliminated the national board and this fact is caused the development of global market and increasing competition (Jarý, 2015).

The globalization is closely related to migration, because the movement of the labour force is one of the factors of globalization. International migration has become a sensitive topic in OECD member states and European countries. Over the last years, migration movements have drastically affected the socio-demographic characteristics of the OECD member states. They have influenced the skill structure of the labour force, the age structure of the population, and the geographical distribution of consumers (Aubry et al., 2016).

Particular theoretical concepts of migration are different in their assumptions and often in the conclusions. Today neoclassical theoretical concept creates mainstream view of the causes and consequences of migration. There exist some models of migration, which are different in definition of consequences of migration to the economic growth in the theories: some of these theories are optimistic and say that the migration supports the economic growth, some are pessimistic and suggest that there are many negative effects of migration in current world.

The paper begins with a brief overview of the selected theoretical concepts of the migration. Then, the methodology and results of the empirical study are presented and discussed. At the end of the paper we mentioned some suggestions for future research.

The aim of this paper are following: to define the relationship between globalization and migration, to find out how are ongoing the migration flows in the Czech Republic and Slovak Republic and to find out how are contributing the selected economic indicators to changes in the migration in these states.

2. Theoretical background of the migration and existing research studies

This part of the paper reviews briefly the existing understanding of the phenomenon “migration” and the impacts of the migration on economy and presents existing selected research studies from this area.

According to the neoclassical model of migration should contribute to balancing the migration disparities in individual countries or regions, or a positive contribution to overall economic growth (Kumpikaite & Zickut, 2012). How we can see on the example of Granato et al. (2015) the impact of low- and medium-skilled migration is consistent with traditional neoclassical reasoning, suggesting that labour mobility reduces differences in regional unemployment rates. In contrast, the migration of high-skilled workers tends to reinforce disparities.

How is mentioned above, not all theories are so optimistic and are mentioned that due to international migration rather regional migration may lead to greater deepening disparities between countries or regions, which in the long run may be the problem: see for example Myrdal (1957) and his “theory of cumulative causes”.

It should be noted that the complex impact of migration on the economy and domestic position is theoretically indeterminate and conclusions of the theoretical models are sensitive to changes in their assumptions. There are many empirical and theoretical studies that have examined the effects of migration on the economy or on the labour market in this research area (see more Dunlevey & Hutchinson, 1999; Girma & Yu, 2002).

We can define not only economic effects of migration but there are relatively many gender studies that point to the fact that women choose, or are forced to choose different strategies integration in the host country. Gender factors may of course be taken into economic studies;

for example Borjas et al. (1996) investigated the size of income for immigrants by gender in different states. They were led by suggesting that immigrants have lower incomes, and these disparities can be caused also by gender. From their studies do not derive clear conclusions, estimates were highly volatile, and the results depended on the size of the selected place.

Franc (2010) has prepared a very comprehensive study in which he has described impacts on the labour market. According Okkerse (2008) the research studies of migration and global labour market can be divided into two main categories which are classified according chosen research methods: simulation analysis and econometric analysis. The first category of studies is based on deeper theoretical backgrounds and the results are more sensitive to the initial theoretical concept and changes in the chosen assumptions. The second category of studies has already estimated the actual effect of migration and these analyses require quality database.

By reason of the fact that we have chosen primary the Granger causality test for our paper, in the following part of the paper is given space to the econometric studies. The criterion for classification is the character of the data which are used in the econometric analysis; there are three categories of studies which are using (i) cross-sectional data, (ii) time series and (iii) the panel data.

Cross-sectional data have in comparison with time series the advantage that the estimated results are usually not affected by autocorrelation (see more Wooldridge, 2003). Impact of migration on the unemployment rate using data for the United States was investigated in the studies LaLonde & Topel (1991). Gang & Rivera-Batiz (1994) have found no empirical evidence that higher concentrations of immigrants increased unemployment rate of domestic workers. Zorlu & Hartog (2005) investigated the impact of migration on domestic income, the survey focused on a few countries in Europe. They failed to prove the impact of immigration on the change in revenue from domestic people.

One of the advantages of using time series in researches of the impact of migration is the ability to distinguish between short- and long-term effects of migration (see more Artl, 1997). Time series analysis used Withers & Pope (1985) during testing Granger causality. Although studied the effect of migration on the relatively long period between 1948 až 1982, they failed to reject the null hypothesis that immigrants do not affect the unemployment rate. Marr & Siklos (1994) tested the causality VAR model and concluded that there is a positive correlation between past migration and the current unemployment rate. The data used were subject to Canada between 1978 and 1985. They analysed a time series from 1861 to 1991. Stevans (2009) examined the impact of migration on the unemployment rate of African-Americans. This effect was estimated with using vector error correction model and analysed cointegration relationship between the time series. They have not found statistically significant relationship between migration and unemployment rates between 1961 and 2008.

The third group of research studies are such that are used for their analysis the panel data. An example of studies which are used panel data are Pischke & Velling (1997). They studied the effect of migration on unemployment in Germany. They did not confirm the impact of migration on unemployment. Addison & Worswick (2002) have used the two-stage method of estimating of the panel data in Australia between 1982 and 1996. They have examined the impact of migration on the real wages of domestic workers, according to them; the migrants have no significant impact on real wages.

3. Methodology, research questions and data collection

The purpose of this study was to investigate and compare migration in Czech Republic and Slovakia. Since the migration and globalisation is an important phenomenon in Europe, the descriptive (initial mapping of migration) and explanatory (clarifying differences and causes in migration) research approaches have been chosen.

This study provides an answer to the following central research question: Does the migration contribute to the convergence of economic indicators and vice versa? In addition to the central research question, the following specific research questions, based on the research results, were formulated: What is migration at national level in Czech Republic and Slovakia? What are main migration inflows in selected countries? How migration affect income and unemployment rate? Based on the literature review and given the specific research questions, the following data-collection questions, the two hypotheses were formulated:

Hypothesis A: The strongest flows of migration are between CZ and SK.

Hypothesis B: Migration contributes to the convergence of income in CZ and SK.

Hypothesis C: Migration contributes to the convergence of unemployment in CZ and SK.

For analysis were used, selected statistical indicators from the Eurostat database, data were available for the period from 2000 to 2014. The final panel data set therefore contains a total of 120 observations. Statistical indicators were chosen to best reflect their theoretical counterparts, there is an assumption that gross domestic product properly represents income developments in individual countries. Descriptive statistics for selected variables are presented in Table 1.

Migration (MIG): given Eurostat the indicator is defined as the ratio of net migration (including statistical adjustment) during the year to the average population in that year. The value is expressed per 1000 persons. The net migration plus adjustment is calculated as the difference between the total change and the natural change of the population.

Income (GDP): this variable represents a statistical indicator, gross domestic product per capita and is expressed in the so-called PPS (i.e. an artificial currency unit used by Eurostat).

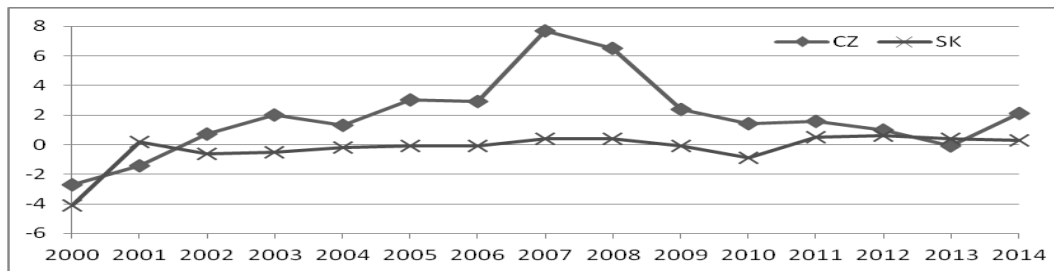
Unemployment rate (UNEMPL): the variable stands for the unemployment rate in the age 15+. This indicator is a specific degree of unemployment, the ratio of certain groups of unemployed in the labour force identically defined percentage.

4. Results and discussion

Question No. 1: What is migration at national level in Czech Republic and Slovakia?

To answer research question 1 was depicted migration in Figure 1 and calculated basic statistics of migration (see Table 1). We can see development over the period 2000 and 2014 in Figure 1. There are higher changes in migration in the Czech Republic and the development of this variable is quite balanced.

Figure 1: Development of migration in Czech Republic and Slovakia



Source: own based on Eurostat

The results indicate that Czech Republic has positive migration in average and the Slovakia has negative one. The development of migration shows that inflows of migration were in average higher than outflows and in Slovakia outflows exceeded higher than inflows.

Table 1: Variables and basic statistics

		Mean	Std. Dev.	Min	Max
CZ	MIG	1.893	2.623	-2.7	7.7
	GDP	19 300	2 873	14 100	23 200
	UNEMPL	7	1.117	4.4	8.8
SK	MIG	-0.253	1.151	-4.1	0.6
	GDP	15 767	3 876	9 700	21 100
	UNEMPL	15	3.084	9.5	19.4

Source: own based on Eurostat

Question No. 2: What are main migration inflows in selected countries?

According to this question we formulated following hypothesis A and try to find out based on data of migration flows in Czech Republic and Slovakia what were migration flows in these two countries.

Hypothesis A: The strongest flows of migration are between CZ and SK.

For verify this hypothesis was explored migration and the migrants origin country, data were depicted as inflows of top 10 nationalities as a % of total inflows of foreigners. The results show that in 2013 the flows were the strongest between CZ and Slovakia (both countries are on the top of the rank). But if we look at the annual average the supreme inflows in CZ were from Ukraine. So given this fact we conclude that flows between CZ and SK are not the strongest but they are still very strong.

Question No. 3: How migration affect income and unemployment rate?

Hypothesis B: Migration contributes to the convergence of income in CZ and SK.

Hypothesis C: Migration contributes to the convergence of unemployment in CZ and SK.

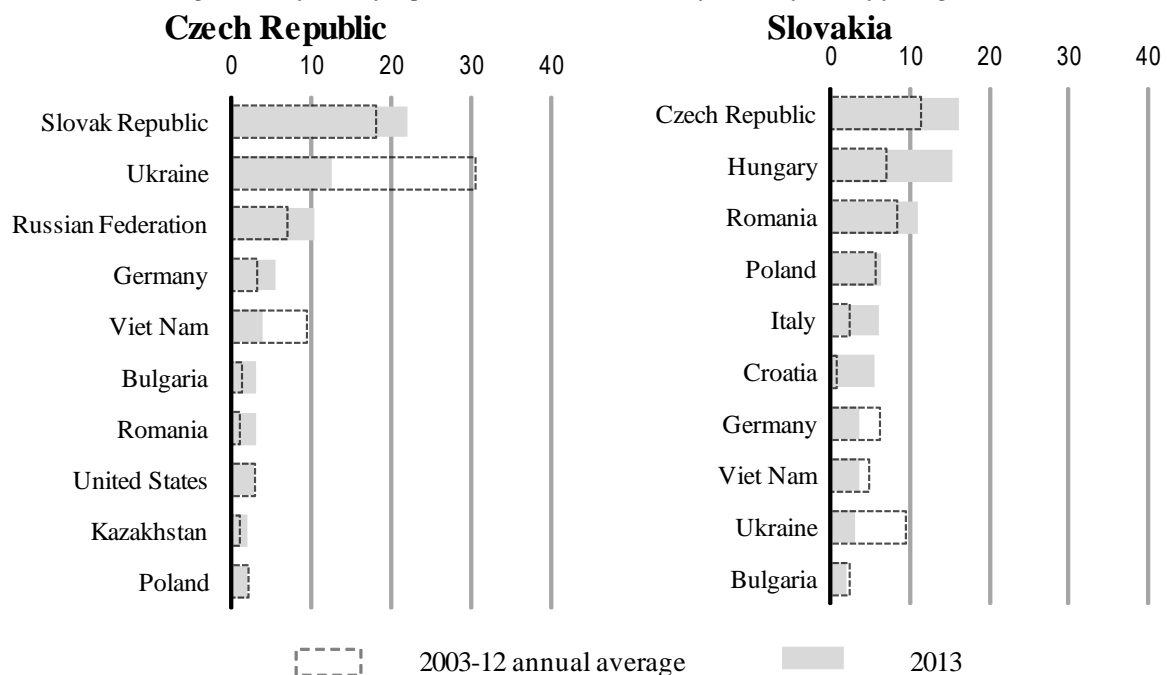
The individual observations were treated equally in the case of so-called. Pooled OLS, it means that observations relating to individual countries were taken as time series. This assumption allows us to use the Dickey-Fuller test, use it to test whether time series have a unit root. Consequently, this approach also allows using a standard form VAR model and Granger causality test.

Variables GDP and UNEMPL showed relatively high volatility at the time and it was necessary because of possible heteroscedasticity to eliminate this volatility. It was

accomplished by using a logarithmic transformation; furthermore, time series have been tested, whether they are stationary. Unfortunately, was not fulfilled assumption about using Granger causality test, therefore we used first differences of time series and it already allowed using the Granger causality test.

There were estimated two VAR(2) models, the first model used variables MIG and GDP and in the second model were used variables MIG and UNEMPL. Than we applied Granger causality test and the results are presented in Tables 2 and 3.

Figure 2: Inflows of top 10 nationalities as a % of total inflows of foreigners



Source: own based OECD

From the values of Table 2 it is seen that the change in the variable GDP did not affect changes in the variable MIG, because we are not able to reject the null hypothesis at the 5% significance level, and we conclude that the changes of migration are not affected by changes in income. Likewise, changes in the variable MIG did not cause changes in variables GDP. Thus, income is not affected by changes in migration.

Table 2: Granger causality test for MIG and GDP

Granger causality Wald tests				
Equation	F	df	df_r	Prob > F
MIG	1.4776	2	21	0.251
GDP	0.2938	2	21	0.7485

Source: own based on Eurostat

Based on P-values in Table 3 it may be seen that the changes in the unemployment rate did not affect changes in the rate of migration. Further changes of variable MIG did not affect changes in variables UNEMPL, again at 5% significance level we are able to reject the null hypothesis in favour of the alternative hypothesis.

Table 3: Granger causality test for MIG and UNEMPL

Granger causality Wald tests				
Equation	F	df	df_r	Prob > F
MIG	0.9578	2	21	0.3999
UNEMPL	0.3644	2	21	0.6989

Source: own based on Eurostat

According results migration did not contribute to the convergence of income and unemployment rate in Czech Republic and Slovakia.

5. Conclusion

The phenomenon of migration and globalization is very important for economics and plays important role in other society discipline as are the sociology or political science. The purpose of this study was to investigate and compare migration in Czech Republic and Slovakia. Three hypotheses were formulated in this paper. They allowed us to conclude that flows between Czech Republic and Slovakia are strong but not the strongest because the strongest inflows to Czech Republic was from Ukraine in average. In terms of testing the causal relationship between the rate of migration and selected economic indicators confirmed the assumption of a causal relationship between the rate of migration, income and unemployment. Thus it was not confirmed that migration contributes to the observed indicators for convergence or divergence values of selected economic indicators. Results of our study show interesting information about migration between Czech Republic and Slovakia and may also provide a useful basis for future research in this area.

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LEADERSHIP MODELS IN GLOBAL ORGANISATIONS: A CASE OF EUROPEAN RETAIL INDUSTRY

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Abstract. The European Retail Branch is one of the largest economic sectors of the EU-28. The retail sector in Europe significantly contributes to the European economy, accounting in 2011 for 3.6 million businesses. Overall, they represent over 15% of all active non-financial business enterprises and as many as 20% of all European small and medium-sized enterprises (SMEs) across all sectors. As well as the retail sector contributes to the European economy in terms of enterprises and turnover, it also represents the second largest employer in the EU after manufacturing, employing 9% of the European labour force. This accounts for 18.6 million Europeans. Leadership models and management have always been up-to-date in retail enterprises in Europe and have a high level of significance. This paper shows the seven most popular leadership models with their characteristics and details. The research questions are: Which of these seven main approaches are the most appropriate theories for the retail industry? Is it possible to find a final answer which applies generally? In paper it is also shown which kind of models are up-to-date and what types of classical leadership models still have been used successfully, partially with adaptations. Hereby, during the discussion of results, some possible ways are shown, in which direction the world of leadership models in the European retail trade could possibly move.

Keywords: global organisation, leadership, leadership models, retail industry, Europe

JEL Classification: F23, M12, M16

1. Introduction

There has been a significant amount of attention paid to research in retail sector. Broadly discussed topics are retail branding and private labels (Ailawadi & Keller, 2004), innovations (Shankar et al., 2011), customers` purchase decisions and loyalty (Murray et al., 2010), pricing (Nagle et al., 2010) and promotion (Ailawadi et al., 2009). However, much smaller amount of attention was given to the topic of leadership in the retail sector, even there were surveys among managers in different sectors: manufacturing (Das et al., 2011), public sector (Trottier et al., 2008), banking sector (Belias and Koustelios, 2014).

Leadership is a complex phenomenon that operates across multiple levels of analysis. There are some limitations to theory (Langley et al., 2013) and therefore the leadership research should be directed towards the organizational practice. So far, the research was primarily oriented on relationship between the leader and follower (Gardner et al., 2010), on

organisational culture and shared values (Schaubroeck et al., 2012) and on how the leader is perceived.

The research usually focuses on the leadership style of specific leader or small groups of leaders (Treviño et al., 2003). We, on the other hand, focus on the whole leadership models. Uniqueness of our research comes from the fact that the survey was conducted among top deciders of the leadership models in their particular enterprises (to the best of our knowledge for the first time at all). In the paper a comparison of the textbook-like leadership models in the European retail trade is made and described using an expert questionnaire with regard to their positive suitability and distribution.

The paper gives a current state of the situation and also a first outlook for the future. We also contribute to the growing literature on CEO style. Several studies find evidence of managerial fixed effects on a variety of corporate outcomes (Bennedsen et al., 2006; Frank & Goyal, 2007). We address a more focused questions, asking which CEO style is most commonly used in global organisations in European retail industry and which is the most suitable one.

Our paper is organised as follows: section 2 describes the retail sector in EU and leadership and leadership models, section 3 explains used methods and describes data, section 4 presents results, section 5 discusses and section 6 summarizes and concludes.

2. Literature review

Leadership is generally described as an interpersonal process in which a leader influences followers. In most definitions, the basic elements of leadership usually include a leader, a follower, and their relational interactions (Dansereau et al., 2013). Theory and research concerning leadership, especially in the organizational context, suggest that leadership is an important factor that may affect work team processes and results (Randall et al., 2011).

A large portion of leadership research has focused on the effects of transformational and charismatic leadership on followers' motivation and performance (Lowe & Gardner, 2000; Morgeson et al., 2010). Recent research has expanded the original theories by placing greater emphasis on how and why followers are willing to be influenced by their leaders (Van Knippenberg et al., 2004). One factor that seems to influence the leader–follower relationship and is relatively universal to leadership theories is trust (Dirks & Ferrin, 2002). Another important factor usually connected with leadership is ethics (Bauman, 2013). Another widely discussed topic is authenticity in the leadership (Neider & Schriesheim, 2011).

The literature on the topic leadership models is very extensive in general, in many aspects controversial and it tries to connect the mega trends in the future with a success-promising leadership ideology. Therefore leadership faces the always same old and above all new challenges, because the mega trends influence the world of leadership models (Ernst et al., 2014).

Following leadership models used in global organisations in the European retail industry are compared and analysed (table 1):

Table 1: Comparison of the leadership models

	Harzburger Model	GRID	St. Gallen	Situational Management	New Leadership	No Management
Approach to problems	voluntary simplicity	depends on employee and task orientation	a general organization grid is used	different situations and edge conditions require situational leading styles	the anticipation and the acting in context of changes	the leadership behaviour is derived exclusively from situations and the acting persons
Leading Model Described	leading instruction, substitutions, target agreements are described	team management, instruction management, association management, paternalism, survival management, human organization management, opportunism	enterprise model, leading model, organization model	suitable leadership style is defined by a work-related and psychological maturity of the led person	innovation, support of engagement, empowerment of led person are important	no defined or communicated or living leading model
Further Development	model's instruments are being modernized	further developed under the term "Synercube"	developed in different directions (the most important school for the European retail trade is based on Fredmund Malik and his approach)	being constantly developed further	the emotional leadership moves forward to the top priority ranking	a possibility to a conflict-free leadership
Main Features	delegation of responsibility; interventions only in case of imminent danger; explicit job descriptions and general internal instructions were created	the connection between the led person and the leading person plays a major role	enterprises are no more described as static organizations; basic conditions are created and they rely on the company's own dynamism	providing open spaces, challenging tasks, learning opportunities against a confidential and good cooperation and a respectful work environment	"power" plays a minor role,	leading behaviour is only situational, changes often

Source: own processing

3. Methods

With respect to small number of respondents partaking in the conducted survey the results were analysed descriptively and displayed graphically. At the same time the survey sample size is – relatively considered – not all that small, as there is only a very limited number of top managers available in the area of European retail trade.

In the survey 25 experts were asked. It is the first time that such a large number of top managers of European retail trade were took part in a survey dealing with leadership models. These 25 experts managed in their professional current situation or their carrier numerous middle- and large retail companies or concerns or even belong as a participant to their

company. The led companies come from all retail branches like food, furniture, shoes, textile, interior design, ware houses, drug stores, construction markets, office trader, garden centre and beverage markets.

All business types in retail trade like full-line supplier, discounter and specialist supplier were included. All experts work or worked for international European companies. The companies always operate in several countries of the EU, some in more than 20 countries.

Regarding this survey it is particularly necessary to point out that six from the 25 surveyed persons are real company founders, majority shareholders or persons who enjoy a similar status like an entrepreneur, due to their development work in their respective companies and their status within their families, enterprises and foundations. All other surveyed experts are to be found in the executive board or managing board, thus in the first management and leadership level respectively the first level of the entire HR segment. Some of them are or were members of further advisory boards of retail companies.

4. Results

4.1 The Use of Leadership Models in the European Retail Trade

Table 2 shows significant differences, if you disconnect the hierarchy levels. Owner and General Manager see <Situational Model> and <Harzburger Model> at the same level and also (still) point out <St. Gallen Model>. The Division managers however have a clear preference for the <Situational Model>, followed by <Harzburger Model> and <No Leadership Model>. Table 3 also shows that younger Managers up to the age of 49 years recognize the use of the <Harzburger Model>, followed by <New Leadership Model> and <Situational Leadership Model>, far behind <GRID Model>, <St. Gallen Model> and <No Leadership Model>. The manager above the age of 49 has another perception. Here the <Situational Model> is ahead of <Harzburg Model> and <GRID Model>. This assessment corresponds with the comparison of the expert's opinion of the large employers with more than 20.000 employees.

Table 2: Use of leadership models in the European Retail trade (ordered)

	Age		Size of Company	Hierarchy	
	23-49	over 49	over 5000	company head, member of board, general manager	division manager
Harzburger	1	2.	2.	1.-2.	2.-3.
GRID	4.-5.	3.	3.	3.	4.-5.
St. Gallen	4.-5.	6.	6.	5.	6.
Situational Leadership	2.-3.	1.	1.	1.-2.	1.
New Leadership	2.-3.	5.	4.-5.	4.	4.-5.
No leadership model	6.	4.	4.-5.	6.	2.-3.

Source: own processing

There were recognized mixed forms of <Harzburger Model> and <GRID Model>, as well as <Harzburger Model> in combination with aspects of <Situational Leadership Model>. Almost a third of the experts mentioned this mixed model, so that we could assume an

extensive circulation in practice. There are additionally mentioned <GRID Model> and <Situational Leadership Model> per single message, <Authoritarian-Harzbürger Model>, <Chaotic-Situational Model>, <GRID-Situational Model> <Malik School-St. Gallen Model> and <Positive Leadership Model>, <Situational Leadership Model> and <New Leadership Model>, <Harzbürger Model> and <No Leadership Model>, <Situational Model – New Leadership Model>, <Delegation (Harzbürger) Model – Authoritarian Model>, <Situational Model – Chaotic Model>, <GRID Model – Authoritarian Model>, <Harzbürger Model-Patriarchy Model>, <GRID Model – Patriarchy Model> and <Situational Model – Patriarchy Model>. To summarize, a colorful mixture of all possible combinations.

4.2 The Most Frequently Used Leadership Models in the European Retail Trade

Table 3 deals with the questions about the reasons for the high, low, or non-implementation of the various leadership models. The top managers rank <Situational Management Model> on first position and <St. Gallen Model> has not been mentioned. Managers, with the age older than 49, show an almost equal response behaviour. <Situational Model> at front place, however equally followed by <Harzbürger Model> and <No Leadership Model>, again no mention of <St. Gallen Model>. In middle size companies up to 5000 employees we find a relatively uniform distribution, only without <New Leadership Model> and <St. Gallen Model>. In those companies with more than 5000 employees all models, except <St. Gallen Model>, are used. <Situational Model> and <Harzbürger Model> are ranked on top.

Table 3: The most frequently used leadership models in the European Retail trade

	Age	Size of Company		Hierarchy	
	over 49	500-5 000	over 5 000	company head, member of board, general manager	division manager
Harzbürger	2.-3.	1.-4.	2.	2.	1.-2.
GRID	4.	1.-4.	4.	4.	3.-4.
St. Gallen	6.	5.-6.	6.	6.	5.-6.
Situational Leadership	1.	1.-4.	1.	1.	1.-2.
New Leadership	5.	5.-6.	5.	5.	5.-6.
No leadership model	2.-3.	1.-4.	3.	3.	3.-4.

Source: own processing

Referring to question concerning the frequency of the use of the seven leadership models a contradiction becomes obvious. Within the scientific discussion and referring to the prominence in the questionnaire the <St. Gallen Model> takes an established place. In the operational praxis none of the top managers sees relevant reasons for an effective use of this model. This could be related to the fact that the <St. Gallen Leadership Model> is seen as too complex in retail trade and a continuous implementation is described as elaborating. In the Top management of European Retail trade <St. Gallen Model> is well-known, but a significant implementation in enterprises is neither existing nor probable in future.

5. Discussion

In the article the seven most well-known and, without the <St. Gallen Model>, the most common leadership models in the European retail trade were described and compared in their individual parts. In this context the three already long existing and researched approaches, <Harzburger Model>, <GRID Model> and <St. Gallen Model>, were viewed regarding their characteristics and their practical implementation. The clear result hereby is that <Harzburger Model> is still used in different adaptations and after modernizations, just as the <GRID Model>, rarer, but still with a high importance in retail. However the third and well-known model of F. Malik respectively the University of St. Gallen, has a surprising high prominence and in relation to this a very low range of implementation, at least in European retail trade. The delimitation to the two classical models, <Harzburger Model> and <GRID Model>, which were and are mainly used in European trade, clearly indicates that once again the St. Gallen team is aware of the fact that for various reasons their model is hard to deal with in retail trade.

The New Leadership model is human-related and aims at the delegation of responsibility, a confidential working atmosphere and a reduction of hierarchical structures. This all complies with the modern spirit of the age of the following digital generations and especially offers an option for a decentralized and fast decision finding for the retail trade, with its many geographically spread units. These are essential as the basic conditions for a fast and profitable growth. In addition to this come the mutation and the polarization between the more and more digitalized retail trade, very large branch systems and a respective regionalization of trade formats, starting with the food trade, even in large discount concerns. Therefore a prediction can already be made, that this kind of leadership models will find their way and take over a very important part.

Also surprising was that the <No Management model>, a contradiction in itself, is used more often in practice than supposed. The reasons for that continue to lie in darkness. What affects company managements and owners to waive any, although first of all only theoretical announcement of a leadership model? Are these future intentions or the simple understanding that it also obviously works without any? Or is it the aversion of companies and managers to take over models from the theory into practice, which is always accompanied with risks, work and the use of resources? Leadership definitely also takes place in companies without any defined leadership model. Furthermore these companies existed and exist with a long lasting presence, often with significant material success. Maybe this model is the best of all? Interesting and broad questions appear for a further examination of the theme complex “Leadership models in European retail trade”.

6. Conclusion

In the recent history many enterprises rely on the proven models as the Harzburger model or GRID. The actual development, pushed by the social megatrends and the dramatically changing conditions with regard to the increasing digitalization and globalization, clearly goes in the direction of New Leadership and situational leadership and in mixed forms or modernizations of proven models. The (European) retail trade – world became too complex and fast moving, in order to do everything right with one leadership model “one size fits all” and to be able to cover everything.

In the paper also the following insight could be gained. Extreme gaps partly exist between the academic discussion about leadership models and their implementation in companies and the company's reality. The large-scale expert's survey plus interviews of top-managers respectively companies of reputable European companies confirmed this gap in large part. In this work many companies of the top 100 in European retail trade, including the market leaders, had the chance to speak. Gap means how far the often theoretical discussion in its supposed precision is away from the real life. Thereby the expert's survey could answer some research questions, f.e. about prominence and implementation of leadership models. Other assumptions, as f.e. the application of St. Gallen model, were clearly disproved. New additions include findings beyond the actual scientific discussion, f.e. the gap of the countless companies and organizations that seem to manage without any official leadership model. Surely one quintessence is that in the daily business countless mixed forms and adaptations exist, which are due to the different company- and country cultures.

With regard to the human leadership it is not about the technical patents and physical legitimacy. Leadership always is something deeply social, an interaction between people and therefore very difficult to transform into theoretical concepts. Each leader and led person, each group in companies and many frame conditions are different and are managed differently. This is scientifically insufficient, but the reality.

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COMPARATIVE ANALYSIS OF THE GLOBAL SPREAD OF TOURISM IN INSTITUTIONAL PORTALS

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Abstract. Throughout history they have been generated topois or platitudes shall identify and designate territories and societies. Topical stories that do not always conform to reality, but which have served to spread it. So according to various reasons, the collective imagination that while maintaining its essence, be rearticulating to suit different socio-economic parameters, such as the phenomenon of globalization. One of the main signs and even engines it can be placed on the Internet, in this sense, has operated no longer a simplification of reality reference, but of collective or platitudes about countries and cities imaginary, turning them into real brands they interact and compete with each other in the social macroespacio emerging. That is, whatever the profile of the tourist and the selected destination in its bid; one of its activities will focus on the visit of the icon, that could well be defined as its global logo. Therefore, this study focuses on the analysis of the images of two tourist destinations of great relevance: Cadiz in Spain and Zadar in Croatia, through a comparative analysis of the images included in the institutional portals of these two cities, in order collect and classify the selection of images that both institutions make to launch its global offering, and to assess the profitability of the proposed positioning.

Keywords: tourism, globalization, image, identity, portals

JEL Classification: L83, Z30, Z32, Z33, Z39

1. Introduction

Throughout history they have been generated topois or platitudes which shall identify and designate territories and societies. Topical stories that do not always conform to reality, but which have served to spread it and the analysis is very revealing to understand the perceptual process going forming a collective imagination, mainly from the similarity / difference pairing with respect to the previously known by the visitor and which eventually constitute, according to various reasons, the collective imagination that while maintaining its essence, be rearticulating to suit different socio-economic parameters, such as the phenomenon of globalization.

One of the main signs and even engines it can be placed on the Internet, in this sense, has operated no longer a simplification of reality reference, but of collective or platitudes about

countries and cities imaginary, turning them into real brands they interact and compete with each other in the social macro-space emerging, where more and more importance is the image, as can be seen in this topic about German technology, which does not require any positive qualification for being deeply internalized in the minds of citizens of the world, as are some icons on tourist destinations, although related to the collective imaginary act largely as unique claims to promote tourist visits, and able to amalgamate any type of tourism with cultural or semi-cultural, arguably. That is, whatever the profile of the tourist and the selected destination in its bid; one of its activities will focus on the visit of the icon, that could well be defined as its global logo.

This implies that perhaps the tourist offer may be devoted to spreading these topics rearticulated according to the forecast of what awaits the tourist, or perhaps are introducing new tourism products by launching future icons that reinforce the interest of travelers, while they are generating the need to portray there. Therefore, this study focuses on the analysis of the images of two tourist destinations of great relevance: Cadiz in Spain and Zadar in Croatia, through a comparative analysis of the images included in the institutional portals of these two cities, in order collect and classify the selection of images that both institutions make to launch its global offering, and to assess the profitability of the proposed positioning.

1.1 Objectives of study

The basic objective of the research focuses on the comparison of different communication strategies that both populations used for the dissemination of their tourism offerings through institutional portals, as well as valuation and return them to present. This basic objective is articulated other side, which are as follows:

- Determine the topics imaginary about both cities
- Encrypt the images broadcast the two tourist portals to promote their destinations
- Catalog and analyze the dissemination of images
- Evaluate and compare both strategies

1.2 Methodology

In this exploratory-descriptive study, we will use a hypothetical-deductive method, which is incardinated by the hypothesis that both Cadiz and Zadar is mainly spread from topical sites, with little emphasis on promoting cultural tangible and intangible heritage of these populations.

To do this, a content analysis of the images of the web portals of the two cities, based on a mixed methodology that combines quantitative aspect and a qualitative, that will see the importance that the issuer of communication grants will be made to the reproduction of imaginary topics, while the promotion of lesser known, primarily those related to the cultural offer. The study is made between the months of May and June 2016.

1.3 Theoretical framework

Donaire (2012) observed a certain homogeneity in the eye of the tourist, who understood as a symbolic construction that crosses borders, which means that the image of the tourist places can be understood as sociocultural macro-relations that have generated throughout history and they have been consolidated in parallel with the evolution of the country in question, which

does not mean that cannot be changed, but its possible alteration must be planned with special attention.

Hernandez (2008) notes that from the fifties disappears heritage tourism promotion, which happens to reflect the stereotype of the Andalusian population, whose festive remains topical today. This imaginary reconstructed from the view of the difference that Spain and Andalusia has over other parts of Europe, as write-called romantic travelers who visited Andalusia and described it in a simplistic and stereotypical way, as Pitt Rivers collected in his book the people of the Sierra (1971). A symbolic imagery that was to represent an earthly paradise inhabited by a population that did not deserve such luck (Lasso de la Vega, 2007), as Ortega y Gasset noted in his Theory of Andalusia.

Ramos Lizana (2007) notes that tourism has led to the creation of new museums, maintaining the heritage and the massive increase of cultural interest, while Marrero and Abdul-Jalbar (2012) argue that cultural tourism has an educational background Middle- high, which could be a good basis for proper reformulation of the tourist image of the city. While, around 89.3% of foreign graduate students visiting Cadiz keep after your stay, the topics of Carnival and the beach, above the flamenco, cultural and architectural heritage, gastronomy, etc.

In the case of the province of Cadiz one of these resources is undoubtedly the cultural heritage in its various dimensions. If we consider as an example the Historical Sets (under the Law of Andalusian Historical Heritage 1/91), the highest number recorded in the province of Cadiz, with thirty-one sets above other Andalusian provinces with the highest recognition as Granada , Cordoba and Seville (Arcila et all, in Bernal, 2011)

2. Tourism Cadiz

The city of Cadiz is the capital of the province of the same name and is part of the Andalusia, located in southern Spain. It counted 120,468 inhabitants (2015) and a developable area of 4.4 km², being non-urbanizable the rest of soil, composed of marshes natural park Cadiz Bay. This limits rather the management of tourism, since the chances of increasing its hotel capacity are more than limited both by lack of land for development and the complexity of remodeling old buildings, because the long history of the city delays, difficult or impossible in some cases, reconstruction of buildings.

Cadiz, also known as the silver cup, is the oldest city in the West, with archaeological remains dating back to 3100 years old, although there are still many historical gaps to investigate, mainly because the writings of Plato, Strabo, Herodotus and others related to Atlanteans (Schulthen, 2006), who named the ocean that bathes its coasts and joins the Mediterranean sea through the mythological pillars of Hercules, where Greece and Rome placed the end of the world (non plus ultra) and is now known as the Strait of Gibraltar. This implies that the history of the city is found immersed in the myth of its foundation, attributed to Hercules defeats Geryon, one of the kings of Tartessos, indigenous people considered by the Greeks as the oldest civilization of the West and has remained in the mythological realm in which still remains although it has been verified its real existence.

Anyway, Cádiz meets every one of the requirements of a cultural tourist destination, but also has an offer of sun and beach, which is what has prevailed in Spain since the dictatorial stage until recently.

2.1 Field work

The portal of the City of Cadiz broadcasts, among other content, tourism in the city. This page is divided into four large blocks (what to see, what to eat, what to do and where to sleep) which, in turn, are articulated in various categories, among those seen with special attention those that relate to the subject of study of this research revolves around the comparative analysis of the tourism strategy that employs the official institution well to result in topical and imaginary area or more centered on the cultural offer of the municipality.

Table 1: What to see

What to see	Options	Photos
Museums	7	129
Viewpoints	5	58
Religious buildings	16	182
Exhibition centres	13	128
Monuments	34	323
Archeology sites	7	50
Theatres and art scene	2	18
Green zones	4	65
TOTAL	88	953

Source: Turismo Cádiz, own elaboration, 2016

Table 2: What to do

What to do	Options	Photos
Gifts and souvenirs	11	65
Guided tours	12	45
Theater visits	6	23
Recreative activities	13	52
Nautical sports	8	56
Nightlife	36	141
Traveling with children	5	34
Learn Spanish	9	43
TOTAL	100	459

Source: Turismo Cádiz, own elaboration, 2016

As you can see in the tables above, none of them includes the supply of sun and beach, which could appear in either, both from the perspective of the category sights like what to do. In fact, none of these blocks offer beach, standing under these four large blocks, where other more specific are inserted, in order to facilitate navigation on the page, and access in a manner contemplated more directly to its contents (tourist offices, maps, how to move, routes, multimedia and downloads, Carnival, congresses and conventions, cruises, holidays and traditions and beach) history, legend, contextualization of contents missing by a generic information that, as a preliminary and introductory, offer an attractive information to the reader. The sights and attractions subcategory amalgam a wide range of points to be visited in the city, but not properly fragmenting what places are located in public places.

The pages of the two theaters broadcast signal: programming consulting, information that should be collected on this page, to facilitate the task of the reader, although it is reiterated some other section of the website. Furthermore, on web portal of Cádiz the visitors of web can find 128 different options what to eat with 622 photos, as also where to sleep with 40 different options and 95 photos.

Under these four categories, other options, which are not structured in the main menu, collected above, and sandwiching new options with those offered in the previous four shown. They are:

Table 3: Tourist offer of Cádiz

	Opciones	Fotografias
Tourist office	4	4
Tourist routs	7	73
Carneval	1	20
Fiestas and tradicion	24	240
Cruzing	4	6
Beaches	4	58
Handicraft and trade	11	53
TOTAL	55	454

Source: Turismo Cádiz, own elaboration, 2016

3. Tourism Zadar

The city of Zadar, located on the Croatian coast (Dalmatia region) is the capital of Zadar County. In 2011 it had 71,471 inhabitants and a total area of 194km². The city of Zadar is situated in the center of Dalmatia in area with plenty islands as such as Ugljan, Pasman, Dugi Otok and other small islets islands. Because of its location, Zadar is one of the most popular tourist destinations in Croatia. Its rich history, beaches, islands, gastronomy, proximity to national and natural parks are the main reasons why tourists visit Zadar, although not staying in the city, but come to her through day trips, managed individually or through travel agencies.

Zadar is known as one of the largest cities in Croatia and primarily for his long and diverse history. The city was populated by 900 B.C. a Illyrian tribe the Liburnian (Petricioli, 2009). During the Roman Empire, Zadar became a municipality and then a Roman colony. Unlike other croatian cities on the coast, Zadar wasn't most important for Roman Empire (like Split or Pula), but presence of monuments from that time prove about economical and cultural development of the town which is stil present till nowadays (Sanader, 2001). According to many of croatian historians and other scientists, monuments from that time is the best what Croatia have inherited (Majnarić, 2004:). In post-Roman times, the city was poblada by barbarian tribes. Since the seventh century Zadar was inhabited by Slavs (Croatians) and from that moment the Dalmatian language (Croatian language) and the Croatian crown (the town of Nin, 12km from Zadar) was developed. Also, as Cádiz, Zadar was island, but with the development of the town became peninsula. So, the most important tourist attractions of Zadar are the ecological tourism, cultural tourism, nautical tourism, outdoor tourism and crusing (TZ Zadar, 2015).

Table 4: Number of visits and nights in Zadar during 2012-2015

Year	Visitors	Nights	Avarage night per visitor
2012	283.097	1.042.513	3,68
2013	320.220	1.203.966	3,76
2014	364.012	1.310.461	3,60

2015 ¹⁶	361.777	1.411.125	3,90
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Source: Croatian National Statistic Office and Tourist Office of Zadar County, own elaboration, 2016

As mentioned, the tourist offer of Zadar can be divided into four blocks but some are more important than others. Also Zadar meets each and every one of the requirements of a tourist destination with cultural characteristics, although the offer of sun and beach is one that has prevailed in Croatia since the beginning of tourism Croatian (end of XIX century) to XXI century. With each year the number of tourist visits grows but measuring mechanisms are not established, making it difficult to track information about the availability of accommodation. This problem exists not only with accommodation, also observed with the number of visits to museums, festivals and other sites that frequent travelers (Demonja, 2011).

The portal of the Tourist Office of Zadar first broadcasts the most important of the city and its tourism. Except that, the portal disseminates practical information for visitors and tourist workers. The portal is divided into six large blocks (infos about Zadar, the guide, events, accommodation, lifestyle and travel planning), but to use and compare easier with Cádiz, is to be used divided into same four blocks.

Table 5: What to see

What to see	Options	Photos
Museums	13	13
Festivals	11	11
Religion buildings	14	17
Exhibitions centres	74	66
Monuments	42	42
Archeology sites	4	7
Theatres and art scene	86	86
Green zones	22	22
TOTAL	266	264

Source: Tourism Office of Zadar, own elaboration, 2016

Table 6: What to do

What to do	Opciones	Fotografias
Gifts and souvenirs	43	32
Guided tours	24	24
Theater visits	11	11
Recreative activites	30	30
Nautical sports	42	10
Nightlife	20	18
Traveling with children	0	0
Learn croatian	0	0
Beach and sun	9	9
Health tourism	3	3
TOTAL	182	137

Source: Tourism Office of Zadar, own elaboration, 2016

Unlike Cadiz, in the above table you can be checked as there is a supply of sun and beach, and it is interesting as seven of nine beaches are around the city. It also differs from Cadiz with its offer of health tourism, which is related to dental medicine. For visitors to the site, navigation is very inspected and therefore can easily find content when they search for what to

¹⁶Resultados no son completos, aún son entre enere y septiembre de 2015.

see or do. Similarly, many routes, virtual tours and multimedia packages allow for easy orientation in the city. The site includes history, legends and interesting information about city (64 in total) and so the context of the city is complete. Furthermore, web portal of Zadar offers to visitors 108 different options what to eat and 73 photos, as also 377 different options and 357 photos.

In the following table, these categories are not structured in the main menu, collected above, and sandwiching new options with those offered in the previous four:

Table 7: Other tourist offer and informations about Zadar

	Options	Photos
Tourist offices	32	0
Routes	5	5
Welness i spa	7	7
Transport	8	8
Usefull informations	3	3
TOTAL	55	23

Source: Tourism Office of Zadar, own elaboration, 2016

Among the most popular tourism resources of Zadar, are innovative attractions and greet the sun and the sea organ representing the most recognized Zadar deals. Thus, Zadar combines its ancient heritage and modernity with innovations as it is distinguished from other cities in the Croatian coast.

Finally, like the web page of Cadiz, the Zadar presents the agenda of acts and events, weather information and the possibility that the site visitor participate with proposals on the amendment of the Law Office of Tourism or you can make reservations for an event in the city.

4. Conclusion

Taking categories responsible for disseminating only the cultural offerings of the city of Cadiz (museums, religious buildings, exhibition centers, monuments and attractions, archaeological sites, theaters and performing arts, guided tours, dramatized tours, routes and holidays and traditions) a total of 1231 photographs, divided between a total of 133 options. On the other side, the categories of the observed web page of Zadar include fewer options (54) and photos (918) than Cádiz.

It can be said, therefore, that as stated Gallego (2002) major cultural and heritage attractions in the city of Cadiz are not sufficiently exploited, taking into account the quantity and quality of the photograph contained on this website is very susceptible of improvement as well as the chance to see all the photographic repertoire without having to return to the previous page where the thumbnails of each photo displayed, without having the option forward and backward within each gallery.

In the portal of Zadar, we can say that the major cultural and heritage attractions of the city of Zadar are sufficiently exploited in case of information and diversity, but are not sufficiently exploited in case of number of photographs of those cultural attractions and heritage because each attractive has only a photograph.

Although photography, in general, does not seem enough and lacks seaworthiness, largely reflects the Cádiz town as it portrays its citizens wandering the streets or enjoying its beaches, which is a strategy different from that operated by the Andalusian tourist communication and also the tourist guides private, recreating empty and deserted places payas (Lasso de la Vega et al, 2007). On the contrary, this website seems to teach the potential traveler's identity reality of their city, through intimate approaches through close-ups, wide shots with front optical, peppered with some contrarious prospects trying to bring majesty to some architectural ensembles, but it shunning of overhead shots overlaying the role of the issuer, as is common in the regional and private strategy cited above.

Tourism of Cadiz wants to offer visitors the reality of a great little town enclosed in its traditions while open to the visitor, offering a tourist alternative well above topics that designated as the proposal Carnival and beaches it is much lower than the culture. So on the web portal there is 133 options and 1231 photos about culture, 1 option and 20 photos of carnival, as also 13 options and 114 photos of beaches and nautical sports.

The same applies to the web portal of Zadar, where culture is in the foreground and other tourist offerings represent secondary tourism. The history and culture of the city of Zadar are the main instruments that make up the tourist city, so there is 202 different options and 202 photos about culture, 46 options and 46 photos about nearby islands and nature, as also 52 options of beaches and nautical sports with 32 photos.

Therefore, the spread of tourism by the City of Cadiz is inversely proportional to the topics about the city, which abound in the Carnival and beaches, while the central strategy of the tourist web commitment to cultural offer although susceptible of improvements, you should develop a plan of tourist Communication able to alter this pre imaginary, in order to adjust and profitable supply and promote the image of a city with as much relevance for the construction of the West. On the other hand, the Tourist Office Zadar still haven't the long-term strategy of tourism communication.

Therefore, why is culture in main focus of communication in Cadiz and Zadar is not something uncommon. According to Anholt (2009) culture is more eloquent communicator and people believe more to them than to the commercial brands because they are more natural and they have spiritual value. Also culture enriches tourist destination and can be source which is used all the year, unlike sun and beaches which depend on weather (Anholt, 2009). So, culture and tourism are intertwined, and creating tourism product and offer achieve that destination increases consumption, the length of tourists stay and they pleasure (Demonja, 2011).

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DO MIGRANT REMITTANCES ENHANCE CONSIDERABLY MACROECONOMIC STABILITY IN RECIPIENT ECONOMIES?

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Abstract. Household remittances presently represent a relevant part of capital flows for advancing economies across the world, furthering economic and social welfare in migrant-sending communities, but they may have both beneficial and detrimental consequences on recipient communities. We are specifically interested in how previous research investigated the capacity of remittances to further globalization and growth. Remittances are progressively correlated with possible gross domestic product (GDP) in recipient economies, being determined by both altruism and investment reasons. Financial advancement in the recipient economy is adversely related to remittances (they assist in mitigating credit constraints). Remittances can have a relevant function in moderating the consequences of macroeconomic instability in developing economies. Migrant remittances may be considerably determined by circumstances within some area of the economy and boost particularly steadily as a reaction to negative exogenous shocks. The empirical investigation described in this paper points out that migrant remittances hinder the kinds of policy settings that would enhance the welfare of all people over the long run and influence considerably the macroeconomic soundness in recipient economies. This research makes conceptual and methodological contributions to the macroeconomic drivers of remittances, the impact of business cycle variations and financial advancement on remittances, and the beneficial effect of remittances on poverty mitigation and growth.

Keywords: migrant, remittance, stability, recipient, economy

JEL Classification: O11, B22, E2

1. Introduction

This study builds on a substantial literature of empirical investigations on the role of migrant remittances in enhancing macroeconomic stability in recipient economies. Migrant remittances supply an extraordinary chance to determine alterations in domestic consumption. As immigrant workers transfer more money home as remittances (Nica, 2015), they have less to allocate domestically, and as a consequence the consumer base will diminish. Concentrating on

remittances may be a valuable manner of distinctly establishing the wage effect of immigrant consumption (Bauder, 2016) from the labor challenging impacts of immigration. Granted the beneficial consequences for receiving economies, a more detrimental effect may be anticipated on developed economies that generally transfer remittances abroad. Migrant remittances generate alterations in the consumer base not including the labor pool (Olney, 2015).

2. Literature review

Remittances by immigrant employees constitute a significant source of funds for numerous less advanced economies and their inflows have been swiftly advancing. Even though remittances flow may be instrumental in the growing of the country, it may be quite expensive. A constant flow of remittances diminish volatility in output. Remittances enhance the advancement of the financial sphere by alleviating the credit restrictions for investments. A substantial inflow of remittances compared with the magnitude of the recipient country may generate some disadvantageous effects (Sigauke, 2016), among other things the prospect of real exchange rate appreciation and deficit of competitiveness in the tradable sphere of the country. (Hassan and Holmes, 2013) The adverse effect of remittances chiefly impact employees hired in non-traded sectors which are more dependent on domestic consumption. Remittances chiefly reduce the productivity of non-traded sectors, and have a more adverse effect on the wages of employees in non-unionized sectors. The latter have more inflexible wage structures, being therefore less impacted by variations in remittances. Remittances stimulated by the inclination to accumulate in the foreign economy (Fabbrini, 2015) do not considerably influence native wages: they will diminish domestic savings but do not relevantly influence the domestic consumer base or wages. Migrant remittances provide a distinctive chance to establish fluctuation in immigrant consumption while maintaining the labor pool regularized (Flegar, 2016): as immigrants transfer more money to foreign economies as remittances, they spend in a lower degree domestically, and as a result the domestic consumer base will diminish. (Olney, 2015) Remittances by immigrant employees constitute a significant source of funds for numerous less advanced economies and their inflows have been swiftly increasing. Remittances transferred home by migrant workers to less advanced economies (Lăzăroiu, 2015) equal to about three times the magnitude of established development assistance. Inward remittances may be instrumental in economic growth (Lucas, 2016) by a swifter accumulation capital. The crises-averting function of remittances is incorporated in the wider structure of the viability of the current account. The long-run active conduct of net remittances receipts is an element in the current account of the balance of payments. Net remittances receipts increase the supply of global reserves and can be employed to compensate foreign debt, thus being instrumental in the viability of the current account (Hassan & Holmes, 2016).

3. Methodology

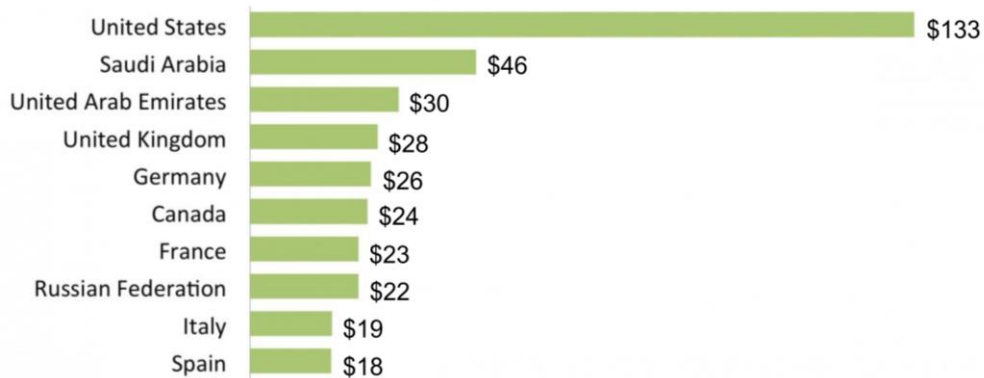
For the investigation of the formulated issues, we develop first-rate recent literature and prove that remittances level the total current account deficit and increase global reserves which can be employed to compensate foreign debt. A constant flow of remittances guarantees positive net receipts (Cesaroni et al., 2015) in the current account in addition to liberal external funding by reestablishing the support of the foreign investors. An outstanding remittances'

assistance enable a feeble type of viability connected with the cointegration between exports and imports. A boost in domestic absorption after an increase in household income as a result of the expanded flow of remittances may preserve the receiving economy's current account balance constant (Popescu, 2015) or due to an appreciating real exchange rate that generates a depreciation of the trade balance by approximately the rise in remittances. (Hassan & Holmes, 2016) If the latter are targeted to satisfy household demands without any subsequent requirements with regard to the migrant worker, therefore the manifestation of other remitting migrant workers in the household may entail a dissemination of accountability, discouraging a migrant worker from remitting herself. A migrant's inclination to send money may decrease with the amount of remitters in the household (Peters & Besley, 2016), and the degree of regression may be topmost for wealthier households, that require the remittances least. If remittances aim to guarantee subsequent inheritances, therefore the occurrence of other remitting migrant workers may bring about emulation in the household to transfer more remittances (Garip et al., 2015).

4. Empirical data and analysis

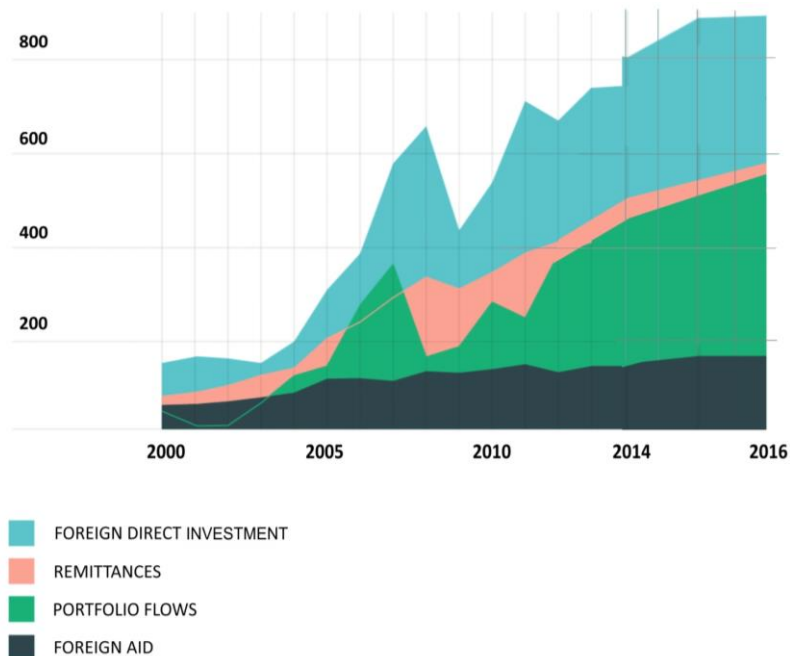
To introduce empirical content to our theoretical model, we start with the finding that a migrant's tendency to send money home may escalate with the amount of remitters in the household, and the degree of intensification may be more significant for possible heirs in the household, who are seemingly to inherit. Resources may influence remittance inclinations implicitly (Popescu, 2014) via their interplay with the preponderance of remittance in social communities. The migrant may tend to transfer remittances as a manner of maintaining connections if other individuals in her social community (Lăzăroiu, 2013) are doing so too. Migrants should be more likely to reciprocate to the remittances of other individuals who are established in comparable social categories. Remittance norms might be clear-cut to social categories, e.g. ones marked-out by gender and birth order. (Garip et al., 2015) Separate remittances for household livelihoods are likely to be less recurrent in time, as family reintegration continues. Reverse remittances weaken the constitution of home economies (Anderson & Kantarelis, 2016) as an unresponsive repository for migrant workers' cash transfers and investments. No matter what migrants transfer, they may concurrently obtain a diversity of resources from their groups of origin, in and out of the household sphere: better schooling for their children, less expensive health care, consumption goods, etc. Reverse remittances count in the initial phases of the migration process: notwithstanding their contacts abroad, aspiring migrants may depend on a series of lenders at home. (Boccagni, 2015) (Figures 1–5).

Figure 1: Top 10 remittance-sending countries (\$billions, 2016)



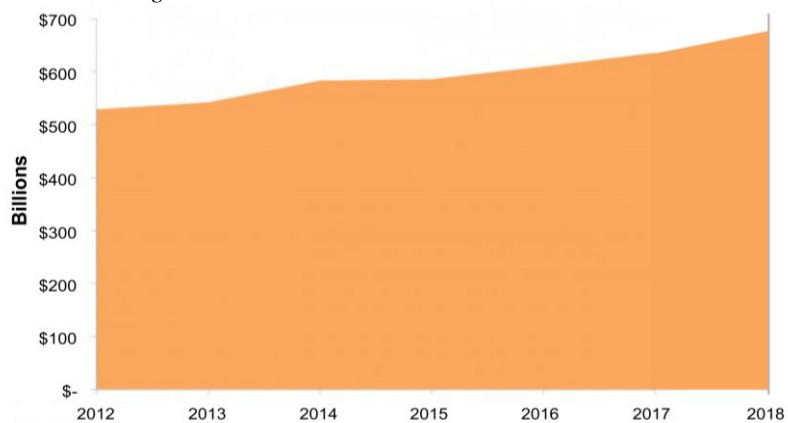
Sources: The World Bank/BI Intelligence and our estimations

Figure 2: Capital flows to the developing world, \$BN



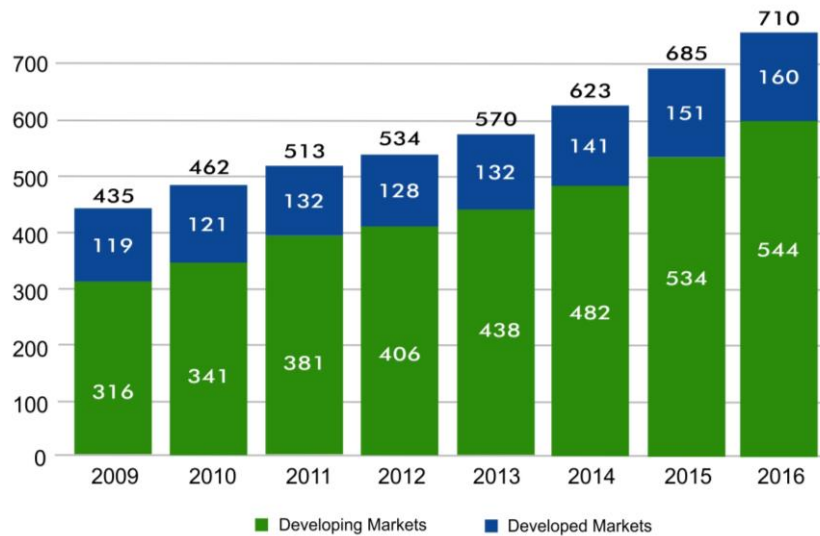
Source: World Bank, OECD, and our estimations

Figure 3: Global cross-border remittance volume



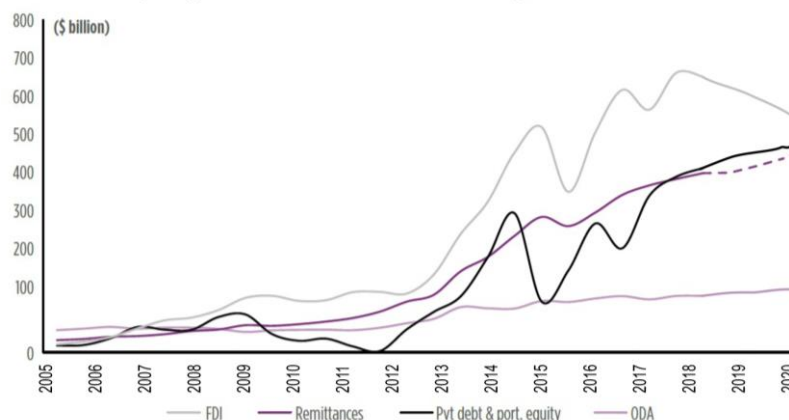
Source: The World Bank/BI Intelligence and our estimations

Figure 4: Global remittance market



Sources: World Bank and our estimations

Figure 5: Remittance flows, Official Development Assistance, and private capital flows



Sources: World Bank Staff calculations, World Development Indicators, OECD, and our estimations

5. Results and discussion

Our findings support our theoretical discussion and empirical analysis and are consistent with research highlighting the role of migrant remittances in enhancing macroeconomic stability in recipient economies. In-kind services supplied in their local settings of origin may be the most relevant and depreciated type of reverse remittance. The latter should serve as an evidence that their incoming assimilations and affective projections (Mihăilă et al., 2016) have concrete foundations: reverse remittances are a determinant of social and emotional backing for migrants (Mulligan, 2015), they should be perceived taking into account their intrinsic social and economic stratification, and are heavily reliant on the interconnection of household networks and on the dissemination of several types of “capital” among non-migrant workers. (Boccagni, 2015) In an unimportant open economy where a rise in remittances is comparable to a stable rise in the non-labor returns of the household, a boost in remittances generates *spending effects* in both the tradables and non-tradables goods industries. The spending effect is a capacity of the rise in disposable income in the wake of the inflow of remittances (Willow

and Keefer, 2015) that raises demand in the economy presupposing positive income elasticity. A rise in remittances generates a *resource movement effect*. As a consequence of the spending and resource movement effects, the coming in of employees' remittances may affect the competitiveness of the tradables products industry (Schneider, 2015) generating an increase of the real exchange rate. The interacting impact of remittances inflow and real exchange rate might fluctuate in the long-term against the short-term. The increase of the real exchange rate and decline of the economy's competitiveness (Ștefănescu-Mihăilă, 2015) as a consequence of remittances flow could be counterbalanced if the latter increases capital accumulation by intensifying savings and investments in the long-term which may rise the output of both tradables and non-tradables where the comparative rise will differ among economies contingent upon their framework (Hassan and Holmes, 2013).

6. Conclusions

The implications of the developments outlined in the preceding sections of this paper suggest a growing need for a research agenda on the role of migrant remittances in enhancing macroeconomic stability in recipient economies. If immigrant's choices for the domestically created products persist precisely likewise after migrating (El-Montasser et al., 2016), accordingly remittances will have a diminished effect on the consumer base and wages. An income or productivity shock in a certain economy may result in native wages to raise and facilitate wealthier immigrants to send more money home. Remittances are a distinctive manner of establishing dissimilarity in consumer request (de Petris, 2015), as they cut down the consumer base without influencing the magnitude of the labor pool (Olney, 2015).

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IMPACT OF GLOBALIZATION ON BUSINESS PERFORMANCE

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Abstract. The presented paper investigates the impact of globalization on business performance. The purpose of our research is twofold: first, we aim to classify and define the effects of globalization, and second we explore these effects and test the relationship between the globalization effects and the performance of exporting companies. In this context the research attempts to answer two questions: 1) in which way the globalization affects company performance, and 2) what is the difference in the relationship between global market opportunities and performance and between global market threats and performance. Structured questionnaire was used to collect the data from marketing and sales managers of companies from six economic sectors in Slovakia. Bivariate regression analysis was applied to study the size and direction of the global market opportunities and global market threats on overall business performance. We found that globalization can affect business performance both positively and negatively: while company performance is enhanced by increased market opportunities caused by globalization, it is braked by growing competitive threats. Therefore, managers must consider such double effects, and try to expand the opportunities, while turning threats into opportunities. Appropriate strategies such as CRM strategies, developing networks with other companies or plural management strategies must be carefully developed and implemented in order to minimize the threats from increased competition.

Keywords: globalization, global market opportunities, global market threats, business performance

JEL Classification: M30, F60, F61

1. Introduction

The aim of our paper is to explore the effects of globalization on company performance. Globalization in our research is defined as the process of economic, financial and market integration and increasing social and cultural inter-connectedness, enhanced by advances in communication and trade liberalization (Eden & Lenway, 2001; Clark & Knowles, 2003). The particular focus of this paper is to investigate the effects of globalization on the performance of exporting firms in Slovakia.

Globalization is an important phenomenon, that cannot be ignored, because every country – regardless of size and level of economic development – is affected by globalization. Globalization enables companies to benefit from the economies of scales and scope and thus find customers around the world.

This paper classifies the effects of globalization into two key and broad groups: global market opportunities and global market threats. Both these effects are frequently cited in the literature as the most important and immediate effects of globalization (Jones, 2002). Global market opportunities represent the opportunities for increase in market potential, trade potential, investment potential and resource accessibility potential (Jones, 2002; Levitt, 1983). Global market threats represent the threats referring to the increase in the number of competitors, level of competition and market uncertainty (Young, 2001).

On the one hand, it is documented that global market opportunities enable companies to expand to many new markets and facilitate access to world resources, which results in a better company performance (Jones, 2002; Levitt, 1983). On the other hand, global market threats can have a negative impact on company performance as a result of increasing number of competitors, increase in intensity of competition and this resulting in high market uncertainty (Eng, 2001; Jones, 2002; Levitt, 1983).

The paper is focused at exploration of both abovenamed effects of global market opportunities and threats on the overall company's performance. In our research we intend to find out how these two categories of globalization effects impact on company performance. Research indicating the direction and size of the relationships between both mentioned globalization effects and company performance could help managers to strengthen their competitive position, to develop strategies supporting their survival in a global market and to contribute to a better understanding about the nature of the globalization effects.

2. Globalization opportunities and threats

The process of globalization brings increasing economic, market, social, political, cultural, financial, and environmental interdependence among countries. Business is also strongly affected by the process of changes towards more interdependence. Globalization contributed to the development of new forms of organizational innovations, such as reengineering, building alliances or implementation of cooperative strategies.

Globalization in our paper is defined as the process of increasing economic, financial and market integrations, and social and cultural inter-connectedness (Eden & Lenway, 2001; Clark & Knowles, 2003). In spite of the fact that much theoretical literature was published on globalization, only few analytical studies exist that investigate globalization effects. Therefore, our ambition is to explore the effects of globalization on company performance.

Globalization has a double-sided effects: it enhances company's market opportunities, and in the same time it also increases the scope and level of competition faced by these companies. Convergence of national economic policies and liberalization of trade evoked by globalization facilitate companies' access to different geographic markets around the world and thus intensify the competitive atmosphere (Harvey & Novicevic, 2002). Companies operating at different levels – global, international, regional and domestic – are now competing against one another. Globalization gave rise to a new type of competition, named as „hyper-competition“, generating enormous threats to companies in all economic sectors since it makes the competitive advantage of any company very time-sensitive (Harvey & Novicevic, 2002). Operating in the global market increases the level of uncertainty faced by companies.

According to several literature sources, driving forces of globalization can be grouped in four broad categories (Harvey & Novicevic, 2002; Eden & Lenway, 2001; Manardo, 1991):

1) macro-economic factors, 2) political factors, 3) technological factors, and 4) organizational factors. Macro-economic factors are represented by rapid increase of population in emerging economies and the increase of technology transfer among countries (Harvey & Novicevic, 2002). Technological factors include advances in transportation technology, in information and communication technology, thus contributing to enormous growth in international business operations (Knight, 2000). Political factors refer to trade liberalization of many countries, to free flows of trade and investments and to deregulation (Eden & Lenway, 2001). Organizational factors are represented by new organization forms of enterprises and their activities, responding to global environment. All these forces have caused changes in the global marketplace that can be considered as effects of globalization, with certain impact on company outcomes.

Since 1980s the international and global marketplace was marked with dramatic changes. Came true. The trend towards more interdependence among countries contributed to several changes in the business environment. Global markets emerged for goods, service, labour and capital. Rapid liberalization in trade and investment supported by stimuli from transportation and communication technologies has resulted in larger volumes of international business operations (Deardorff & Stern, 2002). Convergence in consumers' demands around the world has been apparent (Homburg, Hoyer, & Fassnacht, 2002). All these trends generated two distinctive effects of globalization: global market opportunities and global market threats. It is to consider that globalization presents not only more opportunities to firms, but causes also higher levels of threats.

Our paper focuses on exploring the macro-environment, which is the highest level of environmental framework among all the levels of environmental concept (macro-environment, task-environment and sub-environment). Market opportunities and threats are elements of the macro-environment, with certain impact on company outputs, i.e., company performance. Hence, we anticipate that there is a direct relationship between both dimensions of globalization effects and company performance.

Global market opportunities can be defined as a potential for market increase, trade increase, investment increase and increase in access to the resources around the globe, resulting from globalization (Jones, 2002; Levitt, 1983). Deregulation of trade and investment policies, removal of trade and investment barriers and advances in information and communication technology have provided enormous opportunities for companies to enter international markets. The effects of these changes to companies are twofold: on the one side the global business environment facilitates to enter new markets and on the other side it is providing opportunity to lower costs by transferring company operations and exploiting cheap resources throughout the world (Graham, 1996). Companies can relocate their operations to various locations to lower their costs. Market transactions have also become more efficient as a results of globalization of technology. These new market opportunities have evoked rapid growth in various economic sectors in many regions of the world. A large volume of cross-border flows of capital, investment, trade, and technology is a clear evidence of opportunities driven by globalization (Zou & Cavusgil, 2002).

As explained in previous paragraphs, globalization increases trade and investment potential, market potential and facilitates resource accessibility of companies. Due to low barriers for trade and investment in today's global market, companies have an easy way to relocate their production to different locations and thus benefits from location advantage. Free movement of

people and finance facilitates business transactions and companies are able to reach and serve many new untapped markets in the world. Advances in communication technology and information systems also press the costs down and improve efficiency.

Global market threats include two types of threats: global competitive threats and global market uncertainty. Global competitive threats are represented by keen competition in global markets resulting from increasing number of competitors in the global market (Levitt, 1983). Global market uncertainty, as the second threat of globalization, is defined by the increasing uncertainty and complexity of demand (sales) in the market. Due to the fact that a growing number of companies now participate in the global market, it has become increasingly difficult to forecast demand and competitors' responses, to develop strategies and make decisions. Since globalization enables consumers to gather information faster, easier and at lower costs, consumers can easily learn about alternative products and switch to competition. Technology is changing with a rapid speed and information about new products is easily accessible. Given a growing number of competitors and limited market increase, the fight for a customer becomes hard. Such intensified competition combined with buyers' unpredictability and difficulties in forecasting demand can threaten company performance and make business outcomes less predictable (Eng, 2001).

Both abovementioned types of threats (competition threats and market uncertainty) form the content of the complex phenomenon called global market threats.

3. Goals and Methods

The purpose of this paper is twofold. We intend to answer two research questions: first, in which way the globalization affects the company performance, and second, what is the direction and size of the impact of globalization opportunities and globalization threats on company performance. To answer these research questions, data were collected from Slovakian exporting companies. The paper indicates the extent to which companies are affected by globalization.

Companies from six industries were selected as the base for the research (chemical industry, automotive industry, construction, machinery, electronics, food processing). A total of 154 companies are included in the sampling frame. The main research instrument was a questionnaire sent to the top-level managers and middle-level managers (mostly marketing and sales managers).

To conduct the tests, measurement statements describing the globalization effects were generated. The globalization effects were rated on a five-point Likert scale (1=strongly disagree, 5 = strongly agree).

Following the research aims, companies were asked to express their agreement / disagreement with following three statements:

GMO (Global Market Opportunities): Globalization has increased the opportunities for our company to expand our products and markets.

GMT (Global Market Threats): Globalization has increased the scope and intensity of competition faced by our company.

CP (Company Performance): Our company was satisfied with the overall performance of our business for the period of last three years.

Company performance was measured by use of international sales growth that reflects the level of a managers' satisfaction. It was rated on a five-point scale (1=strongly disagree and 5=strongly agree). We used subjective performance measures for two reasons. First, various research studies indicate that both objective measures and perceptual measures of performance generate relevant results (Hart & Banbury, 1994). Second, the financial data indicating the sales growth from international operations was difficult to obtain.

Both globalization effects were assessed and rated by companies. Within the global market opportunities chances to increase the market potential, investment potential and trade potential were assessed (Narver & Slater, 1990). Taking into account that all these opportunities are likely to enhance the company performance, the first hypothesis is stated:

H1: Global market opportunities (GMO) have a positive impact on company performance.

On the other hand, in the context of global market threats companies considered the level of competition and global market uncertainty (Levitt, 1983; Slater & Narver, 1994). Given a growing number of competitors, buyers' unpredictability and demand uncertainty, we hypothesize a negative relationship between global competitive threats and company performance and anticipate that company performance is negatively affected by global market threats.

H2: Global competitive threats have a negative impact on company performance.

Bivariate regression procedures were used to test the hypotheses.

4. Results and Discussion

Table 1 contains basic variables and their descriptive statistics, in particular mean, standard deviation and reliability coefficients of company performance (CP), global market opportunities (GMO) and global market threats (GMT).

Table 1: Variables and their descriptive statistics

Variable	Mean	Std. deviation	Reliability coefficient (α)
CP	3,65	0,68	0,71
GMO	3,88	0,40	0,79
GMT	4,02	0,32	0,85

Source: own calculation

The results (Table 2) indicate that about 15 % of variance in company performance (CP) can be explained by the changes in global market opportunities across diverse companies. (adjusted $R^2 = 0,15$).

Table 2: Summary results (dependent variable: company performance; independent variable: global market opportunities)

R	R^2	Adjusted R^2	Std. error	Change statistics					Durbin Watson
				ΔR^2	ΔF	df1	df2	Sig. ΔF	
0,39	0,15	0,15	0,46	0,15	25,87	1	152	0,000	1,81

Source: own calculation

Table 3 presents the ANOVA results confirming that the regression model ($F [1, 152] = 25,87, p < 0,001$) is suitable for explaining variability in company performance.

Table 3: Results of ANOVA (dependent variable: business performance, independent variable: global market opportunities)

Model	Sum of squares	df	Mean square	F
Regression	8,02	1	8,02	25,87
Residual	53,14	152	0,34	
Total	61,16	153		

Source: own calculation

Standardized regression estimate (Table 4) shows significant positive impact ($\beta = 0,39, t = 5,89, p < 0,001$) of global market opportunities on company performance. This is in line with the first hypothesis.

Table 4: Regression coefficients (independent variable: global market opportunities, dependent variable: company performance)

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. error	Beta	t	Sig.
Constant	1,44	0,46	0,39	4,14	0,000
GMO	0,59	0,14		5,89	0,000

Source: own calculation

The results presented in Table 5 indicate that global market threats explain about 24 % variance in company performance (adjusted $R^2 = 0,24$).

Table 5: Model summary (independent variable: global market threats, dependent variable: business performance)

R	R^2	Adjusted R^2	Std. error	Change statistics				Durbin Watson	
				ΔR^2	ΔF	df1	df2		sig. ΔF
0,49	0,24	0,24	0,50	0,24	49,56	1	152	0,000	1,81

Source: own calculation

ANOVA results confirm the suitability of the regression model ($F [1, 152] = 49,56, p < 0,001$) for explaining variability in company performance (Table 6).

Table 6: ANOVA results (independent variable: global market threats, dependent variable: business performance)

Model	Sum of squares	df	Mean square	F
Regression	13,11	1	13,11	49,56
Residual	49,90	152	0,29	
Total	63,01	153		

Source: own calculation

However, the regression estimate in Table 7 indicates significant negative influence ($\beta = 0,43, t = -5,76, p < 0,001$) of global market threats on company performance. This result gives support to second hypothesis H2.

Table 7: Regression coefficients (independent variable: global market threats, dependent variable: company performance)

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. error	Beta	t	Sig.
Constant	1,13	0,44		3,91	0,000
GMT	0,52	0,08	0,43	-5,76	0,000

Source: own calculation

To test the anticipated relationship between globalization effects and company performance, the estimates of the path coefficients were used. The path coefficient in Table 4 indicates that company performance is positively and significantly influenced by global market opportunities ($t = 5,89$, $p < 0,001$). On the other hand, global competitive threats and market uncertainty negatively affect the company performance. The path coefficient between the global competitive threats and company performance is negative and significant ($t = -5,76$, $p < 0,001$). Hence, the hypotheses are supported, and both global effects investigated in the empirical test, exhibit nearly equal (but opposite) effect on company performance.

Table 8: Hypothesis testing results

<i>Hypothesis</i>	<i>Result</i>
<i>H1: Positive impact of GMO on CP</i>	<i>Positive (Supported)</i>
<i>H2: Negative impact of GMT on CP</i>	<i>Negative (Supported)</i>

Source: own calculation

5. Conclusion

In our paper we focused on impact investigation of global market opportunities and global market threats on business performance. It can be concluded from the research findings that both opportunities and threats exhibit significant, but opposite impact on business outcomes.

As regards limitations of the research, we investigated companies from only six different industries, hence we have to be careful in generalizing conclusions. Also, longer time series could deliver more detailed results, enabling data comparison for longer period and better explaining the causal relationships between variables. It has to be stressed, that intense global competition is risky for companies mostly in the short term, however in the long term it can encourage companies to the improvements, which lead to better performance.

More detailed measure statements instead of our broad complex statements of market opportunities and market threats could make the quantitative measures more precise. Further research is needed to examine the strategies / instruments / methods explaining the effects of globalization on company performance. Research examining these effects can provide useful information to managers operating in global marketplace and help in managing the effects of globalization more effectively.

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IMPLEMENTATION OF SMALL BUSINESS ACT INITIATIVE IN SMALL AND MEDIUM ENTERPRISES IN SLOVAKIA

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Abstract. Small and medium enterprises are faced with the critical question of how to react to the changes caused by the process of globalization. Globalization creates new business environment with new challenges, but also with new threats. Implementing Small Business Act for Europe (SBA) represents the key appeal for the European Union and its member countries within the support of small and medium entrepreneurial activity. Small Business Act for Europe consists of a set of ten principles that lay down the measures for the support of small and medium (SME) in varied fields. These principles have to be respected when suggesting the measures of complex character aimed at the support of small and medium enterprises development in the EU member countries. The aim of the paper is to evaluate the results of implementing SBA's initiative in small and medium enterprises in Slovakia, to identify the policy areas (principles) in which main strengths and weaknesses in implementing the SBA's initiative is evident and to formulate the main measures to be taken to improve the state in the problematic areas. To fulfil the settled aim several scientific methods of examination, namely the method of analysis, synthesis, induction and deduction will be used.

Keywords: Small Business Act, small and medium enterprises, principles, measures, Slovak Republic

JEL Classification: L53, F60, K20

1. Introduction

Globalization creates new business environment with new challenges, but also with new threats. Problems concerning entrepreneurial activity, entrepreneurial environment and especially the small and medium enterprises (SME) come to the front nowadays in all European countries (Kressel, Lento, 2012). The stated problems were projected into several strategic initiatives that define policies of the EU in concrete spheres. The basic document is represented by the "Strategy Europe 2020" [1] that is a basic strategic development document of the EU. For the SMEs sector there is the key initiative "Small Business Act for Europe". Implementing Small Business Act for Europe (SBA) represents the key appeal for the European Union and its member countries within the support of small and medium entrepreneurial activity and creation of suitable entrepreneurial environment, as well for the smallest enterprises.

SBA creates new political framework that includes political and economic tools in the field of support of entrepreneurial activity (Rozmahel et al., 2014). It consists of a set of ten

principles that lay down the measures for the support of SME in varied fields (Small Business Act for Europe, 2008).

Principle 1: to create an environment in which entrepreneurs and family businesses can thrive and entrepreneurship is rewarded.

Principle 2: to ensure that honest entrepreneurs who have faced bankruptcy quickly get a second chance.

Principle 3: to design rules according to the principle “think small first”.

Principle 4: make public administration responsible to SMEs needs.

Principle 5: to adapt public policy tools to SME needs: facilitate SME participation in public procurement and better use State Aid possibilities for SME.

Principle 6: to facilitate SME access to finance and develop a legal and business environment supportive to timely payments in commercial transaction.

Principle 7: to help SME to benefit more from the opportunities offered by the Single market.

Principle 8: to promote the upgrading of skills in SME and all forms of innovation.

Principle 9: to enable SME to turn environmental challenges into opportunities.

Principle 10: to encourage and support SME to benefit from the growth of international markets.

These principles have to be respected when suggesting the measures of complex character aimed at the support of SME’s development in the EU member countries. Implementation of measures of the Small Business Act is inevitable for reaching progress in the relation to ensure favourable and motivating entrepreneurial environment (Kubíčková, Procházková, 2014).

The aim of the paper is to evaluate the results of implementing Small Business Act (SBA) initiative in small and medium enterprises (SMEs) in Slovakia, to identify the policy areas (principles) in which main strengths and weaknesses in implementing the SBA’s initiative in Slovak SMEs is evident and to formulate the main measures to be taken to improve the state in weak areas. To fulfil the settled aim several scientific methods of examination, namely the method of analysis, synthesis, induction and deduction will be used.

Following the aim of the paper we have formulated a set of research questions:

1. What is the state of implementing SBA’s initiative in Slovak SMEs?
2. What are the policies areas (principles) in which main strengths and weaknesses in implementing the SBA initiative in Slovak SMEs are evident?
3. What are the recommendations to be taken to improve the state in the problematic areas?

2. SBA initiative in SMEs in Slovakia

The government of the Slovak Republic (SR) promised to implement the European principles for the development of small and medium entrepreneurship by means of the initiative of SBA in Slovakia. Exhaustive implementation of EU strategic initiative for the support of the development of SME in Slovakia is in charge of the Ministry of Economy of the SR and of the Small Business Agency of the SR, which is also the body responsible for the monitoring of SBA implementation.

In 2013 a dedicated SBA working group was set up to ensure that the SBA is implemented properly. The activities of the working group include a preparation and implementation of significant measures and policies in the area of SME development, consultations on recommendations and tasks of the EU and preparation of measures supporting SME growth

with aim to maintain sustainable SME growth. The group is made up of representatives of the Slovak Business Agency and 10 ministries with responsibilities relating to SMEs (SBA Fact Sheet 2015 – Slovakia).

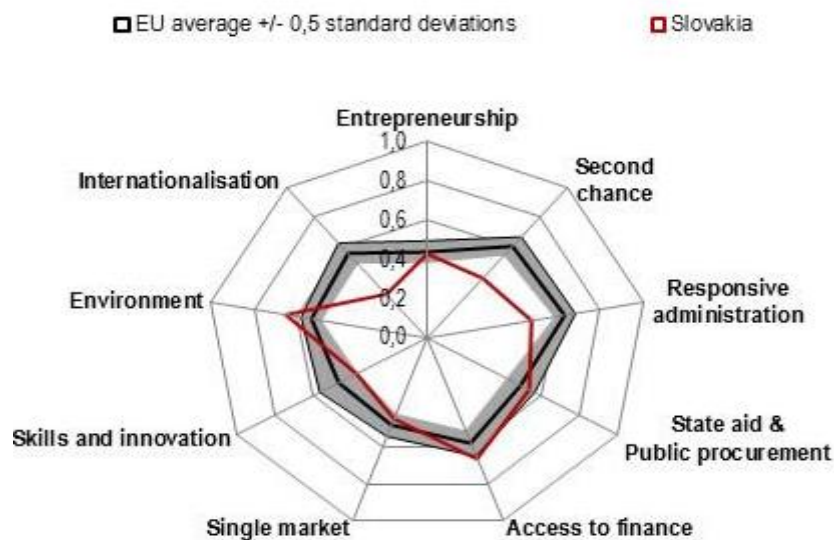
The Slovak government intends to implement the SBA under its SME development strategy, which is due to run until 2020. At this time the strategy is still in preparation. The strategy is intended to be the first document focused on SMEs. It will include the Slovak authorities' response to the SBA, the Europe 2020 strategy and the Entrepreneurship 2020 action plan. The strategy will need to be aligned with the EU cohesion policy 2014-2020.

One of the main tools the European Commission uses to monitor and assess countries' progress in implementing the SBA is the SME Performance Review. The review brings comprehensive information on the performance of SMEs in EU countries and nine other partner countries. It consists of two parts: an annual report on European SMEs and SBA country fact sheet.

3. Evaluating the state of implementing SBA's initiative in Slovak SMEs

According the SBA Fact Sheet 2015 Slovakia achieved an-above EU average performance in the areas of access to finance and partly in environment, average scores were achieved for entrepreneurship, state aid and public procurement and single market. Low performance was achieved in responsive administration, second chance and skills and innovation. The biggest challenge is internationalisation (SBA Fact Sheet 2015 – Slovakia).

Figure 1: Slovakia's SBA profile in 2015



Source: SBA Fact Sheet 2015 – Slovakia, European Commission

To evaluate the state in implementing the SBA initiative in Slovak SMEs we will comment on main indicators representing the individual principles. The evaluation is based on data showing performance in individual indicators according to the EU average.

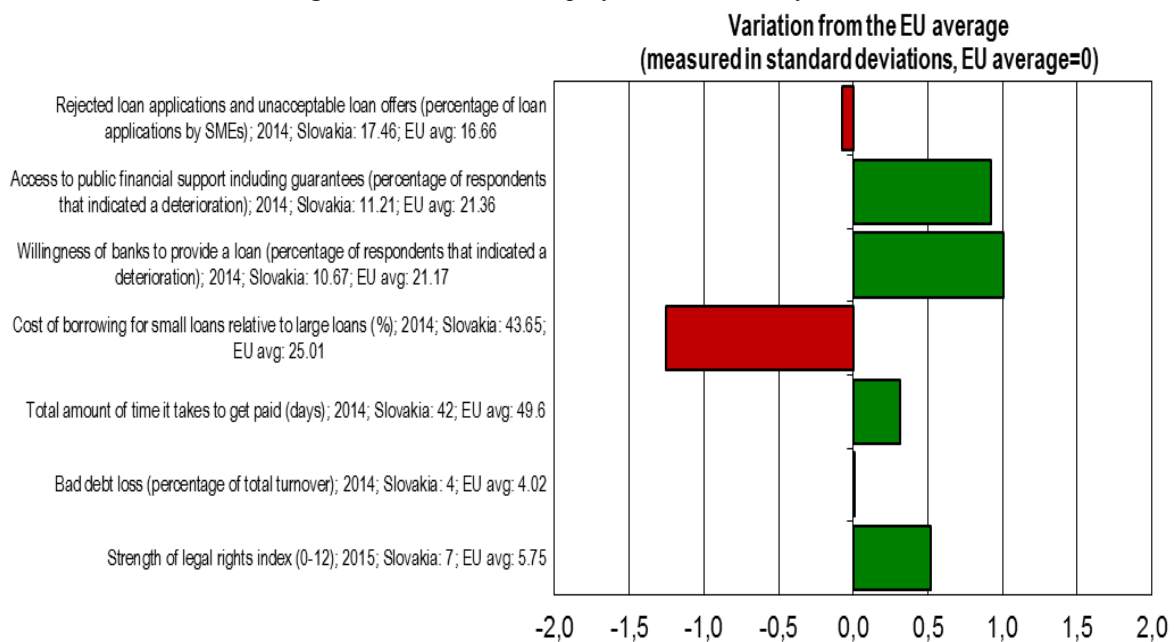
It can be stated that Slovakia has achieved a good quality in preparing policy initiatives, but there are many shortages in implementing them. Evident is lack of transparency (Kormaňáková, 2015). Public perception in Slovakia that public funds have being diverted due

to corruption was the highest between all countries in the EU (Implementácia iniciatívy SBA v malých a stredných podnikoch v Slovenskej republike, 2014).

According to the main indicators given in the SBA Fact Sheet 2015 positive results in implementation of SBA initiative were achieved only in one policy area (principle): “Access to finance” and partly in “Environment”.

What concerns the principle “**Access to finance**” Slovakia’s performance in this area exceeded the EU average.

Figure 2: Slovakia’s SBA profile in “Access to finance”



Note: Data bars pointing right show better performance than the EU average and data bars pointing left show weaker performance.

Source: SBA Fact Sheet 2015 – Slovakia, European Commission

Positively may be viewed that the indicator on “Access to public financial support” (as a percentage of respondents that indicated deterioration) was in Slovakia only 11.21 % to 21.36 % of EU average. “Willingness of banks to provide a loan” (as a percentage that indicated a deterioration) was in Slovakia 10.67 to 21.17 of EU average. The indicator “Total amount of time it takes to get paid” (in days) was in Slovakia 42 days to 49.6 days of EU average. Indicator concerning the loss on bed debts was similar to EU average value while the indicator measuring the strength of legal rights outperformed the EU average (Slovakia 7, EU average 5.75).

Since 2008 a number of policy measures have been adopted in this area (Prehľad základných skutočností o iniciatíve Small Business Act for Europe 2012). The Slovak Guarantee and Development Bank’s, the JEREMIE programme’s and EXIM bank’s schemes supporting export provide dedicated financing facilities (Sobeková Majková, 2011). A micro loan programme is available from the Slovak Business Agency, while the European Investment Bank and the European Bank for Reconstruction and Development provide preferential financing for SMEs through commercial banks. The micro lending programme has been implemented as of January 2013 to increase the survival rate of small entrepreneurs and start-ups as a condition for maintaining existing employment and enabling creation of new jobs.

Thought it can be stated positive results in this policy area, there is still much to do (SMEs perceived deterioration in access to public guarantees as well as evident is high cost of borrowing for small loans relative to large loans – it is by 60 % higher to EU average).

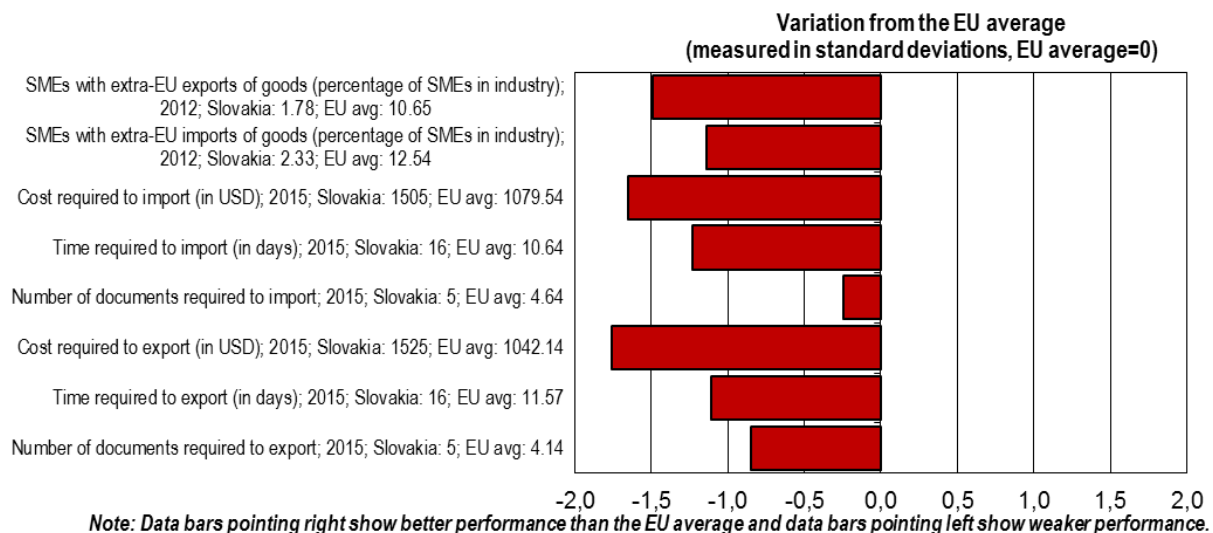
Partly positive results were achieved in the principle of “**Environment**”. Since 2008 Slovakia has put in place various policy measures in this area. Positively may be viewed the implementation of the Energy Efficient Act with the aim to support better monitoring of energy use and energy efficiency. All measures towards ensuring energy efficiency and the use of renewable sources in SMEs help to develop innovative eco-efficient processes, products or services.

On the contrary there are three (!) policy areas (principles) in which Slovakia’s performance is significantly below the EU average. It is: “Internationalisation”, “Responsive administration” and “Second chance”.

As the worst evaluated appears to be “**Internationalisation**”. All available indicators outperformed the EU average level. Minor improvements included marginal increases in the proportion of manufacturing SMEs trading with non-EU countries and the minor reduction in the number of documents required to export (two documents less) and import (one document less).

Because increasing of the cost of trading across borders the situation of Slovak SMEs has deteriorated. The cost required to export as well as the cost required to import increased by 40 % between 2015 and 2008 (indicator “Cost required to export” was in 2015 in Slovakia 1525 USD to 1042 USD of EU average; “Cost required to import” was in 2015 in Slovakia 1505 USD, in EU average it was 1079 USD).

Figure 3: Slovakia’s SBA profile in “Internationalisation”



Source: SBA Fact Sheet 2015 – Slovakia, European Commission

Thought since 2008 some of the SBA recommendations in this area have been implemented (measures stimulating trade and exports, financial support for internationalisation of SMEs, support for clusters, accelerators and trade organisations) the available figures point to the need for improvements in their effectiveness and efficiency.

The measure – project “MISIA14 – Made in Slovakia” can be mentioned as a positive example of export promotion. The project was launched in September 2013 and aims to increase exports from SMEs and increase the share of SMEs exports in total export of Slovakia. The newly adopted “Act on administration, operation and use of the central electronic file information system in the import, export and transit of goods” is the measure to allow international traders, forwarders and carriers to perform the paperwork for the movement of goods more quickly, cheaply and in one place. This could help to reduce the number of required business documents and accelerate their handling (thanks to e-services) (Wagner, Hollenbeck, 2012). In addition, it should bring also more efficiency and easier exchange of information between state administration bodies.

As far as “**Responsive administration**” most of the indicators achieved lower value to the EU average. None of the indicators significantly moved from last year’s level. The progress in this area since 2008 is still limited. The time to start a business was almost three times longer than the EU average (10 days compared with 3.5 days). In 2013 Slovakia has put in place measures to lower the length of the procedure to start the business down to two days, but it was not achieved. An average Slovak Business made 20 tax payments a year, which are 8 payments more than the EU average. The cost of enforcing contracts (percentage of claim) was in Slovakia higher than the EU average (30.00 % in Slovakia to 21.54 % of EU average). The frequent changes in legislation, the pure complexity of administrative procedures and the requirements imposed by government regulations were perceived by Slovak SMEs as a burden.

Since the adoption of the SBA in 2008 Slovakia has made some progress in making administrative procedures to set up a firm SME-friendly. It has also put in place some e-government solutions. However, there is still much for improvements in several areas related to “Responsive administration”. Firstly, the single point of contact for start-up procedures needs to work more efficiently. Secondly, dealing with government services should be made faster and more effective. Thirdly, it is essential to connect different databases for the successful application of the once-only principle. It is also necessary to establish a one-stop shop where SME can have any administrative procedure or to obtain guidance on different areas of their activity, such as access to finance or fiscal advice.

Slovakia’s performance in “**Second chance**” is significantly below the EU average, mainly driven by the time (twice higher than the EU average) and cost (80% higher than the EU average) to close a business. Closing up (winding up) an insolvent business took in Slovakia a long time (four years) and generated a high cost for the liquidated businesses (18 % of the debtor’s estate). Despite several amendments to the bankruptcy law, since 2008 the progress is very limited. No specific measures supporting a second start for bankrupt entrepreneurs have been put in place and no rules were laid down for re-starting. No new measures were introduced in this area during the last years.

4. Conclusion

According to the 2015 SBA Fact Sheet Slovakia ranked below the EU average in applying the SBA recommendations. There was only one area out of ten in which Slovakia performed better than the EU average – it was “Access to finance” and partly in “Environment”.

To improve the state in implementing SBA initiatives in Slovakia needs to create suitable entrepreneurial environment for small and medium businesses (Belás et al., 2015). Public

administration needs to be more transparent and address widely perceived corruption (Sulíková, 2015). It should also better respond to SME's needs by providing higher quality services. Slovakia needs to continue to boost skills and innovation in SME (Janošková, Král', 2015) and enable them to achieve their international potential (Lendel, Varmus, 2014).

It is primarily a business friendly environment in which both start-ups and experienced entrepreneurs could benefit from a wide range of instruments to support their business ideas (Tomčíková, 2015). Such an environment could also provide an opportunity for entrepreneurship of identified marginalized groups to participate in entrepreneurial activity. Failure in business should be perceived as an opportunity for repeated market entry and not automatically understood as a failure.

Moreover, entrepreneurship should be accepted as a relevant career choice and receive support in the educational process (Lesáková, D., 2003). Building entrepreneurial competencies at a young age might be utilized by both entrepreneurs as well as employees at a later stage (Frappalo, 2006).

The new EU multiannual financial framework for 2014-2020 offers for Slovakia a chance to support SMEs via a number of financial and non-financial instruments (loans, equity funding, regulatory impact assessment system implementation, mentoring services, incentives for marginalized groups, start-up promotion, one-stop-shop solutions, etc.) as defined in the national Operational Programs (Letovanec, 2014). This might be the time to formulate a clear SME strategy, a special Act on SMEs, utilizing the best EU and international practices in a long-term framework that would also accelerate the fulfilment of key SBA recommendations.

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THE ROLE OF INNOVATIONS FOR STARTING BUSINESS IN LATVIA

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Abstract. To start their business, in most cases companies have to be innovative and bring to the market new technologies and new solutions for products. Globalization is the main force that brings opportunities and pressures for start-ups and other new companies in Latvia to innovate. A company is considered innovative in Latvia if it at least once in every three years develops a new competitive product or increases competitiveness of its production by introducing new technologies. These products have to be developed within the company. As innovation is continuous process, it is important that innovation culture is built within the organization from the birth of the company. Access to financial support programs is an important issue for innovative business of new companies. The purpose of this research paper is to evaluate the role of innovations and financing opportunities of innovation for starting business in Latvia. The paper includes an overview of the theoretical aspects of innovation and innovative companies, explains the principles of innovation, provides an insight in EU co-financed state support programs for innovative and new companies and analyses the role of innovation culture in new companies under the opportunities and pressures resulting from market globalization. The research covers an analysis of the environment for innovation in Latvia from the point of view of the need for financing and the possibilities for new companies to attract financing for innovation.

Keywords: Innovation, Innovative Company, Starting business, Innovation culture, Globalization

JEL Classification: O32, F61, M13, M14

1. Introduction

Different innovation indicators suggest rather low relative position of Latvia in European Union in respect to innovativeness of the economy. Innovation cultures are built very slowly in both existing and newly established companies. Whether starting a new business or pretending to produce innovative products in an existing company, it is essential to ensure adequate financial resources for developing the necessary infrastructure for innovative activity and the purchase of necessary equipment and technology as well as compensation and training of employees. At the same time often an entrepreneur, especially in the business start-up phase, faces obstacles - the unavailability of external financing caused by the lack of collateral and other factors, for example, limited availability of the external financing (available funding is too small).

The objective of paper is to evaluate the innovation environment, development and state activities that support starting business and innovation in Latvia. In order to meet the objective, the authors examine the nature of innovation, innovative companies and innovative organization culture; analyze the environment and development of innovation in Latvia. The research includes review of scientific literature, analysis of statistical data and state support activities.

2. Nature and sense of innovation in business

Although innovation had been studied already for the second century, so far there is no common definition of it. The word “innovation” is derived from the word “novation”, which means “innovation”, “updating”. Semantic meaning of the word “innovation” or “updating” can also be applied to artistic innovation or employee suggested process rationalization. Nowadays, one can find many different explanations and definitions for the word “innovation”, for example, such as (Dimza, 2003): innovation is commercialization of creativity; innovation is newly created or gained new application idea, activity or object; innovation is any idea or product that a potential innovator perceives or introduces as a new one; or innovation is a new kind of business philosophy; innovation is a state of mind, it is a new kind of understanding of the business; the end result of an innovation is commercial success; or innovation is a long-term economic growth engine.

It is believed that the term innovation was introduced by the Austrian economist and political scientist Schumpeter. According to Schumpeter, innovation is changes aimed at introducing and using new types of consumer goods, new ways of production and means of transport, new forms of organizing production.

Economic theory most often uses two definitions of innovation: (1) Innovation as a process; (2) Innovation as a result (Harrington & Voehl, 2012). Vedla (2007) based on the theory of A. Schumpeter highlights forms of innovation in practical life: innovation as a process, innovation as a means of financing, innovation as a product, technological innovation and innovation as a social category. Innovation as a process is the time period of preparation and all output conversion into innovation. Outputs include different kind of ideas and developments, technologies and services; time of their evaluation and adoption; and the time that is devoted to create and keep competitive products and services on the market (Gupta, 2011).

Innovation as a means of financing – long term capital investment in equipment, machinery, technology replacement with new generation analogues, scientific and technological innovation development. Innovation as a product is geared to technologically new or improved product development and use (Friedman, 2011). Another type of innovation is innovation as a social category. It takes the form of financial investment in education, fostering scientific research, innovative product development and other ways of improving social processes (Fortino, 2011).

The above explanations of meaning of innovation show that the words “innovation” and “nature of innovation” are not necessarily meaning the same. This can be attributed to both the product and the technology, and it is related to many social and business environmental factors, as well as the existing processes within a company or an organization. This explains the fact why a common definition of innovation has not yet been developed.

Some sources of literature also describe improvements in innovation, which means introduction of minor changes in technology and ‘know-how’ (Bessant & Tidd, 2007). Oxford

Business Dictionary defines innovation as a new approach to product design, production and promotion that provides the inventor or his company with an advantage over competitors (Oxford, 2002). It is important to find a common definition of what could be taken as a basis for developing concepts, innovative activities and support programs. It can be assumed that in a sense such kind of definition has already been created on the international level, and it is recognized and used for economic and business theorists and practitioners. This definition has been established by the OECD (Organization for Economic Cooperation and Development). In its documents OECD emphasizes that innovation goes far beyond the confines of research labs to users, suppliers and consumers everywhere – in government, business and non-profit organizations, across borders, across sectors, and across institutions. The guidelines on measurement of innovation, the *Oslo Manual* (OECD, 2005), define *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 organization or external relations”.

The Latvian National Development Plan for years 2007-2013 defines innovation as the process by which new scientific, technical, social, cultural or any other kind of ideas, developments and technologies are being implemented in a competitive and demanded in the market product or service. This definition is almost identical to the definition found in the first document of the Latvian government, dedicated to the development of innovations. The definition of innovation found in Latvian government documents is in line with the OECD definition, but in a slightly narrower sense.

Summing up the various explanations of the innovation term, the authors came to the conclusion that innovation is a process based on the scientific research, technological, financial, social and business activities, by which in the end the businessman acquires tangible competitive advantage over competitors because he offers to the market new goods or services meeting the needs of consumers; or the entrepreneur uses a new or significantly improved technologies. There are various definitions of innovations, in different countries there are different criteria for innovative enterprises. Latvian Ministry of Economics has stated that innovative enterprises generally are characterized by several preconditions: at least every three years, the company starts production of a new, competitive product or introduces new technologies to increase the competitiveness of their products; the new products and services have been created within the company - with the own knowledge and skills or in cooperation with research institutions (individual researchers) in Latvia or abroad; and the company's investment in a new product development each year is at least 2% of its turnover.

3. Innovation and innovative culture of organization as a competitiveness driver of companies starting business

Within era of globalization and growing competition, the competitiveness of organizations, especially in newly established companies, depends on the ability to use new knowledge, working and organization methods, and the capacity to involve in the commercialization of scientific achievements process to develop improved or new products, services or processes.

Innovativeness itself does not guarantee achievement of business goals in new established organizations, like it does not also in other areas where it is important- analysis of scientific literature reveals that innovativeness, although it is called the main tool to compete successfully

in changing circumstances cannot be always the expression of smartness, which is always understood as a desired state of contemporary cities (Grumadaite, 2014), for example. There are many other both internal and external factors that determine success of new companies like business environment, demand conditions, access to finance and many other factors. One of the characteristics of modern innovative companies is a wide use of e-environment (Sceulov & Gaile-Sarkane, 2014).

Michael Porter, famous for his contribution to theory of business strategy and competition, asserts that a company should seek out pressure and challenge since part of strategy is to take advantage of home nation to create impetus for innovation (Porter, 1998).

One of the major challenges of newly established business organizations is to build innovation culture within their organizations. It implies creation of the work environment that leaders cultivate in order to foster innovative thinking and its application. Organizations that nurture a culture of innovation generally believe that innovation is not the responsibility only of top leadership but can come from anyone in the organization. Innovation cultures are prized by organizations that compete constantly changing markets where maintaining the status quo is insufficient to compete effectively, thus making an innovation culture essential for success.

Buschgens, Bausch and Balkin (2013) conducted meta-analysis, which comprised 43 studies with a combined sample size of 6341 organizations, and revealed that the cumulative data confirmed their hypothesis that managers of innovative organizations most likely implement a development culture, which emphasizes an external and a flexibility orientation. Group and rational cultures are consistent with the goals of innovative organization and may thus be appropriate social control strategies. Hierarchical cultures emphasize control and an internal orientation and are less likely to be found in innovative organizations. Managers that follow a (radical) innovation strategy should establish a developmental culture in their organizations (Buschgens et al., 2013). In modern organizational forms a long term strategy as well as human resources are very important. These are based on the knowledge that traditional structures detain people from capture initiative. People want to be responsible and therefore should be responsible for their goals (Kuhn, 2015).

The key challenge for EU Cohesion policy is to improve SME's access to capital and innovation (Golejewska & Gajda, 2015). New companies that start their business activity are SME's with few exceptions. Among other factors ability to innovate can be emphasized. Innovations come from big companies and SME's, but SME's face more challenges due to limited human potential, culture of SME's and management (Golja & Kontosic, 2015). But entrepreneurs need to search purposefully for the sources of innovation, the changes and their symptoms that indicate opportunities for successful innovation and they need to know and to apply the principles of successful innovation (Moraru & Comis, 2015).

That is why newly established companies should not stay alone in their efforts to achieve certain level of innovative culture and state support programs are important for fostering innovative activities in newly established companies and existing SME's.

4. The Analysis of innovation environment and development in Latvia

To assess the innovation environment in Latvia, the authors examined the available statistics from Central Statistical Bureau (CSB) of Latvia on number of innovative enterprises and other

innovation development indicators as well as Global Innovation Index developed by published by Cornell University, INSEAD, and the World Intellectual Property Organization, in partnership with other organizations and institutions.

One of the main indicators characterizing the Latvian innovation environment is the share of innovative companies in the total number of enterprises in Latvia. Table 1 summarizes the data on the share of innovative enterprises by kind of activity. The share of innovative enterprises has decreased in 2012-2014, compared to years 2010-2012. In particular downturn is observed in service sector. Growing share of innovative enterprises has been observed only among industry enterprises implementing only non-technological innovations.

Table 1: Share of innovative enterprises by year and kind of activity in Latvia, %

		Innovative enterprises	..product innovators	..process innovators	..product and process innovators	..ongoing and/or abandoned innovation activities	..enterprises implementing only non-technological (market and organisational) innovations
2010	Industry total	29.1	5.2	6.3	7.7	2.1	7.8
-	..manufacturing	29.6	5.5	5.7	8.4	1.3	8.7
2012	Services	31.3	2.6	6.0	5.6	3.7	13.4
2012	Industry total	28.2	4.1	5.7	6.4	0.8	11.2
-	..manufacturing	28.9	4.6	5.0	6.8	0.7	11.8
2014	Services	23.4	2.5	3.4	4.4	0.9	12.2

Source: Central Statistical Bureau, 2016

In 2014 the total innovation expenditure reached 108,3 million euros in industry and 77,1 million euros in service sector (see Table 2). The biggest share of innovation expenditure (76,3% in industry and 79,8% in services) was spent on acquisition of machinery and equipment. Very small proportion is spent for external knowledge acquisition in Latvia.

Table 2: Total innovation expenditure by kind of activity in Latvia in 2014 (million euro)

	Total innovation expenditure	intramural R&D	extramural R&D	machinery and equipment acquisition	external knowledge acquisition	expenditure on other innovation activities
Industry - total	108,3	13,7	5,0	82,6	0,6	6,3
..manufacturing	74,3	13,2	4,5	49,8	0,6	6,2
Services	77,1	7,9	2,7	61,5	0,3	4,7

Source: Central Statistical Bureau, 2016

Latvia's position in Global Innovation Index (GII) is rather high- in 2016 Latvia holds the 34th position out of 128 countries (see Table 3). There is very low investment in external knowledge acquisition- this may be one of the reasons why component of GII "Human Capital and Research" is ranked low for Latvia. Market and business sophistication should be improved in future as well.

Table 3: Score and position of Latvia in Global Innovation index by components in 2016

	Score (0-100)	Rank (out of 128 countries)
Global Innovation Index	44,3	34
Institutions	77,7	29
Human capital and research	31,4	67
Infrastructure	54,3	30
Market sophistication	48,6	43
Business sophistication	36,6	40
Knowledge and technology outputs	31,6	41
Creative outputs	46,2	25

Source: *The Global Innovation Index, 2016*

Based on the Ministry of Economics study it can be concluded that currently in Latvia there is insufficient and fragmented technology transfer process in the scientific institutions; as well as insufficient research and innovation capacity in the business companies; alongside with poor collaboration between the research sector and the industry; and ineffective system of support for innovative start-ups' development. The analysis carried out by the Ministry of Economics identified those aspects of the business environment that have the most significant impact on the development of product markets. The European Commission's research as well as data analyzed within the Latvian Competitiveness Report have identified that the innovation performance of Latvia is of low significance in many analyzed dimensions. World Bank study ranked Latvia in the 25th place in terms of business environment rating, which is measured taking into consideration the business start-up and financing availability ratio (World Bank, 2014).

To maximize the productivity of the innovation process, it has to be linked to the creation of comparative advantages, particularly when Latvia is identifying and positioning itself in the prospective product markets. Therefore, it is particularly important in the initial period to increase public expenditure for innovation and create motivational conditions for business, including the availability of financing to attract more and more investment in technology and research and development.

The new planning period 2014-2020 envisages significant support to innovations and SME's through the competence of the Ministry of Economics. Innovation will be supported with 193,5 million euro, but fostering competitiveness of small and medium-sized enterprises with 237.1 million euro (Ministry of Economics, 2015). It has to be noted that activities related to fostering competitiveness of the small and medium-sized enterprises are also rather innovation oriented.

Ministry of Economics of Republic of Latvia concludes (Ministry of Economics, 2015) that investment in technology and innovation, science, and education is needed for transition to higher value added production. The current low level of innovation performance shows not only the lack of state aid, but also (and perhaps even more) the low demand of entrepreneurs for innovation.

That is why Latvia needs to find efficient ways of strengthening the development of knowledge-based economy, improving the competitiveness of companies in the exporting industries, increasing efficiency and innovation capacity, which cannot be achieved without developed business environment.

5. Conclusions

The descriptions of innovation and its nature differ in scientific sources, yet the authors came to the conclusion that innovation in era of globalization is a process based on the scientific research, technological, financial, social and business activities, by which in the end the businessman acquires tangible competitive advantage over competitors because he offers to the market new goods or services meeting the needs of consumers; or the entrepreneur uses a new or significantly improved technologies.

Building of innovative cultures from the starting business in organizations is crucially important. Owners and managers of newly established companies should follow innovation strategy and establish a developmental culture in their organizations instead of building hierarchical cultures that restrict innovative activities in organizations.

Despite being rather high in Global Innovation Index ranking, it is necessary to promote cooperation and improve technology transfer system in Latvia, by supporting the private sector and scientific institutions in collaborative research, as well as providing support for small and medium-sized enterprises for the purchase of research services. To create a unanimous technology transfer platform that is not tied to a specific scientific institution, while developing the management of industrial property within research institutions; complementing and combining support for technology transfer with the incubation and early phase financial instruments (strengthening cooperation in the field of innovation).

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MAIN CONSUMER SATISFACTION FORMATION FACTORS AND PROCESS IN RETAIL IN THE SITUATION OF MARKET GLOBALIZATION

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Abstract. Business, including retail business, is based on satisfaction of consumer desires and needs, which ensures the company with a profit. In the process between businesses and consumers, different relationships form, but both sides have a specific goal, how they expect to benefit from them. For the company, first of all, it is to increase sales and make a profit, but for the consumer objectives may be several - to get goods / services at the right place and in the right quantity, to receive the necessary information and attitude. These consumer benefits can build consumer satisfaction and desire to shop again. Repeated purchasing is very important for retail companies as the process of attracting new customers is always associated with larger investment of money, time and energy. Market globalization influence also the retail trade enterprises more and more. It makes them to look for new opportunities to ensure their competitiveness on the global scale. The study aims to explore the factors forming consumer satisfaction. Therefore, the authors have used the monographic or descriptive methods to examine the theoretical basis of consumer satisfaction, to analyze retail development trends of in the Baltic States and to carry out consumer research to examine factors influencing retail customer satisfaction in all three countries. This study will raise retail business awareness on consumer satisfaction theoretical and actual factors and highlight the particularities of the process in retail. Regarding the scientific significance, the authors have gathered and analyzed the theoretical aspects, defining a common approach to consumer satisfaction from the aspects of the object and essence. Resultant to the research, the authors conclude that the exploration of consumer satisfaction factors can be used by the company to manage this process, it may become one of the tools to ensure competitiveness.

Keywords: globalization, consumer, satisfaction, retail, satisfaction process

JEL Classification: F1, F6, M1, M3

1. Principle of consumer satisfaction

In the contemporary product-saturated global market environment, it is vital for enterprises to ensure their competitiveness. The analysis and satisfaction of consumer needs are related to consumer - focus in company management. Consumer satisfaction and its management have

become an integral part of doing business. While there exist different evaluation criteria and principles regarding consumer satisfaction, they all have a common goal – to promote a competitive and sustainable development of retail business. The analysis of scientific publications on the subject (Fornell, 1992; Prass, (b.g.); Vavra, 1997; Brandt, 1987; Shostak, 1987; Gummesson, Kingman-Brundage, 1992; Bitner, 1993) shows several sources, models and methods for consumer satisfaction evaluation and measurement. At the same time, the companies in the Baltic States lack sufficient understanding on consumer satisfaction management and its benefits. The study looks at consumer satisfaction factors and its process in retail. It is important as the evaluation and measurement of consumer satisfaction carry out the following interrelated functions:

- acquisition of information on the levels of consumer satisfaction and company offer's quality;
- approximation of the cases of dissatisfaction for their elimination (e.g. product replacement, refunding, compensation, apologizing to customer etc.);
- approximation of the reasons for dissatisfaction for their prevention in future – during the pre-purchase stage;
- approximation of the positive and negative results of satisfaction for the development of business indicators to stimulate and punish the employees.

By gaining understanding on consumer satisfaction principles and applying them skilfully, the company the company gains greater customer confidence and significantly improves its competitiveness. When researched and understood properly, consumer satisfaction factors form an essential competitive advantage of a company. The research shows that attracting new consumers costs 5-10 times more than selling to the existing customers and the existing customers spend about 67% more money than the new consumers (Anderson et. al., 2007).

The objective of the study is to establish the main consumer satisfaction factors in retail and to define the particularities of the process, which would allow retailers to improve their real-life operations and to ensure their competitiveness.

To reach the objective, the following tasks were established:

1. To carry out analysis of the theoretical aspects of consumer satisfaction formation.
2. To describe the retail sector and its development in the Baltic States.
3. To carry out a survey to establish the main consumer satisfaction factors and its formation particularities in retail.

To determine the consumer satisfaction trends in the Baltic States and to design recommendations for companies for consumer satisfaction improvement, the study surveyed buyers and the following limitations were established: the study was devoted mainly to the methodological aspects and survey respondents' level of education, age, social status, etc. were not taken into account. The research period was from January 1, 2015 to January 1, 2016.

The following research methods were used: logically-constructive method – for the comparison of the theoretical material with the empirical research results, graphic method – for the depiction of the visual information and analysis, and a consumer survey. The methodological basis constitutes of the works and publications of foreign authors (*R.Oliver, R.Westbrook, I.Howard etc.*), providing insight in the most recent findings on the consumer relationship formation factors and process.

2. Theoretical aspects of consumer satisfaction formation

In the past, companies did not need to pay great attention to relations with consumers and their needs satisfaction. When market conditions are beneficial to sellers (manufacturers, retailers), the companies do not seek to use and develop a variety of marketing activities and manage the consumer relationship process. However, when market situation becomes favourable for consumers, offering a wide product / brand choice, and when there is fierce competition among companies, they become interested in making every effort to attract and retain consumers. If the actual product / brand value does not meet the expected consumer values, they will move to a competitor.

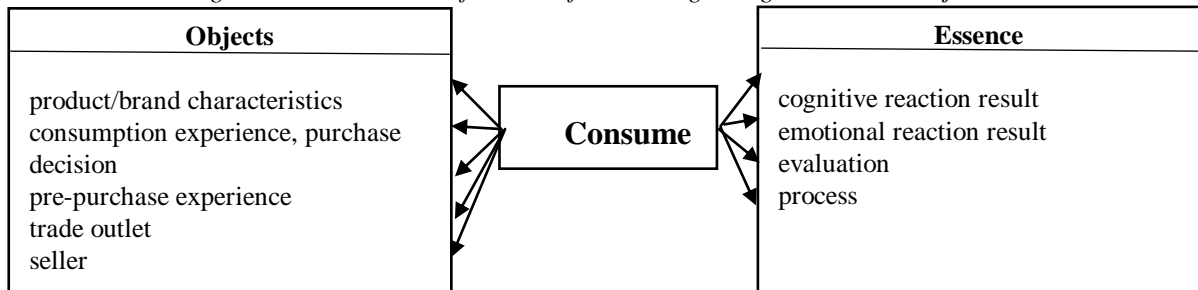
It should also be taken into account that the product / brand quality level, appropriate in the current situation, may prove to be invalid from the point of view of tomorrow. In this situation, companies have to focus on the consumer, i.e. offering them a higher value than done by competitors. Businesses should design and implement a consumer relationship management system. In this context, it is very important to study consumer satisfaction formation process. Taking into account the research object – retailing, the specifics of the beforementioned processes in the sector should also be referred to.

Reviewing the published research results, the authors of the paper conclude that there exist many conceptually different definitions, adapted for different marketing objectives. *A. Westbrook* and *M. Reily* argue that satisfaction is emotional reaction to the experience gained or associated with the purchase of the particular product and shopping in the outlet or market behaviour (Westbrook & Reily, 1983). Emotional reaction as a factor is highlighted also by *R. Oliver*, who believes that satisfaction is a complex psychological state of a consumer, created during combination of expectations and post-consumption experience feelings (Oliver, 1981). Meanwhile *I. Giese* and *I. Cote* believe that the basic component of satisfaction is a complex emotional reaction, the intensity of which may vary (Giese & Cote, 2000). Several authors define consumer satisfaction as evaluation. For example, *H. Hunt* states that consumer satisfaction is an evaluation expressed by consumer, meaning that consumption experience has been at least as good as expected. *I. Engel* and *R. Blackwel* hold that it relates to the compliance of the chosen alternative with the preliminary preconceptions of this alternative (Engel et al., 1982), while *D. Tse* and *P. Wilton* – that the consumer satisfaction is reaction to varying evaluation between expectations and the real product perception after its consumption (Tse & Wilton, 1988). In essence, it is a product-focused approach which combines all stages of consumption experience and situation perception in a sequential evaluation process leading to the formation of satisfaction or dissatisfaction.

In the scientific literature, consumer satisfaction definitions also differ depending on the research object. *G. Churchill*, *C. Surprenat*, *R. Oliver*, *G. Linda*, *I. Swan*, and *T. Trawick* link satisfaction with a product or service (Churchill & Suprenant, 1982; Oliver & Linda, 1981), while *W. Bearden*, *I. Teel*, *R. Fisk*, *C. Yong*, *S. La Tour* and *N. Peat* accentuate consumption experience as the object of satisfaction (Bearden & Teel, 1983; Fisk & Young, 1985). Satisfaction with the purchase decision making has been researched by *M. Kourilsky* and *T. Murray* (Kourilsky & Murray, 1981; Westbrook & Newman, 1978). Satisfaction with the trade outlet, including service, attending personnel etc., has been in the research focus by *I. Swan* and *R. Oliver* (Swan & Oliver, 1985), service characteristics – by *I. Bettman* and *Threshold* (Bettman & Threshold, 1974), while satisfaction with pre-purchase experience has

been highlighted by *R. Westbrook* (Westbrook, 1977). The differing approaches have been summarized in Figure 1.

Figure 1: Consumer satisfaction definitions regarding essence and objects

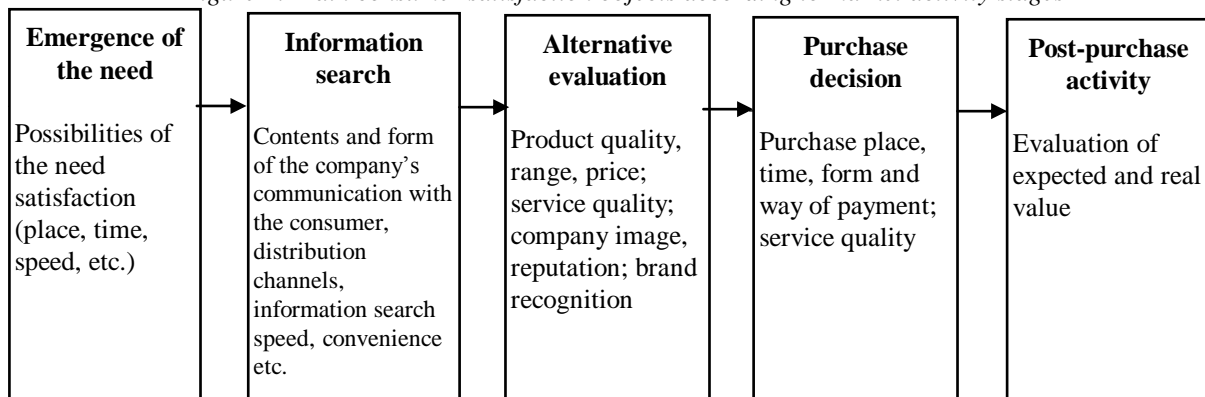


Source: by authors

Of course, each individual consumer in a given situation can not detect all, but only a few of satisfaction objects, depending on their needs, goals, psychology, and other factors, as well, any object can be chosen as a study subject. Yet, in essence, consumer satisfaction object is the process of market activities as a whole, including all of its stages (see Fig.2).

Consumer satisfaction objects form according to consumer market activity stages:

Figure 2: Main consumer satisfaction objects according to market activity stages



Source: by authors

On the basis of the research conclusions, the authors offer the following consumer satisfaction definition: **'Satisfaction/dissatisfaction is a complex, cognitive, emotional and by intensity varying reaction of a consumer, formed in relation to the pre-purchase, purchase and post-purchase market activity stages'**. This definition reflects the concept of satisfaction as a result, while satisfaction criteria vary dependent on the products used by consumer. Let's have a look at the consumer satisfaction particularities in retail.

3. Retail and its development particularities in the Baltic States

The scientific literature review shows that there exist satisfaction formation process differences in three sectors of national economy: sector of consumer goods (Lewis, 1995 etc.), sector of industrial goods (Homburg & Rudolph, 2001), and sector of services (Brandt, 1888; Cadotte & Turgeon, 1988). The research object of the present study – retail sector – due to its specifics can not be included in any of these sectors, therefore it is useful to highlight its particularities in the context of satisfaction:

- 1) retail is intermediary (distribution channel) between producers and/or wholesalers, who supply goods, and consumers. Therefore, to satisfy consumer needs, retail has to influence producers and wholesalers (orders, deals), as well as co-operate with them;
- 2) retail adds a particular value to material products – goods, as it carries out sorting, weighing, packing, etc. Even when selling the goods produced by other companies under own trademark, retailers provide them with the added value;
- 3) retail provides consumer service in their market activity process in traditional shops, off-site and on-line. Retail provides a service or immaterial product complex that cannot be transferred to consumers as property.

Retail specifics stipulate that a consumer has to be satisfied both with material (goods) and immaterial products (services). This influences nearly all satisfaction formation process. The degree and intensity of the impact depends on the level of service (supermarket or luxurious shop, etc.), form of trade (traditional shop, off-site trade) and other factors.

Private consumption is one of the cornerstones of economic growth, and retail may be considered as a state's economic growth indicator. Since regaining of independence, the retail sector in Latvia in particular and all Baltic States in general has evolved with changing effects. It has been one of the major contributors to GDP for many years. In various aspects, this depended on the states' willingness and efforts to organize the sector. Retail trade transferred from market places, sports halls and sheds to shops and supermarkets. On the other hand, during the global economic crisis, retail was one of the national economy sectors experiencing the largest downturn. Such a sharp decrease may be explained by many various factors, but among the most significant was the discontinuation of consumer crediting. During stabilization of economic conditions in the countries, the retail sector also began to recover.

Since 2011, the retail sector in the Baltic States has been following the development trend of the economy in general. The retail sector depends mostly directly on the internal (national) events, nevertheless it is influenced indirectly also by external environment factors, including market globalization. The Russia-Ukraine conflict and the related sanctions, as well as the recent weak growth rates in the European Union (EU) has left a negative impact on consumer activity and promoted savings, slowing down the overall consumption. However, the data on labour market and salaries allow assuming that internal market development is still resisting successfully the negative impacts of external environment (www.csb.gov.lv).

Despite the current overall retail growth rates, the internal competition within the sector keeps increasing. Therefore, the retailers need an instrument to ensure competitiveness and create consumer desire for repeated purchase, so that they would not interrupt relationships with the company, product or brand.

4. Main consumer satisfaction factors in retail and their ensuring process

To identify consumer satisfaction factors and to arrange them according to their significance in retail, there was carried out a consumer survey in all three Baltic States.

The survey was designed in *Google Forms*, and translated into Lithuanian and Estonian to ensure the speakers of these languages with an opportunity to participate. Further, applying non-probability snowball method, the link to the questionnaire was e-mailed to recipients on the authors' personal contact list, who forwarded the message further. The questionnaire was

also distributed to the member-companies of the trade associations in all three Baltic States. The survey respondents totalled to 1838 respondents aged 18 to 74, including 55% women and 45% men. Regarding segmentation of the respondents by income level, the different income groups were distributed equally.

To evaluate consumer satisfaction factors, it is very important to understand their shopping habits. Regarding the question on drawing a shopping list, 38% of respondents claimed that they did it ‘often’ or ‘always’, while 62% of respondents – ‘seldom’ or ‘never’. Interesting was the answer distribution regarding the question on purchasing impulse goods, where 50% of respondents answered ‘always’ or ‘often’, while the other 50% – ‘seldom’ or ‘never’. Informational materials on discounts were ‘always or often’ used by 31% of respondents, while ‘seldom or never’ – by 58% of respondents. 90% of respondents used several loyalty/discount cards provided by traders, and they had positive attitude towards these cards. At the same time, 64% of the card users admitted that the trading companies never or hardly ever used a possibility to communicate via text messages or e-mail.

The survey results indicate that 87% of the respondents shop in several chains of supermarkets, 12% - in two chains, while only 1% prefer shopping in a particular chain of supermarkets. 72% of respondents shop several times a week and at the same outlets. On average, they spend 15 to 30 minutes in the shop. Regarding the question on factors related to what is important while choosing where to shop, the most important factor mentioned was the location of the shop. Ranging other factors by their importance, it can be seen that 4 points were gained by product range/trademarks and price level, followed by service quality, while marketing activities and loyalty programmes were mentioned as the least important factors (see Fig.4).

Summarizing the shop evaluation factors, which according to the survey results would ensure consumer satisfaction, the situation is as follows (see Fig.4): the respondents value the most the location of the goods and convenience, followed by price level, marketing activities and loyalty programmes, while the lowest evaluation gained customer service quality and product range/trademarks.

Figure 4: Consumer survey results regarding supermarket choice criteria and evaluation of operation



Source: by authors

It must be noted that the higher scores in the figure correspond to the more positive evaluation, while the lower scores – to the worse ones. Comparing both graphs (see Fig.4), there may be drawn a conclusion on the mismatch between the criteria evaluation by their

value for consumers and the real operation of the supermarkets. For example, an important criterion – product range/trademarks (4 points) – was evaluated with score of 1 point by the real operation. The research shows that not only the goods/trademarks ensure consumer satisfaction, but also many other factors connected with the whole process at both the pre-purchase and purchasing stages. Thus, it may be concluded that the consumer satisfaction formation process in retail is a complex process consisting of several stages, where each of them impacts the formation of satisfaction and loyalty.

5. Conclusion

The retail sector is one of the most important contributors to GDP and is developing in all three Baltic States similarly.

The consumer satisfaction analysis in retail sector should regard its specifics more than in other sectors, and it has been researched insufficiently yet.

Summarizing the research results, it may be concluded that:

1. Among the supermarket choice factors, as important there was mentioned the location, which may be explained by the fact that in Latvia, Lithuania and Estonia the trading area in m² per number of inhabitants is still much smaller than in the developed European countries. With the increase in this indicator, the relevance of this factor will decrease, which will push the traders to pay more attention to other choice factors.
2. The consumer satisfaction is influenced by all stages: pre-purchase, purchase and post-purchase. This indicates that retail businesses should pay attention to the efficiency in all these stages, without concentration on one particular of them.
3. Consumer behaviour is influenced by retail business purchase stimulation activities and communication. Their evaluation with score 3 out of maximum 5 shows that, unfortunately, the companies still do not fully exploit the marketing possibilities.
4. Analyzing the product range factor, it can be seen that it has received a very high score at the supermarket choice factors (4 points), but a very low score at the real situation evaluation (1 point). This indicates a need for retail businesses to develop this aspect.
5. The service quality has received a negative evaluation (2 points), which also indicates a direction of improvement for retail businesses.

With growing competition in retail sector, especially with advance of international chain stores, it is important to understand all factors that may contribute to competitiveness. A satisfied consumer is key to successful retail business. Thus, it is vital to design an action plan for improvement of these factors within the CRM (consumer relationship management) system.

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LIBRARIANS COMPETENCIES IN THE GLOBAL ENVIRONMENT

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Abstract. The global economy creates increased demand for graduates entering to the labour market. This trend is also evident in the field of library and information services. Each state puts emphasis on the ability of these workers to create and build international connections and relationships in this area. Exchange of good practice and new ideas is as indispensable as in other areas. With this in mind, the quality of staff and thus the training of new professionals is the prerequisite for achieving the desired level in the provision of these services at all. The paper deals with the evaluation of librarian competencies in condition of Czech Republic as the state of Europe Union. The attention is focused on requirements of labour market in compare with the results of our research. The article aim is to determine the level of competence of graduates entering practice in the field of information and library services in the Czech Republic. The article is the particulate output of the research and presented results that focus on determining the professional knowledge and skills of graduates. The significance of identification of gaps emerging generation of librarians can help create a convenient way for improving their skill levels and thus secondarily improve the quality of library services.

Keywords: competencies, library services, personal management, graduates, globalization

JEL Classification: M12, M50, M53

1. Introduction

Currently it is very difficult to succeed in the labour market (Závadský et al., 2015; Kampf et al., 2014). Each work profession requires particular requirements for education, skills and abilities of employees (Rebet'ák & Farkašová, 2015). And for such reasons, in the labour market in the Czech Republic, there is a project of the National Qualification Framework (2016) and project the National System of Occupations (2016), for determining what is required by the current labour market for knowledge and skills in various professions.

According to International Federation of Library Associations and Institutions (2004), “the public library is the local gateway to knowledge and a fundamental prerequisite for lifelong learning, independent decision making and cultural development of individuals and social groups“. Currently, in the Czech Republic, there are available to approximately 6 097 libraries (Ministry of Culture, 2016) with 1,436,461 registered users. They are among the most visited

cultural institutions with an annual attendance of 64,158 million - physical and online visitors in 2015 (The National Statistical Office of Czech Republic, 2016).

According to statistics from the National Information and Consulting Centre for Culture (2015), there were 5,345 employees in the public libraries in the Czech Republic in 2014. In 1995, only 5,089 workers were employed - the number of employees in professional libraries grows (NIPOS, 2015). In the libraries of the Czech Republic, there are mainly employed women (88%) and 55.4% of the librarians are aged 40 to 60 years working. In contrast, only 12% of the total staff consists of employees aged 18 to 30 years. However, analysis of the number of school graduates has not been made. The unemployment rate in the field of library and information services is quite high. The age structure of the library staff is getting older. In 1998, there were only 5% of employed workers aged 60 years in the field of librarianship. Employees over 60 years old accounted for in 2011 nearly 10% of the total number of employees of the library staff. It is double the number of workers in librarianship, today (SKIP, 2015). Training a new generation of librarians is a strategic tool for improving the quality of librarianship in the Czech Republic as well as the possibility of a more global interconnection of these institutions at the global level.

The article focuses on determining a level of competence which has graduates who go into practice in the field of library and information services in the Czech Republic. The importance of gaps identification (Seemann & Farkašová, 2015) of coming generation of librarians can help create a suitable way to increase their skill levels and thus secondarily improve the quality (Nadányiová, 2014) of library services. With increasing qualifications of graduates it opens more options for creating and more intensive international cooperation in the framework of European Union projects (Grugulis & Vincent, 2009) and the exchange of good practices. Currently, there are already preparing a new concept of development of libraries in the Czech Republic for the years 2016-2020 (Ministry of Culture, 2016). The article aim is to determine the level of competence of graduates entering practice in the field of information and library services in the Czech Republic. The outputs of this contribution can help to identify opportunities for quality improvement of library services in the Czech Republic.

2. Materials and Methods

The paper deals with the evaluation of librarian competencies in condition of Czech Republic as the state of Europe Union. The attention is focused on requirements of labour market in compare with the results of our research. The aim of article is to determine the level of competence of graduates entering practice in the field of information and library services in the Czech Republic. The article is the particulate output of the research and presented results that focus on determining the professional knowledge and skills of graduates. Meaning observing the deficiencies of coming librarian generation can help create a suitable way to increase their skill levels and thus secondarily increase service of libraries. The importance of increasing the quality influences the creation of international cooperation (Bridgstock, 2009; James et al., 2013) and exchange of good practices at the global level.

The analysis was based on required competencies and resources of the National Qualifications Framework (2016) and the National System of Occupations in the Czech Republic (2016), which not only reflect the labour market but also provide professional view of specialists in this area. The National Qualifications Framework (2016) is continuously building

the register of professional qualifications existing in the labour market in the Czech Republic, which is supported by the state and useful for citizens and employers. Within this system, the librarian profession is selected on the Librarian acquirers; librarian cataloguer; librarian fund administration; librarian at the library for children; Librarian in direct services; reference librarian.

The National System of Occupations (2016) classifies each profession, and provides information about the needs and requirements of the labour market. The National System of Occupations are closely related and linked to the National Qualifications Framework (2016). It defines the profession of librarian's professional skills, general skills, professional knowledge and competencies soft librarian and their required level. By integration of the requirement, we identified key competencies that have been used to investigate the level of competencies of graduates entering the field of librarianship.

To determine the knowledge and skills of graduates in the field of library and information services, there is used a questionnaire survey. The questionnaire was distributed by two e-library conferences and mailing interviews in the whole area of Czech Republic. We used the conference Andersen library and library conferences SKIP. The target group were elected librarians in the Czech Republic. The respondents were asked to evaluate graduates who join as new employees over the past 5 years. Total number of respondents, who participated in the research, is 364. 62 respondents said that no graduate has recruited to do their libraries and other 15 respondents said that although they have recruited a new librarian, he has not been a graduate. The distribution of the questionnaires took place in September - December, 2015. The questionnaire consisted of 5 areas (soft competence, general skills, professional knowledge and professional skills) with the evaluation criteria set out (4 questions with rating scales and one open question). The respondents could answer with an interval of 1-5, where 1 is the best rating and the worst rating is 5. The results were processed by the basic static characteristics and the methods of comparative analysis and deduction.

3. Results and Discussion

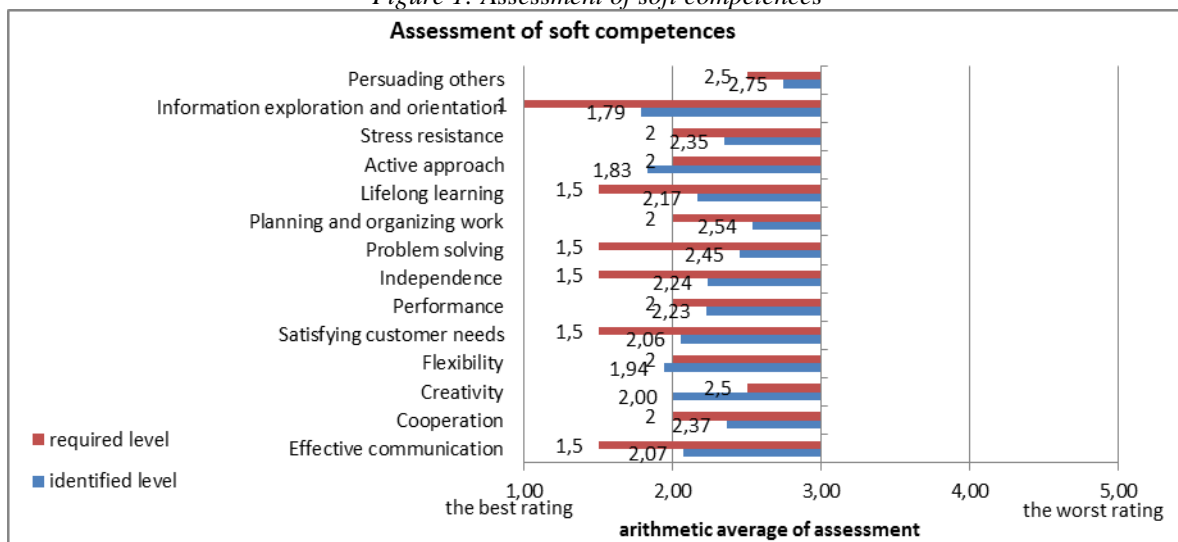
The research focus on the identified competencies of graduates entered the library praxis by the assessment of their colleagues. The article presents part of research output. According to the evaluation questionnaire responses, the structure of graduates who were evaluated by their colleagues is:

- 25.4% of graduates have secondary education with graduation examination in the field of information and library services, and 18.3% are graduates with a master's degree.
- 12.7% of graduates have a grammar school, 15.5% have a bachelor's degree graduates, and 12.7% received other education.
- 5.6% of the graduates have higher professional education, 4.2% of graduates have secondary education with a graduation examination in fields as education, training and social care, and 5.6% of graduates have secondary education with a school-leaving examination in a bookstore.
- No graduate has completed secondary education with graduation examination in the field of journalism.

3.1 The level of soft skills

From the viewpoint of soft skills, we evaluated 14 key skills among graduates. The respondents had the opportunity to evaluate on a scale of 1 to 5, where 1 - represented the best assessment of the competence and 5 - skills undisposed. We compare the results of the questionnaire with the required level of skills based on the national system of occupations. The evaluation results of soft skills are shown in Figure 1 in the form of weighted arithmetic averages. The best rating was achieved by the ability to find information and orientation in them, 55.3% graduates achieved the grade 1 (25,5% - grade 2, only 17 % - grade 3 and 2,1 % - grade 5). This competence is identified as one of the most important in soft skills according to the National System of Occupations (2016) and required level is higher than identification level of graduates. Skills as flexibility, creativity and active approach are on the better level as it is required. On the other side, there are more gaps of level skills of graduates. The most important are problem solving (difference between levels is 0,95); information exploration and orientation (0,79); independence (0,74); lifelong learning (0,67) and effective communication (0,57).

Figure 1: Assessment of soft competences

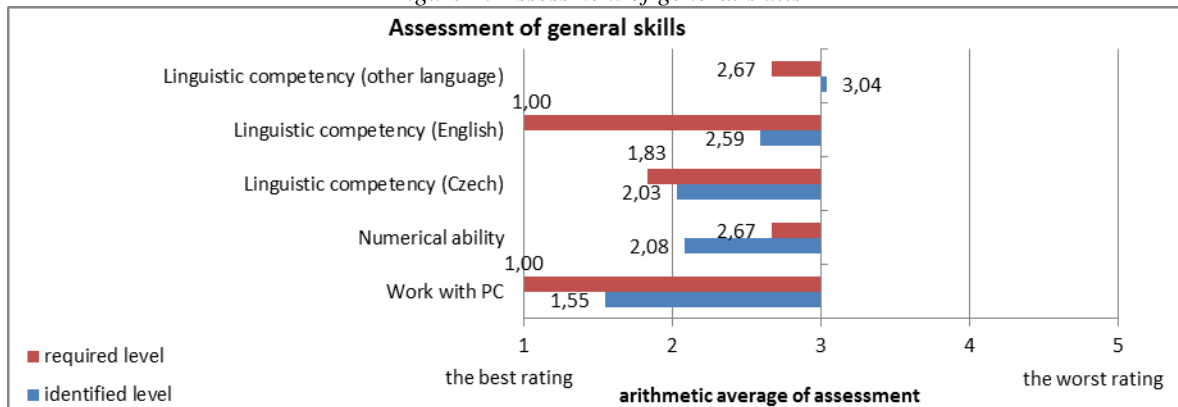


Source: own research

3.2 The level of general skills

The Figure 2 shows the results from the evaluation of the level of general skills. The best rating achieved graduates in computer competence, although there is a gap between required and identified level of this skill (difference 0,55). The graduates received an average grade 2.08 within numerical competence, which is better result as is required (the National System of Occupations, 2016). There are appreciable gaps in language skills of graduates. Required proficiency in English is considerably higher (difference 1.59) than the level observed in graduates who were assessed at 2.59. Language skills in another language recorded the worst results (grade 1 was evaluated only 2.1% of graduates, grade 2 received 19.1% of graduates, 38.3% of graduates received grade 3, 23.4% of graduates received grade 4, 17% graduates received grade 5). Currently, the linguistic competency of foreign languages (include English language) creates the potential for cooperation and relations at the global level.

Figure 2: Assessment of general skills

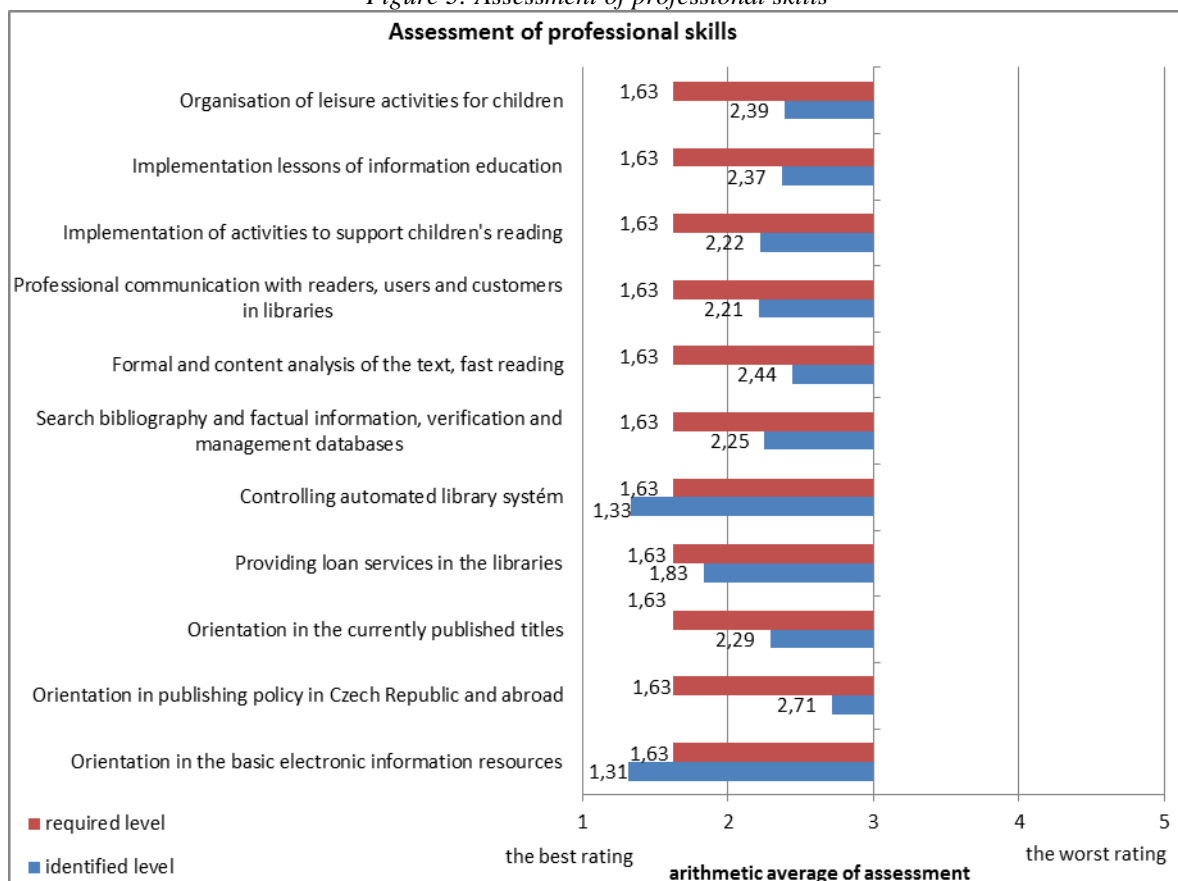


Source: own research

3.3 The level of professional skills

In total, there were 11 professional knowledge evaluated (Figure 3).

Figure 3: Assessment of professional skills



Source: own research

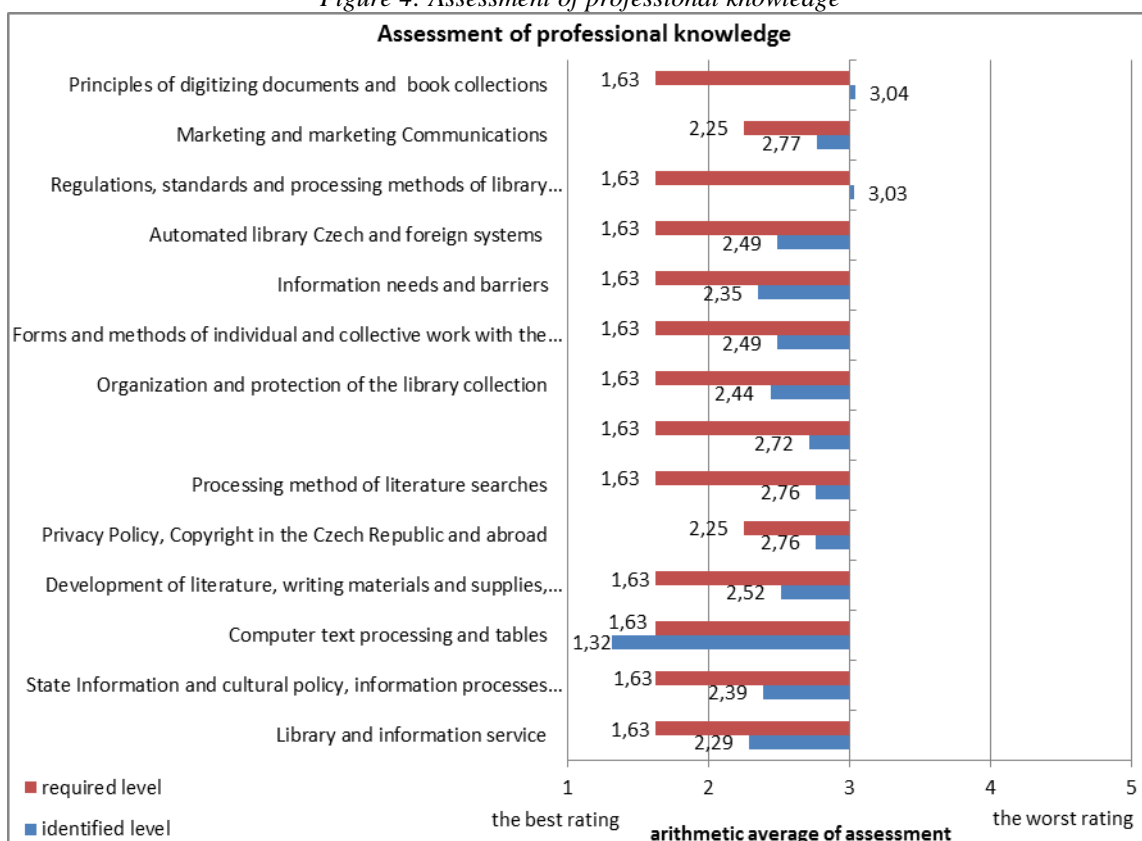
In the case of the professional skills, there are very good results evaluated in skills as orientation in the basic electronic information resources (grade 1,31) and controlling automated library system (1,33). The assessment for these skills even exceeds the required level. These competences are ones of the most important, like the skill providing loan services

in the libraries. Also, in the framework of this skill, we found relatively positive results and the graduates have a smaller shortcomings compared to the required level. On the contrary, within the other skills, we have identified more serious gaps, mainly in orientation in publishing policy in Czech Republic and abroad (difference between identified and required level is 1,085) and formal and content analysis of the text, fast reading (difference 0,815). These skills can be gained practical application of knowledge. This is probable because of their low levels. To remove such significant gaps, it is possible to focus on the practical aspects of the framework to prepare students for a profession.

3.4 The level of professional knowledge

Graduates received the best ratings in the knowledge of process text and tables, as well as information and library loan services (Figure 3). Addition to the knowledge of text processing and tables, graduates have deep deficiency in all tested knowledge. The biggest gaps are found in knowledge: and Principles of digitizing documents and book collections (a difference of 1,415); regulations, standards and processing methods of library collections (a difference 1,405); processing method of literature searches (1,135) and profiling, creation, processing and cataloguing of information and book, archival funds (1,095).

Figure 4: Assessment of professional knowledge



Source: own research

Students have a good opportunity to acquire these professional skills during their studies. Despite the fact, just in professional knowledge, there are recorded the biggest problem areas. The recommendation is to incorporate the required aspects that are missing in the syllabuses of schools focused on this field. An equally important element is the needs of the application of

this knowledge within practical side of teaching so that students have the opportunity to practice them and thus they came to practice with the knowledge that they understand and know apply.

4 Conclusion

This article aims to identify gaps in the competency levels of graduates who go into practice in the field of librarianship in Czech Republic. The results about competence level of the graduates are collected by the questionnaire survey. Comparing the required level of competence based on the national system of occupations we identified more gaps. The biggest gap in graduates entering the practice of librarianship is a language proficiency in English and other foreign languages. It is also one of the most important skills that open up the possibility of creating global links, cooperation and exchange of good practice between libraries. As in other professional areas, even within the library profession it is easily predictable gaps in professional skills. This is due to the fact that the acquisition of these skills is subject to practical application, which is often problematic during the study. Surprising is that greater gaps than in practical skills are in the professional skills that graduates should dispose by graduation. These findings are supported by answering the open questions. According to these responses, a quarter of graduates often have trouble with lack of knowledge the alphabet and thus with the correct classification of library collections and 7% have gaps in knowledge of Czech and world literature, whether classical or contemporary as well. Identification of problem areas of the competence level of graduates, who entering to the labour market in the field of librarianship, should lead to the possibility avoid mistakes and reduce gaps in the preparation of a new generation of librarians. The human factor in library services is the strategic element, where we can find factors to improve the quality (Kampf & Ližbetinová, 2015) of librarianship in the Czech Republic. Currently, in the globalization era (Jackson & Wilton, 2016; Poniščiaková & Gogolová, 2015), it is not possible to operate in the field of librarianship without creating transnational interconnections and cooperation (Rebeňák & Rypáková, 2015). However, it is not realistic without quality staff.

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POWER SUPPLY SAFETY OF RAILWAY TRAFFIC CONTROL SYSTEMS AS A PART OF INTERNATIONAL TRANSPORT SAFETY

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Abstract. The international railway companies use a wide variety of traffic control systems. These include mechanical, electromechanical and computer devices. Due to the passage of time, which causes systems aging and wearing, these devices are in different technical condition. The quality and safety of railway traffic depends on how well they operate. A crucial element of the international railway lines in terms of smooth and safe traffic management are crossovers, which allow to change the tracks. The replacement of crossovers involves installing new switch machines, while the modernisation of the whole station involves construction of new rail traffic control systems. These upgraded systems are built mainly using computer technology. Therefore, all over the Europe, to ensure an adequate level of safety and reliability they require uninterruptible power supply, so these power supply devices must be sufficiently reliable, stable and safe. In the article, the authors will present both older as well as modern solutions of the power supply railway traffic control systems, that are used by international railway companies. These solutions will be analysed taking into account the quality of the power supply and the costs of obtaining the appropriate level of reliability. Their advantages and disadvantages will be summarised and prospects for development of safe power supply railway traffic control systems will be discussed.

Keywords: railway traffic control systems, power supply, transport safety, power quality

JEL Classification: L92, R41, R42

1. Introduction

International rail transport is a very important area of life of modern societies. Rail transport, both passenger and freight, there are fast, safe, comfortable and environmentally friendly ways to move across Europe (Kornaszewski et al., 2010). The prospect of depletion of petroleum-based fuels, the danger of the traffic and its inconvenience are the reasons, through which rail traffic will develop further. A modern railway gives the opportunity to travel at high speeds, especially on international lines and important domestic lines. This involves the need to ensure maximum safety of travel, that is, among other things, to ensure the maximum reliability

of all railway devices (Armoush et al., 2009). Their technical condition, proper operation and the ability to diagnose, all these factors strongly affect the safety and comfort of movement around the area of the modern world (Berman, 2012), (Berman et al., 2014). Any possible failures of technical systems can cause human suffering and very large financial losses. Hence, from a social and economic point of view, it is important to ensure the proper functioning of the railway technical systems.

For numerous devices standing at a very high technological level the proper power supply it is very important issue. Power interruption or weak energy quality, is one of the potential reasons of failure in the system. The power quality is the most important for supplying railroad switches and associated with them traffic control devices. The railroad switches are the elements that allow trains to be guided from one track to another in the smooth and way (Sadeghi et al., 2016, dos Santos & Barbosa, 2016). They are essential in ensuring the safety of travel. The authors of this article have worked on this subject for many years carrying out numerous measurements of the power quality in the traffic control systems. The aim of these studies is the improvement of the quality of energy as well as the improvement of safety in rail traffic. The authors present the experience of mainly Polish power systems (but identical with, among others: Slovak, Czech, Italian, Spanish), however, the conclusions of these benefits are universal and apply to the systems of the other European countries.

2. The role of traffic control devices in a rail

Traffic control and signalling is a fundamental issue in terms of railway traffic efficiency and safety, both in national and international transport. These devices allow to supervise directly the work of the railway transport system and ensure the efficient railway traffic organization as well as safety (Bozzano & Villafiorita, 2010) (Łukasik & Nowakowski, 2010).

Depending on the working area the currently used devices are classified as: the line devices (installed on railway lines), the station devices (installed on railway stations) and the special purpose devices. They were described in details among the others in (Kornaszewski & Łukasik, 2007), (Nowakowski & Kornaszewski, 2011).

The line devices have to ensure the safety of movement of trains between stations. These include:

- Automatic Block Signaling (ABS) and Semi-Automatic Block Signaling (SABS),
- Level crossing safety system (ensure the safety of intersections of roads with railway lines).

The single direction ABS (train movements on the track is possible only in one direction) and bi-directional ABS (train movements on the track is possible in both directions) are used In the European Railway Area. SABS are used on the lines which are not equipped with train detection system.

The dispatch of the train to the next station is possible only when the section is not occupied by another train (it is indicated by the relevant elements of the SABS), but on the train arrival the operator has to state the signal on exit light and manually confirm the release of the block.

SABS are equipped with train detection system. SABS allow to dispatch a few trains on the track (that considerably increases the capacity of route), assuring them at the same time safety.

The station devices are responsible for the train movement in the station area or in the block post area. The railroad switch enables railway trains to be guided from one track to another. The correct railroad switches operation is a key element of the railway traffic safety. The switch motor which is used on national and international railway lines is shown on Fig.1.

Figure 1: The switch motor used on national and international railway lines



Source: own preparation

The latest microprocessor technologies allowed to create a modern, fully computerized signaling systems, such as EBILOCK, ESTW or MOR3. They provide a high level of safety of railway traffic. These systems are automated and user-friendly. The proper hardware configuration and specialized software cause that there is no risk of a dangerous situation for train operations.

3. Power supply of railway traffic control devices

The functioning of railway traffic control devices has a direct impact on the movement of trains and passenger safety, due to these devices must operate reliably. The quality and continuity of power supply is an important factor which influences the functioning of railway traffic control systems. The entire railway electric traction (3 kV DC – i.a. in Poland, Slovakia, Czech Republic, Italy) is supplied from the professional electric power industry by the traction substations (conversion of AC to DC). In order to improve the reliability of their operations, they are supplied by two independent power lines (basic and emergency), from two different energy sources. This is the main way to deliver energy to the entire railway traction system, and thus the railway traffic control devices. However, in case of power interruptions the most important elements such as railway traffic control systems are powered from additional sources to ensure appropriate level of safety and reliability.

In Poland, the requirements for the newly built power supplying systems for railway traffic control systems are defined in chapter 13 in the manual Ie-4 (WTB-E10 "Technical Guidelines for the construction of railway traffic control systems in Polish State Railways "). In accordance with paragraph 72, external power supply of railway traffic control systems, which includes cable and overhead transmission lines, power connections and power transformer stations should meet the following requirements:

- principles of construction of electric power devices,
- principles of surge protection,

- principles of fire protection and precautions.

Power equipment in the signal box is arranged in dedicated rooms, such as: power room, switchboard, battery room. To ensure proper operation the facilities are located in the direct vicinity. Distribution of electrical supply equipment in each room is dependent on the value of voltage, type of power supply (AC/DC), type of railway traffic control equipment and the necessary power.

The powering devices of the older type, used in the older types of railroad switches, were characterized by low power requirements and the simplicity of construction. However these devices do not comply with the requirements of contemporary traffic control systems. Thus the many modern power systems were built. They are fully compatible with modern systems, inter alia SUZ-2M and ELZAS. They are dedicated to supply railway traffic control devices and they support various types of these systems, among the others, computer driven devices, electro-mechanical controllers as well as relay based systems. These systems are suitable, both in new-and modernized or renovated railway power facilities. They can be supplied with one or two power lines $3 \times 230 / 400$ VAC, with uninterruptable power supply(UPS) and/or with power generator.

A master programmable logic controller (PLC) supervise power grid switching, power grid condition and power generator operation. Its dedicated software provides required control and uninterruptable power supplying. The system, according to the algorithm, may realize change-over operation from primary supply into reserve supply (in case of power interruption) or into emergency supply (UPS or power generator) if power supply is not available on any supplying line. System realizes automatic return switching into main supply if power is back. Of course in this case reserve units (UPS and generator) go back again into standby mode. Modern power supply systems are equipped with the power quality analysers. This allows to monitor the state of the power supply system continuously.

Figure 2: Power generator and controllers as an example of emergency power supply of railway traffic control system.



Source: own preparation

A part of modern system of power supply (generator, together with the controllers, switching elements and power quality analyser) is shown in (Fig. 2).

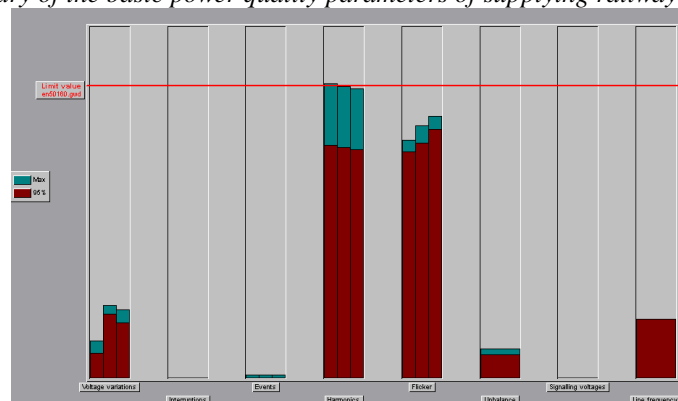
4. The quality of power supply in railway traffic control systems

The European norm EN 50160 with subsequent amendments-(EN 50160, 2010), defines constraints and acceptable limits of electric power quality. The norm was published in 1994 and has implemented in Poland since 1998. The purpose of the standard is the introduction to the national legislation the basis parameters of electric power quality (EN 50160:2014, 2014). This norm gives consumers the legal basis for claims in case of poor quality of electricity.

In Poland, the electric power quality parameters are defined in Regulation (Rozporządzenie, 2007). The electricity suppliers are obliged to provide appropriate supply parameters which are specified in law regulations or defined in energy sale contract. The President of Energy Regulatory Office is obliged to control power quality parameters of electricity supplied to customers. Failure to maintain the quality parameters may involve the company's financial responsibility and may cause the necessity of discount for the customer.

The provisions included in the Regulation concern the parameters of energy in the public power grids. For some customers, who are particularly sensitive to disturbances in the power system (voltage dips, interruptions in the power supply) (Saied & Al-Shaher, 2009), (Vujatovica et al., 2016) the requirements for quality and continuity of energy supply must be much higher. An example of such recipient is the railway, which for safety reasons must be ensured with increased level of reliability of power supply (Xiangjing & Baohua, 2014), (Lei et al., 2015). Analyses of power supply parameters of such devices which aim is to improve railway transport safety are a subject of the authors' work. An example of the measurements results which will be used to provide general conclusions relevant to national and international railway traffic safety is shown below. The conducted measurements sessions have been lasting for a period of one week. In this period all necessary parameters which are required by international standards were recorded. The special report which emphasizes safety critical incidents was generated. It allows to check overall condition of examined power supply system. (Fig. 3) and (Tab. 1) presents the summary of the measurements results in the selected system.

Figure 3: Summary of the basic power quality parameters of supplying railway substation AC/DC



Source: own preparations

Table 1: Juxtaposition maximum value and 95%-value parameters

Parameter	Unit	en50160.gwd	Maximum value			95%-Value		
			L1	L2	L3	L1	L2	L3
Voltage variations		57.74V +/- 10%						
Maximum	% [Un]	+ 10	1.2	2.5	-0.0	0.9	2.2	1.9
Minimum	% [Un]	- 10	-1.3	0.2	-2.3	-0.9	-2.2	-1.9
Interruptions	Number	100	0	0	0			
Events	Number	100	1	1	1			
Harmonics								
5. Harm.	% [Un]	6.00	6.05	5.99	5.95	4.77	4.73	4.69
Flicker	Pst	1.00	0.81	0.86	0.90	0.77	0.80	0.85
Unbalance	%	2.00		0.20			0.16	
Signalling voltages	% [Un]			none				
Frequency 95%		50 Hz +/- 1%						
Maximum	%	+1		0.2			0.2	
Minimum	%	-1		-0.2			-0.2	

Source: own measurements, power quality analyser software

In the presented example, an increased harmonics voltage distortion (the content of higher harmonics) and light flicker effect were observed. There were no power outages or significant voltage drops. Also others parameters have proper values, in accordance with international standards. The excellent system condition is a result of using modern power supply system, which was described above by the authors. In the most of examined cases the authors found the rule: modern devices and power supplying systems guarantee a significant improvement in power quality and therefore the safety of railway traffic.

5. The economic aspects of modern traffic control systems usage

In the case of railway traffic control systems (including their systems of power supply), especially for railroad switch controllers it is difficult to discuss about the economic aspects of the malfunctions. It is obvious that correct operation of railway traffic control devices is basic condition of traffic safety. Avoiding railway accidents and catastrophes is the main aim of the system. Safety and reliability are overriding and are worth funding. Any failures, not to mention railway catastrophes, are human tragedies, but also the enormous financial losses. These include destroyed: railway vehicles, railway tracks and traction, rail- and not-rail infrastructure, as well as damages and compensation. The economic impacts of disasters are extremely huge and usually are not available to the public. The potential loss of reputation by the railway as a mean of transport is another long-term cost of tragedy.

Analysing the railway accidents it is noticeable that a significant part of them is caused by railway traffic control system failures. It is clearly shown by following examples of railway disasters:

- Szczekociny (Poland - 2012), trains TLK 31101 from Przemysl to East Warsaw and interREGIO 13126 from East Warsaw to Kraków - 16 people were killed, 57 wounded.
- Andria (Italy - 2016), from Bari to Barletta - 23 people were killed, 57 wounded.
- Bad Aibling (Germany - 2016), from Rosenheim to Holzkirchen - 10 people were killed, 150 wounded.

In all mentioned above disasters the decisive cause were the railway traffic control systems crash or the use of insufficiently modern railway traffic control devices (the possibility of human error).

6. Conclusions

The article presents a synthesis of issues related to railway traffic control systems and their importance for the safety of railway traffic. The authors pay attention to the problem of proper power supply of these devices. Taking into consideration the whole issue, the authors came to the following general conclusions:

- Financing of modernization must be addressed primarily in the areas of safety and reliability, including the railway traffic control systems.
- Technology and diagnostics of railway traffic control devices and their working environment (including the power supply systems) should be continuously developed.

Detailed proposals:

- Standard EN 50160 should be modified. "Sensitive" customers should form a separate group, and have stricter requirements for power quality. Currently acceptable values are unsuitable for railway traffic control systems and can be the cause of failure.
- There is a need to establish provisions that oblige manufacturers of railway traffic control devices for testing their products in case of improper power supply quality.
- Obligatory power quality diagnostic tests of railway traffic control systems and their power supply subsystems should be required.
- The number and quality of railway staff training should be increased.

The authors hope that the contents of the paper will contribute to the development and popularization of issues related to the safety of railway traffic.

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DOES GLOBALISATION LEAD TO THE UNIFICATION OF THE INSTITUTIONAL ENVIRONMENT QUALITY?

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Abstract. The paper looks into the effect globalisation and international integration produce on the quality of the institutional environment. By clustering twenty-eight EU countries and five former Soviet republics that are not integrated into the European framework using institutional environment quality indices (the corruption perceptions index, the index of economic freedom, the worldwide governance indicator), we are able to see a sustainable persisting difference between two groups of post-socialist states. We used Ward's method for clustering; calculations were done through the SPSS package. This method intends to create small clusters from the closest observations, which fits well the objectives of our study. Eastern European and Baltic countries come close to other EU states in terms of their institutional quality. These countries don't form their own cluster. Their institutional environment is consecutively improving, although these improvements have different speed. Former Soviet republics except for Kazakhstan form a single cluster notable for a similar state of the institutional environment, which is sustainable over the course of time. Unstable quality of institutional environment is common for south Europe countries. However, link between institutional quality and economic growth rates has not been revealed. Economic growth rates were significantly different in countries belonged to one cluster.

Keywords: institutional environment, transition economies

JEL Classification: E02, F63, P 51, O43, 044

1. Introduction

Globalisation unifies life standards and behavioural patterns. It is closely related to integration processes which bring about the alignment of legal regulations governing economic activities and technical standards while contributing to concordance between formal institutions. Therefore, the more deeply institutions are involved in global integration, the more they must get unified under the influence of these processes. On the other hand, specific institutions of each country are substantially stable. We can see whether institutional conditions in the countries affected by integration and globalisation converge in such circumstances or the Path Dependence effect prevails by comparing post-Soviet development patterns of the former

Eastern bloc states, including the countries that emerged from the collapse of the Soviet Union.

2. Institutional environment and transformation of institutions

The whole range of formal and informal institutions evolving in each national economy builds a system of interrelated elements, or the so-called institutional environment. It is characterised by a certain degree of sustainability so that evolution of separate regulations, rules or laws does not result in a total change in the system. Moreover, revolutionary changes associated with the dissolution of the old formal institutions and creation of new ones can be conducive to the restoration of the previous institutional environment, though with formally new laws, regulations, types of economic relations and organisational interactions.

Evolution of institutions constitutes a special area of economic research. It was pioneered by Douglass North (1990), who viewed institutional replacements as the result of correlation between the profits from resource investment in the changes of the current regulations and the losses from their preservation for economic agents given the shifting relative prices. Changes in the institutional environment can arise from internal factors, ranging from new institutions being formed by the new forms and spheres of economic activity to the collapse of current institutions due to social revolutions when a group of economic agents cannot see any prospects of economic development within the old institutional environment.

Transformation of Soviet economies into the capitalist ones has engendered a host of problems concerning the effective transition from one system to another and possible transplantation of institutions born through evolution of developed countries into a completely different environment. (Kang, 2014) As it turned out, even when the institutions active in developed countries were borrowed in a comprehensive way and immediately shifted to a country with different traditions, regulations and historical development, these institutions would degenerate and become degraded within the new context. (Polterovich, 2008) Transition of the forms of business activities, legal regulations and methods of government regulation of the economy shaped by another development pattern made it possible to substantially decrease the expenses of shifting to a new system by making use of the tested operating institutions rather than building new ones. However, their transplantation entails a number of challenges.

The shifted formal institutions come into conflict with the previous institutional system and primarily with its informal component. (Cougoudjian, 2012) This results in an institutional environment that hinders effective economic activity. (Zweynert & Goldschmidt, 2006) The newly brought institutions degenerate and become degraded. The possibility of integrating Anglo-American models into a whole new environment raises serious doubts. (Evans, 2004) One of the most classic examples of this kind of degeneration is bankruptcy which, until recent amendments to legislation, served in the Russian economy not to protect the companies from their creditors or to protect the creditors themselves, but rather became a convenient tool to seize property.

The importance of the institutional quality for potential economic development and growth sustainability of national economies has been subject to thorough research, and the findings are rather contradictory. Glaeser et al. (2004) come to a conclusion that economic growth is secured by the accumulation of human and physical capital or, in the case of poor countries, mainly by a dictator while democracy and high-quality institutions come with wealth. Rodrik

D. and Wacziarg, R. (2005) claims that the influence of democracy on the economic growth is statistically insignificant. On the other hand, Acemoglu D. at all (2014) prove that the importance of the human capital contribution to the economic growth is overestimated while it is the quality of institutions that determines the growth in its correct long-term evaluation. Ineffective economic policy ultimately comes down to the quality of institutions. (Acemoglu D. at all 2003) Even a contribution of such counter-productive institution as corruption to the economic growth gets a conflicting evaluation. ((Dzumashev, 2016) (Podobnik at all, 2008)) At the same time the influence of national economy's involvement in the international economy on the institutional environment quality is interpreted unambiguously. The intensity of global economic interactions mainly depends on the compatibility of the institutions of different countries, interaction agents, and, vice-versa, the intensity of these interactions maintains the institutional quality of less developed countries. (Costantin & Liberati, 2014) (Bessonova & Gonchar, 2015) (Valaskova & Kramarova, 2015).

Sustainability of the institutional system coupled with preservation of ineffective or unsound institutions is known as Path Dependence effect. Any economy is exposed to it to some extent; however, one can suggest that it is less developed in the countries involved in integration processes since their economic practice and legal regulations will be controlled and maintained by the partners from the same integration group. Globalisation to a greater extent affects the countries that are more actively involved in global interactions. The alignment of life standards and consumer behaviour has to lead to the unification of informal institutions in the long run.

3. Methodology

In order to test the hypothesis about the influence of integration processes on the improvement of the institutional environment quality and its unification in member countries of the integration group, we analysed 33 states. (28 EU countries as well as former Soviet republics that are not members of the European Union such as Russia, Belarus, Kazakhstan and Ukraine). The quantitative evaluation of the institutional environment quality was based on a number of indices calculated by international organisations

In the first place, we verified whether the evaluations made through various indices that characterise the institutional environment and are calculated using different methods comply with each other. Index creators engage different experts, and their surveys involve representatives of different business communities, NGOs etc. At the same time, the data of different rating agencies is used in the calculation of some indices while the institutional environment parameters subject to evaluation are closely related. That is why the concordance of different evaluations can show that they indeed reflect the real state of different institutional environment parameters. For our calculations we used a sample of 74 countries, for which five indices of the institutional environment quality are available from 2000 to 2014. (Table 1)

Table 1. Link between indices characterising different aspects of the institutional environment quality

	The Rule of Law Index	The International Property Right Index	The Corruption Perceptions Index	The Knowledge Economy Index	The index of Economic Freedom
The Rule of Law Index	1	0,890**	0,857**	0,841**	0,719**
The International Property Right Index	0,890**	1	0,839**	0,796**	0,709**

The Corruption Perceptions Index	0,857**	0,839**	1	0,752**	0,823**
The Knowledge Economy Index	0,841**	0,796**	0,752**	1	0,659**
The Index of Economic Freedom	0,719**	0,709**	0,823**	0,659**	1

** Correlation is significant at the 0.01 level (2-tailed).

Source: own calculations

It is easy to notice that the indices calculated in different ways show consistent results. As an indicator for the institutional environment quality, we used the average value of three standardised indices: The Corruption Perceptions Index, The Index of Economic Freedom and The Worldwide Governance Indicators. If for some country one of the indices was not available for one of the years, we used a weighted average value of two indices. The choice of the period (1995 – 2015) can be explained by the availability of respective indices for most of the countries. Moreover, the beginning of this period almost coincides with the beginning of transformation processes in post-socialist countries. The data for the year 1995 cannot be fully used in comparisons since the group of countries involved in the ranking is not the same and, hence, the clusters do not match the subsequent ones. Nevertheless, the 1995 findings are still of interest for further analysis.

As part of our study, the countries were grouped by the "similarity" in the evaluations of their institutional environment quality. We used Ward's method for clustering; calculations were done through the SPSS package. This method intends to create small clusters from the closest observations, which fits well the objectives of our study. Similar method was used in Mádr & Kouba (2015) for clustering post-socialist states.

At the initial step, Ward's method merges each observation in one separate cluster; then it merges two objects in a new cluster so as to minimise the error sum of squares or, equivalently, maximise r^2 values at each step of the algorithm. The algorithm is completed when all the observations are merged in one cluster. The final number of clusters is determined by the study objectives.

Let X_{ijk} – denote the value for variable k in observation j belonging to cluster i Furthermore

The Error Sum of Squares which is summing over all variables, and all of the units within each cluster:

$$ESS = \sum_i \sum_j \sum_k |X_{ijk} - x_{i.k}|^2 \quad (1)$$

The Total Sum of Squares which is comparing the individual observations for each variable against the grand mean for that variable:

$$TSS = \sum_i \sum_j \sum_k |X_{ijk} - x_{..k}|^2 \quad (2)$$

$$R^2 = \frac{TSS - ESS}{TSS} \quad (3)$$

4. Results and discussions

This method allowed us to distinguish the following clusters (Table 2).

Table 2. Countries by clusters

1995	1998	2001	2004	2007	2010	2013	2016
1 cluster	1 cluster	1 cluster	1 cluster	1 cluster	1 cluster	1 cluster	1 cluster
Ukraine	Uzbekistan	Uzbekistan	Uzbekistan	Uzbekistan	Uzbekistan	Uzbekistan	Uzbekistan
Belarus	Ukraine	Ukraine	Belarus	Belarus	Belarus	Ukraine	Ukraine
Romania	Kazakhstan	Russia	Kazakhstan	Ukraine	Ukraine	Belarus	Belarus
Hungary	Russia	Kazakhstan	Ukraine	Kazakhstan	Russia	Russia	Russia
Italy	Belarus	Romania	Russia	Russia	2 cluster	Kazakhstan	Greece
Bulgaria	Bulgaria	Belarus	Romania	Romania	Kazakhstan	2 кластер	2 cluster
Poland	Romania	2 cluster	2 cluster	2 cluster	Romania	Romania	Slovakia
Russia	2 cluster	Bulgaria	Slovakia	Bulgaria	Bulgaria	Greece	Croatia
Spain	Latvia	Croatia	Poland	Croatia	Greece	Bulgaria	Italy
2 cluster	Croatia	Slovakia	Bulgaria	Poland	Slovakia	Slovakia	Slovenia
Греция	Slovakia	Latvia	3 cluster	Slovakia	Italy	Italy	France
Slovakia	Lithuania	Poland	Latvia	Greece	Croatia	3 cluster	3 cluster
Portugal	Poland	Greece	Greece	Italy	Latvia	Croatia	Kazakhstan
Estonia	Greece	Czechia	Italy	3 cluster	Hungary	Hungary	Portugal
France	Italy	Slovenia	Czechia	Latvia	Poland	Czechia	Hungary
Czechia	Czechia	Italy	Hungary	Hungary	Lithuania	Slovenia	Bulgaria
Luxembourg	Hungary	3 cluster	Lithuania	Lithuania	Czechia	Poland	Romania
Sweden	Slovenia	Hungary	Slovenia	Czechia	3 cluster	Latvia	Malta
Germany	Estonia	Malta	Malta	Slovenia	Portugal	Lithuania	Spain
Austria	Malta	France	Portugal	Portugal	Malta	Malta	Belgium
3 cluster	3 cluster	Belgium	Cyprus	Malta	Slovenia	Spain	Poland
Ireland	Portugal	Portugal	Estonia	Cyprus	Spain	Portugal	Cyprus
UK	Cyprus	Lithuania	4 cluster	Spain	Estonia	Cyprus	Latvia
Malta	Spain	Estonia	Spain	Estonia	France	Estonia	4 cluster
Netherlands	Belgium	Spain	France	France	Cyprus	France	Austria
Finland	France	Cyprus	Germany	4 cluster	Belgium	4 cluster	Sweden
Denmark	4 cluster	Germany	Belgium	Belgium	4 cluster	Austria	Germany
	Austria	Austria	Ireland	Germany	Germany	Belgium	Czechia
	Germany	4 cluster	Austria	Ireland	UK	Ireland	Luxembourg
	Ireland	Ирландия	5 cluster	Luxembourg	Ireland	UK	Lithuania
	Luxembourg	Sweden	UK	Austria	Austria	Germany	Netherlands
	UK	UK	Sweden	UK	Luxembourg	Luxembourg	UK
	Sweden	Denmark	Luxembourg	Sweden	Sweden	Netherlands	Denmark
	Denmark	Luxembourg	Denmark	Netherlands	Netherlands	Sweden	Estonia
	Netherlands	Netherlands	Netherlands	Denmark	Denmark	Denmark	Ireland
	Finland	Finland	Finland	Finland	Finland	Finland	5 cluster
							Finland

Source: own calculations

The clustering revealed a number of patterns in the institutional environment changes. The lower the position of the cluster and the country in it, the closer the institutional environment in the respective cluster and each particular country comes to the reference one. The rank among the evaluated countries is primarily significant.

1. In 1995, the first cluster of countries with the institutional environment which was the most remote from the reference used by the ranking creators included former Soviet republics, former socialist countries and a number of Southern European states such as Italy and Spain. The second cluster is formed by only two countries of the former Eastern bloc, i.e. the Slovak and the Czech Republics, as well as one former Soviet republic, Estonia.

2. The cluster formed by former Soviet republics is the most sustainable one. Out of all the post-Soviet republics, only Kazakhstan managed to consistently improve the quality of its institutional environment. At the same time, economic growth in the countries from this cluster was more than substantially different. For instance, in 2014, Uzbekistan saw its GDP increase 2.63 times in comparison with 1990; the increase totalled 1.9 times for Belarus and Kazakhstan, 18.5 % for Russia, while Ukraine lost 35.1% GDP over 25 years. (Wold Bank, 2016)

3. Eastern European countries were gradually improving the institutional environment quality both before their accession to the European Union, which can be partially explained by the work on meeting the EU requirements needed for entry, and after it. For instance, originally the first cluster included Romania, Hungary, Bulgaria and Poland, while by 2004 only Romania was left to end up in the second cluster starting from 2010. At the same time the shift towards the common European currency did not produce any visible effect on the institutional environment quality, at least during the period in question.

4. Finland, Denmark, Sweden, the Netherlands, Germany, Austria, Luxembourg, UK and Ireland constitute a "Euro-15" nucleus, which formed into one cluster since these countries have similar institutional environment indicators, with changes happening in the group as a whole. The institutional environment quality in the Baltic states was also steadily improving. In 1998, all of them were included in the second cluster, while by 2016, Estonia and Latvia gradually moved down the table and ended up in the fourth cluster, to which Latvia came close.

5. Although Southern European countries were members of the European Union for a long time, Italy being one of its founders, their institutional environment is unstable. Starting from 2004, Greece's indices were getting worse, leading it to the first cluster in 2016, where it ranked among post-Soviet states. Throughout the whole period, Italy never left the second cluster, while Spain and Portugal never left the third one.

6. We did not manage to reveal any links between the increasing quality of the institutional environment and economic growth rates. For instance, starting from 1992, GDP rose by 67.4% in the Czech Republic and by 137% in Slovakia; during the same period the Czech Republic shifted from the second cluster to the fourth one, while Slovakia remained in the second one. The Baltic states were experiencing similar growth rates while the changes in the institutional environment were happening at a different pace.

5. Conclusions

Former Soviet republics except for Kazakhstan form a single cluster notable for a similar state of the institutional environment which is sustainable over the course of time. The Path Dependence effect is visible in the economies that are weakly involved in integration processes affecting developed countries. The existing institutional environment turns out sustainable, with newly coming institutions deformed and informal institutions preserved.

Eastern European and Baltic states get integrated into the European environment, including by means of improving their institutional environment quality. The improvement of institutions happens at a different pace, but some post-socialist states have currently come close to developed European countries in terms of their institutional environment quality. Economic

links support the promotion and establishment of new institutions transferred from the countries with a higher level of economic development.

The quality of institutions does not affect economic growth rates in the medium term.

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MULTIMODAL PASSENGER TRANSPORTATION AS A GLOBAL TREND OF AGGLOMERATION TRANSPORT SYSTEMS DEVELOPMENT

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Abstract. Urbanization process leads to city agglomeration and new resettlement schemes. Agglomeration developing process has several stages. Although it starts to grow spontaneously, it should be regulated. There are specialized zones for business, rest and leisure in modern agglomerations, they are usually far from each other, however they should have transport links not longer than one hour. In these circumstances transport system development has a particular meaning. Although a general population mobility level is high, passenger flows have different intensity in various directions and daytime. Transport should serve all these flows, providing high speed and comfort. Such an intensive passenger flow can be maintained successfully only by balanced and well coordinated development of all kind of public transport. Multimodal transportation is a new kind of transport service which is now developing quickly and successfully, according to the global experience analysis. This service has a new level of quality. All the advantages and disadvantages of city public and private transport are taken into account while new transport system is under design. In Western Europe transport service schemes provides not only all kind of public transport but also some opportunities for private ones like car or bicycle. There are intercepts parking and interchange hubs. Route planning and ticket selling also contain new technologies inside. Thereby multimodal transportation is a new developing level of service, which is becoming popular all over the world, and Russia is not an exception. This article contains passenger transportation development trends and some barriers for multimodal transport in Russia.

Keywords: multimodal transportation, agglomeration development, global transport system

JEL Classification: R12, R48, O18, L92

1. New transportation systems appearing as a result of agglomeration development

Urbanisation ranks among the core social and demographic processes in today's world. Over the last two hundred years, the urban population has grown manifold so that nowadays more than half of the world's population lives in cities. The urban population is expected to

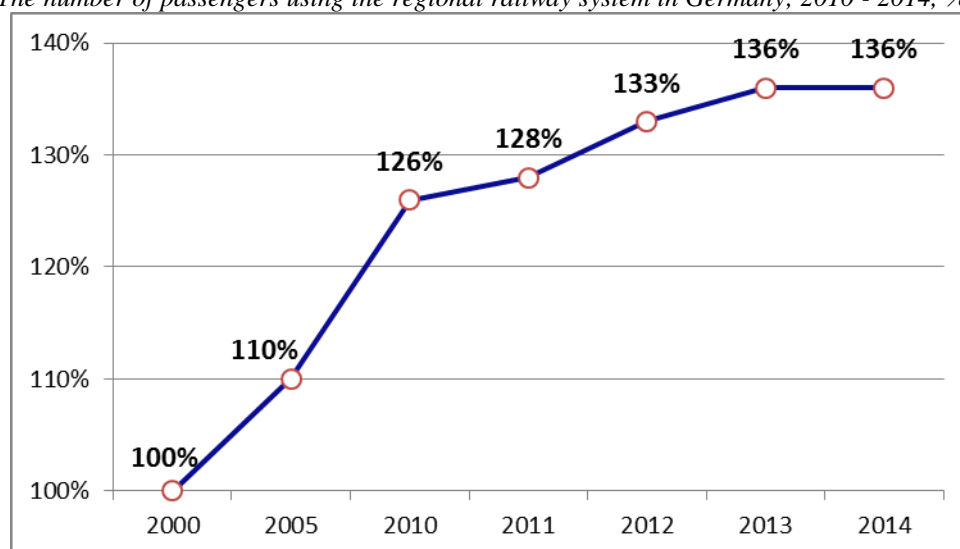
continue growing dramatically until 2050. (Savelsbergh & Woensel, 2016). Meanwhile, large cities are rapidly developing, growing into various agglomerations.

An urban agglomeration (from Latin *agglomeratio*, mass together) denotes a group of neighbouring cities, settlements, and other populated areas with tightly linked employment, culture, everyday life, and production. Formation of urban agglomerations is an objective process happening when the population clusters around industrial, educational, scientific, and cultural hubs. As a spontaneous process, it requires targeted management at some point. Urban agglomerations pass through different stages of development: an industrial agglomeration, transformation stage, a dynamic agglomeration, and an advanced post-industrial agglomeration.

An industrial agglomeration centres around large industrial cities. At the transformation stage, an agglomeration is characterised by a common labour market and commuting from the periphery to the industrial “nucleus”. A dynamic agglomeration develops in a centrifugal way meaning that its production, tourism, and culture shift from the periphery towards the “nucleus”. An advanced post-industrial agglomeration constitutes an area with a functionally specialised type of settling which is split into zones focusing on labour, education, culture, tourism, or leisure. These zones are closely interconnected and exposed to a synergic effect which can be stronger or weaker depending on the level of public transportation. (Chatman & Noland, 2011)

Of special importance in agglomerations is commuting, or recurring travel for employment, cultural or everyday purposes, which implies accelerating growth of different types of passenger transportation within the agglomeration. Areas for leisure, living, and work are separated in such a city. Development of urban agglomerations is impossible without a targeted development of public transportation system since it is accompanied by the augmenting population mobility via transportation and an increasing volume of urban and regional transit. Fig. 1 shows changes in the number of passengers using the regional railway system in Germany, where the proportion of urban population is high and growing rapidly.

Figure 1: The number of passengers using the regional railway system in Germany, 2010 - 2014, %



Source: estimated on the basis of *Мировой опыт организации и финансирования пригородных железнодорожных пассажирских перевозок* [Online]. – Available: http://www.ipem.ru/files/files/other/2016_04_20_ipem_cppk_report_full.pdf

The increase in population mobility as a result of agglomeration development is a global trend. One of the largest urban agglomerations in Russia (i.e. Moscow and Moscow Region), which accounts for 65% of total regional transit, also witnessed an increasing number of passengers: the number of carried passengers went up by 14% from 2005 to 2014 (The Demographic Yearbook of Russia).

2. Intermodal and multimodal passenger transportation

World-wide evolution of urban agglomerations imposes new requirements on the level of urban and regional transportation systems. Production and business areas with a notably high clustering of people are located tens or even hundreds of miles apart, while the time required for moving from one area to another must not exceed one hour. Passenger flows in agglomerations are of different intensity depending on the destination and are serviced by different types of transport whose fierce competition sometimes leads to irrational use of resources, lack of required quality or deviations from the schedule. Urban transportation systems face a whole range of problems, including an excessive growth of private automobiles, traffic jams, and poor use of public transportation.

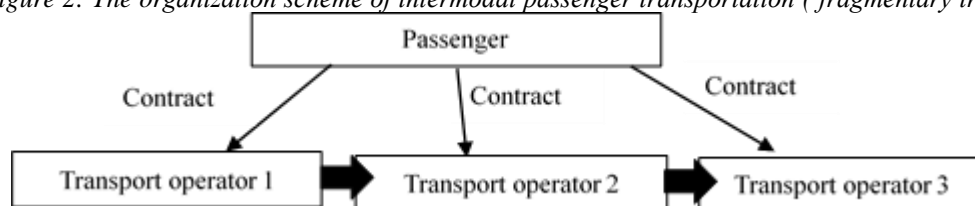
Thus, the growing competition between different forms of transport decreases the total efficiency of urban transportation systems. In the long term it is expected to give way to their coordinated development and formation of common urban and regional transportation systems which will bring together intraurban and suburban communications. These transportation systems imply the use of two or more types of transport in a trip (Dröes & Rietveld, 2015).

In developed countries, urban transportation systems are based on railway traffic (metro, high-speed trams, commuter trains), which ensures regular mass transit between agglomeration zones. (Matrisch & Weiss, 2008)

Within the context of continuing urbanisation and evolving agglomerations, multimodal transportation solutions are gaining momentum. Scholars identify and describe the problems of interactions between different means of transport in large cities, devising different models for planning urban transportation systems. (Strano et al., 2015)

Currently there is no common understanding of differences between intermodal and multimodal transport among scholars. In terms of technology, combined transit is the one provided by several modes of transport. As a rule, such combined transportation is carried out by a number of independent organisations, although in some cases via different types of transport within one company. Combined passenger transit can be intermodal or multimodal. Intermodal transportation is also called “fragmentary trips”. In their case, each client (passenger) interacts with each transportation company directly. The scheme of intermodal (fragmentary) passenger transportation can be found in Fig. 2.

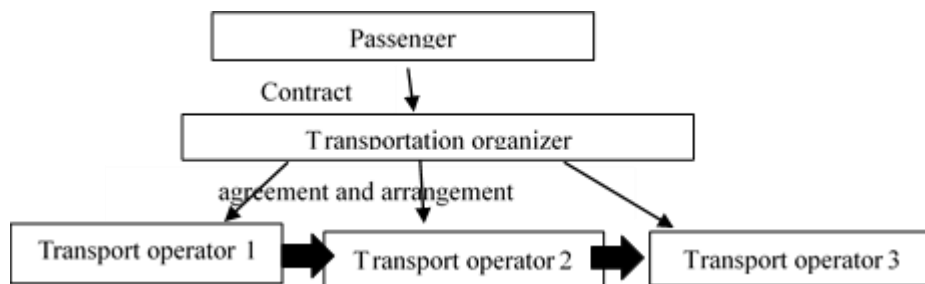
Figure 2: The organization scheme of intermodal passenger transportation (‘fragmentary trip’)



As it is seen from Fig. 2, a passenger signs a transportation agreement with several independent companies with strictly separated duties: each one is responsible for transportation within their part of the route. Passengers plan such trips themselves given the matching timetables of different transport modes and the presence of transport hubs.

The scheme of multimodal trips is somehow different (Fig. 3).

Figure 3: The organization scheme of multimodal passenger transportation



According to Fig. 3, in this case a passenger signs an agreement with a transportation company which undertakes to organise a trip according to the indicated itinerary by means of different transport modes, for which it bears responsibility. The company, in its turn, interacts with other transportation companies based on a contract. Such a scheme is by far more convenient for the passenger, who buys a package of transportation services, most often uses a single travel card and has to interact with one company only. On the other hand, this scheme is more complex due to potential problems between the organiser and contractors (other transportation companies).

Passengers can benefit from multimodal trips in terms of cost and time. However, a poorly coordinated interaction between different types of transport can often pose a threat to these benefits. (Gallotti & Barthelemy, 2014)

3. World-wide Survey of multimodal passenger transportation

The main strategic areas of transportation development in advanced economies (EU, USA) of the early 21st century cover the organisation of multimodal transit, including in large agglomerations.

For instance, the Finnish multi-faceted transportation holding VR Group includes a department for railway traffic and a department for bus transit, while offering multimodal services to its customers. The choice of transportation in Finland does not only depend on the speed or type of transport, but also on environmental aspects (Salonen et al., 2014).

Multimodal stations and terminals are set up for multimodal trips. According to Walter R. Turner, the efficiency of passenger travel increases if railway stations can be used in a multimodal way, both for railway and bus transportation. Multimodal stations are a key to the quality of continuing urban growth in North Carolina. The final report of the Washington State Department of Transportation, which looks into the ten-year strategy for development of a multimodal passenger transportation system including ferries, says that people in Puget Sound are serviced by a developing multimodal passenger transportation system which encompasses bus and suburban railway passenger transport in addition to ferries. Over the last years, the

Department has invested substantial funds in the planning and development of a system of integrated public transportation, increasing the number of commuter trains and expanding the range of services offered by bus transportation companies.

It must be highlighted that multimodal transportation is not only regarded as a competitive product for a passenger, but also as a way of aligning the development of different types of transport and merging them within a common transportation system. The term “intermodality of passenger transportation” stands not only for cooperation between different types of public transport, but also for the integration of private transport into the development of transportation systems by establishing passenger hubs, park-and-ride areas for automobiles and bicycles and their rental. The issues of such integration are mainly discussed by researchers from Europe (Gregova & Dengova, 2014) and USA (Buehler & Hamre, 2014).

In the region of Paris, urban and suburban transit is carried out by RATP, the leading operator of an integrated public transportation system. This system brings together metro, buses, trams, and suburban high-speed trains, carrying more than 11 million passengers daily. As a result, public transportation accounts for 64% of total passenger transportation in the region of Paris, while the passenger flow increased by 7.5% from 2010 to 2014. RATP is also planning to implement the project called “Grand Paris Express” by 2030, as part of which it is expected to build and put into operation new 200km-long metro lines and 72 stations, of which 80% will serve as hubs (Ferrier, 2015).

Transportation administrations in big German cities are responsible for aligning the timetables of different types of transport, developing hubs, and devising a common system of rates. Multimodality is viewed as one of the ways to increase the volume of passenger trips via public transportation and decrease the environmental burden. To do this, public transportation has to become a multimodal provider with an appropriate quality of urban and regional transportation infrastructure and online ticket sale systems. One of the examples of a coordinated development of public transportation are trains linking the airport with the city centre.

Researchers all over the world study technologies required for planning multimodal trips via websites and mobile applications (Djurhuus et al., 2015), paying special attention to the improvement of interface of such information resources for their more convenient use (Booth et al., 2015).

For instance, in order to coordinate the development of transportation in agglomerations, McKinsey employees offer solutions such as separate lanes for public transport and a multimodal trip planner panel, which will allow its users to choose the optimal route and buy a single travel card through a smartphone application. (Пассажи́рские перево́зки в агломе́рациях: те́нденции и техноло́гии, 2015)

4. Conclusion

Multimodal passenger trips and a coordinated development of different transport modes stem from the formation of new demographic systems and large agglomerations all over the world. In developed countries, urban transportation systems are based on the types of public transport (metro, high-speed trams, commuter trains) which are able to guarantee regular mass transit of passengers between different agglomeration areas. At the same time, private transport is integrated into the system of transportation services. Tools for government

involvement in the development of transportation systems in agglomerations include alignment of timetables of different transport modes, development of multimodal hubs and common systems of rate setting.

Russia also has its own experience of multimodal transportation, although most of the projects involve long-distance transportation or transit between the airport and the city.

Under the resolution of the Russian Ministry of Transport, starting from 2015, Russian territories are developing long-term comprehensive plans for passenger transportation (for the period of 5 to 30 years). In accordance with methodological recommendations of the Ministry, the targeted model for transportation services is based on the level of infrastructure in the region and the volume and destinations of the expected passenger flows. It is underpinned by an interregional transportation balance. Thus, in the long run, passenger transportation in the regions will be based on comprehensive plans involving different types of transport, including multimodal transportation.

However, Russia witnesses a number of organisational barriers which hinder the implementation of the above-mentioned models of interaction between different types of transport. This is related to the current system of funding of infrastructure-related projects and rate setting at the regional level, division of responsibility between the regions, and lack of possibility to form a service scheme outside the Russian region. Moreover, there is no elaborate legal framework for interaction between transportation companies in terms of the issues arising in the case of multimodal transportation:

- implementation of a single travel card;
- mechanism for dividing responsibility between transportation companies;
- aligning the travelling and luggage rules for different transport modes.

By overcoming these obstacles, Russia will be able to enhance the development of its multimodal passenger transportation, the growing population mobility, and the level of agglomeration development.

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THE GLOBAL IMPACT OF E-MARKETING STRATEGIES ON SME IN THE SEGMENT OF TOURISTIC SERVICES

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Abstract. Internet is a world-wide medium and has a global impact on companies and customers. Physical boundaries have disappeared and the virtual boundaries are relative unknown. Boundaries now only exist in people's minds and the possible applications have had an effect behaviour of people and on business function. This is the right place for application of specialised marketing strategies in companies that are in online space. This combination of global online space (Internet), specific marketing strategies and proper marketing communication tools leads to the changes of the customer buying behaviour and the changes in business model of the companies. This article is focused on global implementation's impact of e-marketing strategies in the conditions of small and medium enterprises especially in the segment of touristic services. The article is divided in the two basic parts. In the analytical part of the article we analysed fundamental e-marketing strategies and the tools of e-marketing communication in the specific segment of touristic services in Slovakia and abroad. The practical part of article is dedicated to example how to implement the special e-marketing communication tools (creation of web pages with booking services, SEO, engagement to affiliate program, email marketing and social marketing) suited for segment of touristic services in international environment. The impact of implementation of selected e-marketing communication tools in conditions of real SME company is summarised in the conclusions of article.

Keywords: e-marketing, e-marketing communication tools, internet, SME, touristic services

JEL Classification: M31, M37, Z33

1. Introduction

V súčasnom svete ovplyvňuje aplikácia online marketingových stratégií takmer každú sféru podnikania. Výnimkou nie sú ani podniky poskytujúce ubytovacie a stravovacie služby, pre ktoré sú online prezentácie na internete existenčne nevyhnutné. Implementáciou adekvátnych zložiek marketingového mixu s využitím nízko nákladových foriem online marketingovej komunikácie môže tento typ podniku získať okrem konkurenčnej výhody, aj nových zákazníkov a docieľiť nárast zisku. Prostredie internetu ponúka priestor pre využívanie nástrojov online marketingovej komunikácie, ktoré umožnia podnikom efektívne a flexibilne

reagovať na potreby zákazníkov. Ako spätnú väzbu pre overenie správnosti aplikovaných stratégií je možné využiť webové analytické nástroje, čo sa prejaví napr. v posilňovaní preferovaných a efektívnych komunikačných kanálov a v eliminácii tých, ktoré nemajú efekt pre podnik.

2. Analýza súčasného stavu

Podnik pre dosiahnutie svojich marketingových cieľov na cieľových trhoch využíva súbor marketingových nástrojov, ktoré sú v marketingovej terminológii označované ako marketingový mix. Marketingový mix je konkrétna kombinácia marketingových nástrojov, ktorými sa podnik snaží ovplyvniť svoje odbytové trhy a dosiahnuť tak marketingové a súčasne aj celopodnikové ciele. Pri marketingovom mixe sa jedná predovšetkým o nástroje zo štyroch oblastí pôsobiacich na trhu. Ide o oblasti výrobok, cena, distribúcia a komunikácia. (Ramanathan et al., 2012)

Pod pojmom produkt rozumieme výrobky a služby resp. čokoľvek, čo upúta pozornosť ku kúpe, spotrebe a uspokojeniu potrieb. Produkt predstavuje všetko to, čo sa môže ponúknuť na uspokojenie potrieb. Služba ako produkt je súbor hmotných a nehmotných prvkov, obsahujúci funkčný, sociálny a psychologický úžitok alebo výhodu. (Corejova et al., 2015, B) Na internete sú hmotné produkty iba ponúknuté, pričom nehmotné produkty môžu byť cez internet aj dodané (napr. softvér, hudba). Internet spotrebiteľom neumožňuje daný produkt osobne prezrieť a vyskúšať, preto je dôležité poskytnúť potenciálnym zákazníkom dostatočné množstvo informácií, aby boli ochotní vykonať nákupné rozhodnutie. (Doiron, 2011) Cena je dôležitý prvok marketingového mixu a je aj jednou zo základných ekonomických kategórií. Vyjadruje hodnotu výrobku, ovplyvňuje dopyt, je zdrojom informácií a vytvára príjmy podniku. Internet zvyšuje transparentnosť cien, pretože umožňuje zákazníkovi rýchlejšie porovnanie s konkurenciou čo vedie k minimalizácii cien. (Caniels et al., 2015) Pod pojmom distribúcia rozumieme proces, ktorým sa tovar alebo služba distribuuje ku správne mu zákazníkovi, na správne miesto, v správnom množstve, stave a čase. Tovar či služba je k zákazníkovi od výrobcu dodávaný prostredníctvom distribučných kanálov. (Vaculik et al., 2014) Internet má významnú úlohu v oblasti distribúcie. Môžeme ho chápať nielen ako novú distribučnú cestu, ale aj ako miesto nákupu, kde je produkt iba vyberaný resp. aj zaplatený. (Corejova et al., 2015, A), (Liu & Dong, 2010) Marketingová komunikácia je významným prvkom marketingového mixu, obzvlášť v globálnom prostredí internetu. (Jankalova, 2012) V podstate je to každá forma komunikácie, ktorou firma informuje, presvedča alebo ovplyvňuje zákazníkov. K základným nástrojom marketingovej komunikácie na internete patria webové stránky, online Public Relations, podpora predaja, internetová reklama a priamy online marketing. (Rostasova & Dudova, 2015) Správnou kombináciou nástrojov marketingového mixu môže podnik naplniť svoje krátkodobé i dlhodobé zámery. Na rozdiel od iných ekonomických veličín sú marketingové premenné ovplyvniteľné a kontrolovateľné. (Madlenak et al., 2015, B) Náklady na marketing patria väčšinou k prvým, ktoré podniky v prípade problémov redukujú. Tento postup je však nesprávny, pretože práve marketingové investície prinášajú podnikom nárast zisku. Na základe výsledkov výskumu Bostonskej univerzity Hotelového manažmentu, priemerné náklady na marketing sa pohybujú v rozsahu 4-5% z celkových hotelových nákladov. Napriek tomu, že hotely disponujú nízkym rozpočtom na marketing, ich úspech je priamo závislý na tom, ako efektívne sa tento rozpočet využije. (Liang, 2014) V roku 2015 sa viac ako 55% hotelových rezervácií objednalo online. Preto je

dôležité investovať finančné zdroje podniku poskytujúceho ubytovacie a stravovacie služby do globálneho online prostredia. Výsledky výskumu uvádzajú, že do online marketingovej komunikácie pôvodne putovalo 25-30% rozpočtu z celkových marketingových nákladov. Za rok 2015 sa hodnota zvýšila na 50%. Odvetvie ubytovacích a stravovacích služieb si vyžaduje ešte vyššie vynaloženie nákladov do online marketingu, ako v ktoromkoľvek inom odvetví. Celkovo hotelierstvo je závislé na pozitívnych recenziách, ktoré podporujú rozhodovanie nových hostí. A práve internet predstavuje najjednoduchší distribučný kanál pre ich zverejnenie. Podľa štatistík vyhodnotených spoločnosťou zaoberajúcou sa hotelovými rezerváciami TripAdvisor, až 77% cestujúcich, sa rozhodne pre ubytovacie zariadenie na základe recenzií a odporúčaní zverejnených na internete. (Abou-Shouk et al., 2016) Webové stránky podniku je potrebné neustále upravovať a inovovať. Tieto inovácie by mali v priemere tvoriť 4 až 5% finančných prostriedkov z rozpočtu online marketingu. Nízko nákladná konštrukcia, bez efektívnych funkcií ušetrí finančné prostriedky len pri budovaní webu, v dlhodobom horizonte však môže zapríčiniť pokles tržieb ubytovacieho zariadenia. Kvalitná webová stránka, ktorá je pravidelne aktualizovaná sa stará o značku podniku. Je preto potrebné brať do úvahy, že čím bude vyšší je počet spokojných návštevníkov, tým bude väčšia pravdepodobnosť konverzie návštevníka na zákazníka. (Madlenak et al., 2015, A)

V prieskume realizovanom na vzorke 376 hotelierov, až 70% respondentov uviedlo, že najväčšiu návratnosť investícií zaznamenali práve z implementácie online nástrojov. Približne 73% z nich sa zhodlo, že úsilie marketingovej komunikácie závisí na vnútropodnikových zamestnancoch, ktorí riadia správu marketingovej komunikácie. Hotelieri súhlasia s využitím outsourcingu, ktorý by optimalizoval výšku nákladov a zabezpečil ich efektívnu správu, čo by v konečnom dôsledku zabezpečilo väčšie príjmy. Poradenstvo by malo tvoriť približne 8-10% z rozpočtu online marketingovej komunikácie. (Lopez & Freire, 2015) Pre nezávislé podniky poskytujúce ubytovacie služby, by takáto forma poradenstva pomohla k efektívnemu SEO, SEM, meta vyhľadávaniu, ako aj k ostatným nástrojom marketingovej komunikácie. (Majerova et al., 2013)

3. Cieľ a metodika

Cieľom príspevku je poukázať na to ako návrh a vytvorenie internetovej prezentácie, ktorá je zameraná na oblasť ubytovacích a stravovacích služieb a následná aplikácia vhodných nástrojov marketingovej komunikácie dokáže zvýšiť záujem zákazníkov o webové stránky podniku a tak zabezpečiť efektívnosť a ziskovosť podniku. Metodický postup ako dosiahnuť naplnenie požadovaných cieľov je možné načrtnúť ako postupnosť krokov:

1. Tvorba (resp. reinžiniering) webovej stránky podniku
2. SEO optimalizácia (on-page a off-page) webovej stránky
3. Tvorba identity na sociálnych sieťach
4. Zapojenie do partnerských programov
5. Emailový marketing
6. Kontinuálne vyhodnocovanie aplikovaných nástrojov marketingovej komunikácie

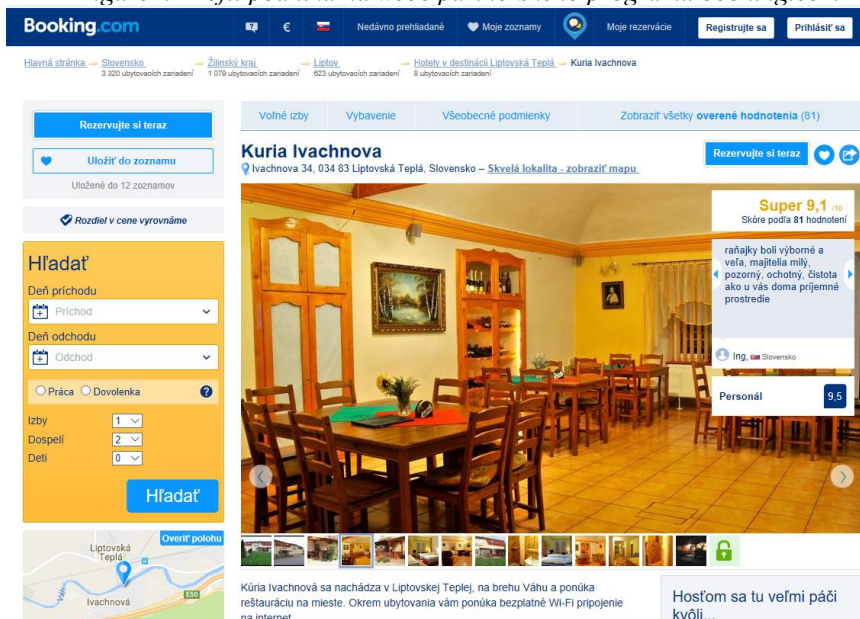
4. Výsledky a diskusia

Pre lepšie priblíženie navrhovanej metodiky bola realizovaná praktická aplikácia v podmienkach vybraného podniku zo segmentu SME pôsobiaceho v oblasti poskytovania ubytovacích a stravovacích služieb. Tento podnik doteraz nepôsobil v online priestore a preto bolo prvým krokom navrhnutie a vytvorenie novej internetovej prezentácie podniku. Webová stránka obsahuje okrem základných informácií podniku taktiež online rezervačný systém a nástroje pre interakciu so zákazníkmi.

Po vytvorení internetovej prezentácie nasledovala realizácia optimalizácie webových stránok pre vyhľadávače (SEO). Tá sa uskutočnila úpravou zdrojového kódu stránky (on-page SEO), ale najmä linkbuildingom, teda prepojením novovytvorenej stránky s existujúcimi webovými stránkami (off-page SEO). Na základe tohto kroku svetové vyhľadávače zaregistrovali existenciu tejto stránky a zapojili ju do výsledkov vyhľadávania pre určité kľúčové slovo. Toto je významný aspekt penerácie do globálneho prostredia.

Vytvorením podnikového profilu na sociálnych sieťach je možné budovať povedomie o podniku a šíriť jeho dobré meno. Je to efektívny nástroj pre komunikáciu s používateľmi. Vzhľadom na dominanciu sociálnej siete Facebook u európskych používateľov internetu, bol vytvorený podnikový profil v tejto sociálnej sieti. Následne boli aplikované vybrané nástroje marketingovej komunikácie vhodné pre tento segment, s cieľom vyvolať záujem zákazníkov o vytvorenú webovú stránku podniku vo väzbe na zvýšenie ziskovosti podniku. Úspešnosť Facebook profilu je možné merať prostredníctvom neplatených štatistických nástrojov, ktoré sú umiestnené priamo na sociálnej sieti. (Kolarovszki et al., 2016) Pomocou nich je možné sledovať nárast publika a atraktivnosť jednotlivých príspevkov, ktoré sa postupne pridávali na profil. Podľa komentárov a počtu zdieľaní alebo kliknutím na tlačidlo „Páči sa mi to“ je možné zistiť, ktorý z príspevkov vyvolal záujem a aký typ uverejnených príspevkov na sociálnej sieti stránky je efektívne publikovať.

Figure 1: Profil podniku na webe partnerského programu booking.com



The image shows a screenshot of the Booking.com website profile for 'Kuria Ivachnova'. At the top, there's a navigation bar with 'Booking.com' logo, currency (€), flags for Slovakia and Czech Republic, and links for 'Nedávno prehladané', 'Moje zoznamy', 'Moje rezervácie', 'Registrujte sa', and 'Prilásiť sa'. Below this is a breadcrumb trail: 'Hlavná stránka - Slovensko - Žilinský kraj - Liptov - Hotely v destinácii Liptovská Teplá - Kuria Ivachnova'. The main content area is divided into sections: 'Rezervujte si teraz', 'Uložiť do zoznamu', 'Rozdiel v cene vyrovnáme', and a search filter section with 'Hľadať' button. The search filter includes 'Deň príchodu', 'Deň odchodu', 'Práca / Dovolenka', 'Izby', 'Dospelí', and 'Deti'. A large photo of the restaurant interior is displayed, with a 'Super 9,1' rating and a review snippet: 'raňajky boli výborné a veľa, majtelia milý, pozorný, ochotný, čistota ako u vás doma príjemné prostredie'. Below the photo is a map showing the location in Liptovská Teplá. At the bottom, there's a text box: 'Kuria Ivachnova sa nachádza v Liptovskej Teplé, na brehu Váhu a ponúka reštauráciu na mieste. Okrem ubytovania vám ponúka bezplatné Wi-Fi pripojenie na internet.' and a quote: 'Hostom sa tu veľmi páči kvôli...'

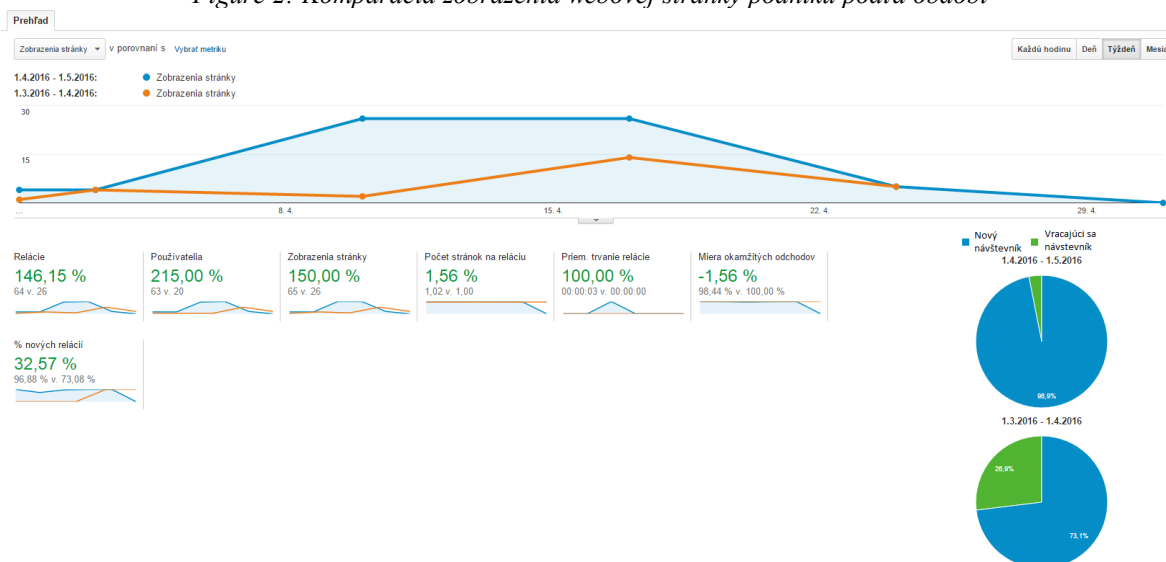
Source: www.booking.com

Osvedčeným nástrojom pre prilákanie veľkého počtu návštevníkov webových stránok je zapojenie sa do partnerských programov. Z analýzy nástrojov marketingovej komunikácie v oblasti ubytovacích a stravovacích služieb vyplýva, že rezervačné portály sú významným prezentačným a súčasne aj distribučným kanálom. Zákazníkom umožňujú porovnávať rôzne ubytovacie zariadenia podľa stanovených kritérií. Vo väzbe na túto skutočnosť bol podnik zapojený do celosvetového partnerského a rezervačného programu booking.com (obrázok 1). Email marketing patrí medzi veľmi úspešné a zároveň lacné nástroje marketingovej komunikácie na internete. Skôr, ako podnik využije túto formu priameho marketingu je nutné získať podrobné informácie o zákazníkoch, na základe ktorých môže diferencovať segmenty adresátov. Jeho sila spočíva v tom, že sa oslovujú potenciálni zákazníci. V súčasnosti podnik nemá k dispozícii databázu klientov s ich kontaktnými údajmi a preto nie je možné vytvoriť emailovú kampaň. Aj napriek tomu bol navrhnutý grafický dizajn emailu, ktorý bude zasielaný návštevníkom stránky prihláseným na odber noviniek.

Meraním účinnosti zvolenej emarketingovej stratégie a vybraných nástrojov marketingovej komunikácie je možné zistiť, či zvolená stratégia a vybraný nástroj je pre podnik vhodný. Okrem vyhodnocovania aplikovaných foriem online marketingovej komunikácie je nutné analyzovať aj finančné údaje o podniku. Pre takéto vyhodnotenie boli využité nástroje zberu a analýzy kvantitatívnych dát: Google Analytics a jednoduchá analýza obsadenosti ubytovacieho zariadenia.

Ako príklad efektívnosti nasadenia emarketingovej stratégie v prostredí podniku môže slúžiť porovnanie návštevnosti webových stránok pred a po aplikácii nástrojov online marketingovej komunikácie. Grafické znázornenie je doplnené aj percentuálnou komparáciou sledovaných období, ktorá vyjadruje mieru okamžitých odchodov, počet stránok zobrazených za jednu reláciu a celkový počet relácií.

Figure 2: Komparácia zobrazenia webovej stránky podniku podľa období



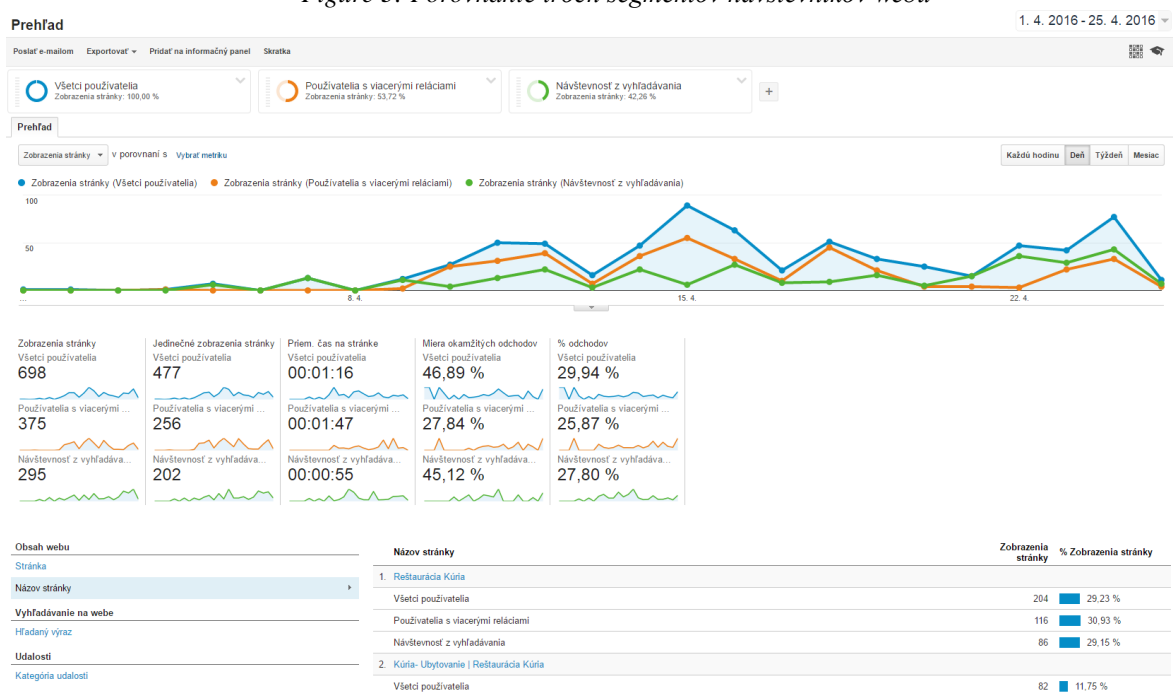
Source: <http://analytics.google.com/>

Z výsledkov grafického porovnania návštevnosti je možné konštatovať, že zvolené online marketingové nástroje zabezpečili vyššiu návštevnosť internetovej stránky podniku. Porovnaním počtu zobrazení stránok v sledovaných obdobiach došlo po aplikácii nástrojov emarketingovej komunikácie k nárastu zobrazení o 150%. Významným zistením je, že počet

nových relácií (nových návštevníkov) po aplikácii emarketingových nástrojov sa zvýšil o takmer 33% oproti predchádzajúcemu obdobiu. Miera okamžitých odchodov priniesla opäť pozitívne výsledky, pretože sa znížila o 1,56% oproti predchádzajúcemu obdobiu.

Aby boli výsledky výskumu presnejšie, analyzovalo sa obdobie s najvyššou návštevnosťou internetovej stránky podniku. Do grafického zobrazenia boli pridané nové segmenty v rozsahu dátumov, kedy sa umiestňovali príspevky na firemný profil v sociálnej sieti Facebook.

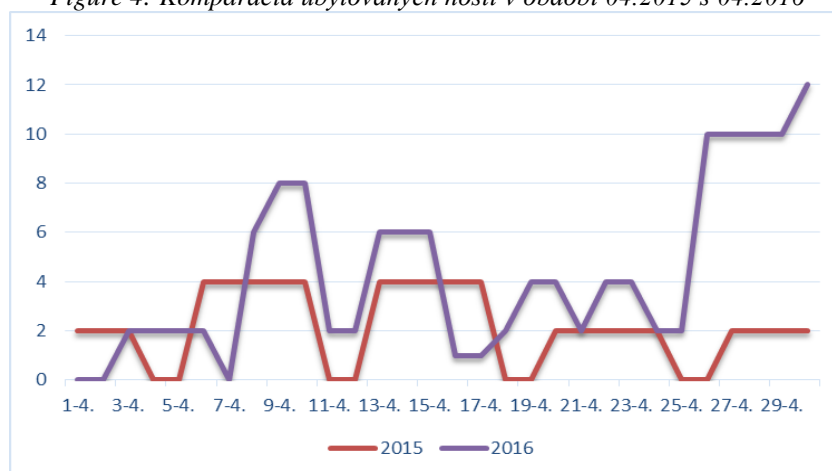
Figure 3: Porovnanie troch segmentov návštevníkov webu



Source: <http://analytics.google.com/>

Obrázok 3 znázorňuje komparáciu segmentov: používatelia s viacerými reláciami a návštevnosť z vyhľadávania s celkovou návštevnosťou webu. V sledovanom období z celkového počtu zobrazených stránok 698 (počítajú sa aj opakované zobrazenia jednej stránky) až 375 používateľov vykonalo na stránke viac ako jednu reláciu. Priemerný čas strávený na stránke za spomínané obdobie zo všetkých zobrazení predstavoval 1:16 minúty. Segment užívateľov s viacerými reláciami strávil na stránke priemerný čas 1:47 minúty. Najvyššia návštevnosť stránky jednotlivých používateľských segmentov s viacerými reláciami bola zaznamenaná 15.4.2016. Práve v tento deň bol v profile podniku na sociálnej sieti Facebook zverejnený odkaz na webové stránky podniku. Z uvedeného vyplýva, že zverejňovanie vlastných odkazov so zaujímavým obsahom na sociálnej sieti je dôležitou súčasťou online marketingovej komunikácie. Táto akcia zabezpečila zvýšenie návštevnosti stránky v daný deň až na 89 zobrazení stránky, pričom 55 návštevníkov vykonalo viac ako jednu reláciu. Úspešnosť môžeme jednoznačne pripísať uverejneniu príspevku na Facebooku, pretože v tento deň nebola zaznamenaná žiadna návšteva z vyhľadávania.

Figure 4: Komparácia ubytovaných hostí v období 04.2015 s 04.2016



Source: Autor

Opodstatnenosť využívania emarketingových stratégií je zrejmá aj z výsledkov komparácie a analýzy obsadenosti ubytovacích kapacít podniku v období pred (apríl 2015) a po implementácii emarketingu (apríl 2016). Z výsledkov uvedených v grafickom zobrazení (Obrázok 4) je možné konštatovať, že zvolené a implementované nástroje marketingovej komunikácie mali relevantný vplyv na efektívnosť podniku. V období apríl 2015 bol počet rezervovaných izieb 64 a v mesiaci apríl 2016 sa ich počet zvýšil o polovicu. Bližšou analýzou získaných údajov sa dospelo k záveru, že primárnou príčinou zvýšenia počtu rezervovaných ubytovacích jednotiek v apríli 2016 bolo zavedenie affiliate programu s portálom Booking.com. Zo 130 rezervácií bolo 78 registrovaných práve prostredníctvom rezervačného portálu Booking.com.

Samotná realizácia stanovených cieľov bola do značnej miery podmienená záujmom, finančnými možnosťami a predstavami majiteľov vybraného podniku. Aplikáciu emarketingových stratégií je potrebné neustále doladovať a prispôbovať jednotlivé nástroje meniacemu sa prostrediu internetu. Prezentovaný príklad je ukázkou pozitívnych dopadov vhodného pôsobenia online marketingových nástrojov v globálnom internetovom prostredí.

5. Conclusion

Všeobecne je možné konštatovať, že ak podnik chce úspešne pôsobiť v online priestore mal by dodržiavať vyššie uvedenú metodiku. Pre verifikáciu tohto tvrdenia sa realizoval pilotný prípad, kde sa postupovalo v zmysle metodiky. Práve vďaka vytvorenej koncepcii sa vybraný podnik stal úspešným v online priestore.

Celá koncepcia emarketingovej stratégie bola založená na využívaní nástrojov nízko nákladovej marketingovej komunikácie. Od vytvorenia internetovej stránky, cez jej optimalizáciu, až po aplikáciu nástrojov marketingovej komunikácie bola snaha finančne nezaťažovať vybraný podnik. Tento prístup má však svoje limity. Ak chce byť podnik v súčasnom vysoko konkurenčnom globálnom prostredí a technologicky vyspelom svete úspešný, musí investovať finančné prostriedky do ďalších nástrojov online marketingovej komunikácie (Facebook Ads, PPC, tvorba jazykových mutácií webových stránok a podobne), pretože ponuka ubytovacích a stravovacích služieb je v súčasnosti veľmi vysoká a získať zákazníkov je stále náročnejšie.

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THE ASSESSMENT OF E-GOVERNMENT READINESS IN THE GLOBALIZATION PROCESS

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Abstract. This paper deals with the assessment of e-government readiness in the globalization process. Nowadays, there are a lot of benefits of e-government that should be emphasized in the globalization process, especially with the rise of new trends in modern technologies such as mobile broadband, cloud computing, open data, big data, social media, green technologies, etc. Not only the citizens of a country receive a quality service and achieve positive outcomes where possible, but the government and other stakeholders worldwide are also benefited by adoption of an e-government system. Therefore, this paper presents a comparative analysis of e-government readiness based on the selected global e-government readiness reports and other related e-government initiatives. As a result, it identifies the key challenges and policy options to address the importance of these evaluations in the globalization process. Further, it also provides a global scale classification of related reports, indices and ranks focusing on the best performing countries in the world from the recent past. The results suggest that the attention of governments should be particularly focused on the principles of open government, such as transparency, accountability and participation, multichannel approach and services delivery (one-stop portals), cross-border digital public services, mobile government, and promoting sustainable (green) infrastructure with the use of cloud computing.

Keywords: e-government readiness, globalization, assessment, trends, comparative analysis.

JEL Classification: C43, H11, L86, O38

1. Introduction

The development, diffusion and utilization of modern Information and Communication Technologies (ICT), particularly the Internet, create a worldwide trend of using ICT and the Internet to deliver public services and infrastructure in a much more convenient, efficient, customer-oriented and cost-effective way than ever before. This so-called e-government offers benefits to citizens and businesses in that it can enhance public service efficiency, quality, and cost-effectiveness (Kassen, 2014; Rorissa et al., 2011; Yildiz, 2007). The assessment of e-government is a part of the appealing field of e-government which has recently attracted the attention of many researchers, who most of the time carry out evaluations of e-government maturity and do international comparative analyses that rank different governments, nations, or countries (Bogdanoska-Jovanovska, 2016). But the sustainable and successful development of e-government also carries new risks emerging from technological or societal trends in ICT. It involves the generating, storing, processing, and transferring of much larger amounts of data

requiring new cybersecurity and privacy approaches across the entire data lifecycle, critical infrastructure requirements and the use of cloud computing, the open government movement, which has emphasized transparency, collaboration, and innovation at all levels of government, etc. (Attard et al., 2015; Kao, 2015; Máchová and Lněnička, 2015; Zissis and Lekkas, 2011).

Globalization of e-government is a technological and social process in which the constraints of geography on economic, political, social and cultural arrangement recede, in which people interact with each other in all spheres of life more intensively (Kassen, 2014; Pardhasaradhi, 2014). Generally, all this globalization is driven partly by cheaper, easier, and faster transport and communication, emerging market liberalization, democratic and social changes, and ICT revolution. In this context, it is crucial to compare the most important global e-government readiness reports and other related e-government initiatives, and identify the key challenges and policy options to address the importance of these evaluations in the globalization process.

2. Research Methodology and Methods

The methodology of this paper was determined by the principles of comparative analysis. Thus, it provides a comparison and overview of e-government readiness based on the selected global e-government readiness reports and related global e-government initiatives. Its main contribution is presented through the classification of these sources and identification of the main global trends, their implications for practice, the resulting challenges, opportunities and policy options in the globalization process. These findings then should serve as a guide of best practices with the aim of facilitating the global improvements of e-government systems. Further, it addresses the following research questions: What is the relationship between e-government readiness and globalization? And how can the assessment of readiness and related trends be used to improve the implementation of e-government in the globalization process?

The first goal is to examine the global frameworks adopted to assess the related areas in the e-government readiness at the international level, with the aim that it will contribute to the current reflections on this topic worldwide. Drawing on the rise of new trends in modern ICT such as mobile broadband, critical infrastructure, cloud computing, open data, big data, social media, green technologies, cybersecurity, etc., a further theoretical goal is to understand the contributions of these trends and classify them in the global context of e-government systems. This analysis will then provide practical guidance and recommendations for the governing and implementation of these trends. Besides that, the best performing countries in the world from the recent past will be compared based on the indices identified. Finally, a set of best practices and implications for practice will be provided to improve the global e-government readiness.

The main methods used are systematic literature review, comparative and content analysis of related reports focusing on the e-government development, synthesis and classification of results according to the proposed criteria.

3. Literature Review and Background

Governments from all over the world are constantly looking for ways to achieve success in e-government implementation especially after investing enormous amounts of resources in related projects (Kassen, 2014). E-government readiness or the preparedness is an important indicator of the quality of a country's technological and telecommunication infrastructure and

the ability of its citizens, businesses and governments to adopt, use and benefit from modern technologies. As government develops e-government systems to offer such enhanced services to the citizens, further assessment efforts are required to measure the effectiveness of the e-government development and readiness (Siskos et al., 2014; Máchová and Lněnička, 2015). It is studied by building frameworks, benchmarks and models of its stages (Yildiz, 2007), and can be then assessed periodically by various reports, indices and ranks. These assessments are a foundation for implementing effective e-government strategies and initiatives that supply significant knowledge and information sources for policy and decision making (Rorissa et al., 2011). They are conducted by various international organizations, but sometimes are based on a limited number of (subjective) indicators and do not highlight the multidimensional nature of the electronically provided services (Siskos et al., 2014; Máchová and Lněnička, 2015).

The basic idea of assessments is first to find the criteria which reflect the performance of e-government and then design a scoring system for each of these criteria to transform the data collected from criteria into numbers that have the same basis for comparison. Weight, which represents the relative importance, is then assigned to each criterion to obtain a weighted sum to represent the overall readiness of each country with regard to the development of e-government. All countries are then ranked based on the weighted sum. Countries with low ranks should then be able to make appropriate improvements by identifying the criteria with low scores (Kao, 2015). In general, most of them tend to measure the readiness of a country according to how it is capable to deal with infrastructure and technology, people and human skills, accessibility and connectivity, and transparency (Yildiz, 2007; Rorissa et al., 2011; Siskos et al., 2014). Some other similarities applicable to all measurements are security or the overall level of education and business sophistication (Máchová and Lněnička, 2015). Kassen (2014) argues that the international e-government agenda suffers from its overgeneralization as a tool to achieve better governance. It does not take into account heterogeneous political and institutional environments in different countries, and various disparities in harmonization of realization procedures on a global scale. The processes of globalization then demand policy changes and restructuring of government organizations (Pardhasaradhi, 2014).

A recent comparison of related reports, indices and ranks can be found e.g. in Bogdanoska-Jovanovska (2016), Rorissa et al. (2011) or Máchová and Lněnička (2015). Tokárová (2015) then focused on the competitiveness measuring in conditions of globalization and presented the related indices, which may be also used in the e-government context (Lněnička et al., 2015). However, none of these papers discussed the main global trends, their implications, the resulting challenges, opportunities and policy options in the globalization process. It should be also noted that national governments often cannot achieve significant progress in building e-government projects without participation of people due to weak promotion of the idea itself among citizens, businesses and other stakeholders (Kassen, 2014; Máchová and Lněnička, 2015). According to Zissis and Lekkas (2011), if these stakeholders are not fully informed about the benefits of e-services, they are unlikely to use them and participate in the further development of e-services. What is currently lacking from most e-government information systems is the capacity to support effective citizen participation in the decision-making process, beyond the electronic implementation of traditional bureaucratic services (Zissis and Lekkas, 2011). Cloud computing as well as open data should be an option to improve e-services, transparency, accountability, and deliver these services to citizens and businesses. Opening data may allow citizens and businesses to analyse various datasets and understand what governments are spending public resources on (Lněnička et al., 2015). Big data create usable

insight and value from large amounts of structured and unstructured data coming from different sources and with differing dynamics (Bertot and Choi, 2013). Cloud computing and open (big) data are complementary approaches to storing, processing, accessing and reporting information, which motivate a technology shift to data centric architecture using clouds and distributed platforms (Lnenicka and Komarkova, 2015). The cloud spans many borders and may be the ultimate form of globalization (Zissis and Lekkas, 2011). Thus, it is important to explore their potential as a means of technology transfer and innovation in the developed and developing world in the context of global ICT programs (Navarra and Cornford, 2009)

4. Comparative Analysis of E-government Readiness

In a global perspective, frequently cited e-government readiness reports include the United Nations' (UN) E-government rankings: the E-government Development Index (EGDI) and the E-participation index (EPI); the World Economic Forum's (WEF) Networked Readiness Index (NRI); the International Telecommunication Union's (ITU) ICT Development Index (IDI) and the Waseda E-government ranking. Shortly after 2010, new indices focusing on the assessment of new trends in e-government were introduced, e.g. the Asia Cloud Computing Association's (ACCA) Cloud Readiness Index (CRI), Business Software Alliance (BSA) Global Cloud Computing Scorecard, the Web Index and the Open Data Barometer (ODB) index produced by the World Wide Web Foundation (W3F), the OURdata Index by the Organization for Economic Co-operation and Development (OECD), the Open Knowledge Foundation's (OKF) Global Open Data Index (GODI) or the Global Cybersecurity Index (GCI) by the ITU (Máchová and Lněnička, 2015). Based on the relevance of these sources, the following global reports were selected and compared: 1. Measuring the Information Society Report by the ITU; 2. The Global Information Technology Report by the WEF; 3. UN E-Government Survey by the UN; and 4. Waseda International E-Government Ranking Survey by the Waseda University. These reports are then compared in the Table 1.

Table 1: Comparison of related reports, indices and ranks

Report	Index	Period covered	Reports published	Countries covered	Selected areas (criteria) of e-government measured
1.	IDI	2009 – 2015	7	167	ICT access, ICT use and ICT skills
2.	NRI	2002 – 2016	15	139	Environment, readiness, usage and impact
3.	EGDI, EPI	2003 – 2016	8	193	Online service, human capital and telecommunication infrastructure
4.	Waseda index	2005 – 2016	12	65	Network infrastructure, efficiency, online services, e-government promotion, etc.

Source: Author

Table 2 shows an example of the most recent results, which are represented by the ranking of ten most successful countries covered by those indices. However, they cannot be clearly compared in time because there is a various time gap between the individual reports or they use different components to measure the e-government development and readiness. Only the United Kingdom can be found in the top ten ranking of all the indices. Therefore, this progress will be investigated more thoroughly and quantitatively.

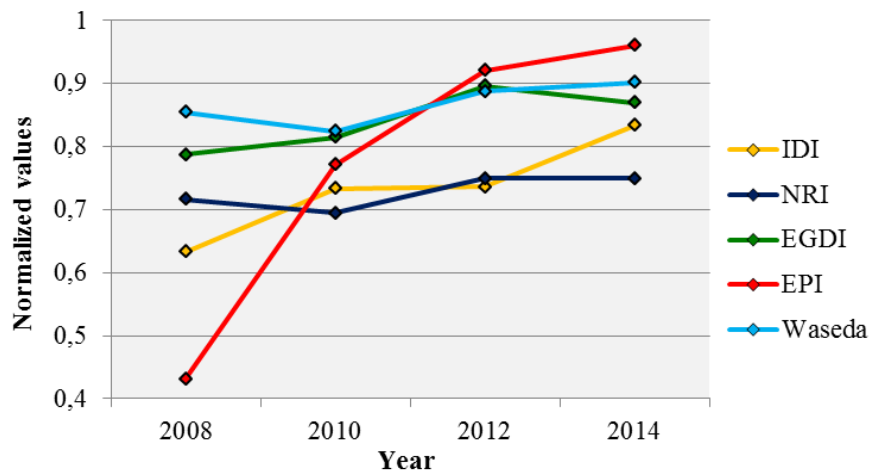
Table 2: Comparison of the best performing countries in the world from the recent past

Rank	IDI 2015	NRI 2016	EGDI 2016	EPI 2016	Waseda 2016
1.	Korea	Singapore	United Kingdom	United Kingdom	Singapore
2.	Denmark	Finland	Australia	Japan	United States
3.	Iceland	Sweden	Korea	Australia	Denmark
4.	United Kingdom	Norway	Singapore	Korea	Korea
5.	Sweden	United States	Finland	Netherlands	Japan
6.	Luxembourg	Netherlands	Sweden	New Zealand	Estonia
7.	Switzerland	Switzerland	Netherlands	Spain	Canada
8.	Netherlands	United Kingdom	New Zealand	Singapore	Australia
9.	Hong Kong	Luxembourg	Denmark	Canada	New Zealand
10.	Norway	Japan	France	Italy	United Kingdom

Source: Author

At first, all values had to be normalized by scaling between zero and one in order to ensure that the dataset uses the same unit of measurement and can be compared. It was done for the IDI, NRI and Waseda index, since the IDI is measured on the scale from 1 to 10, the NRI (1 to 7) and the Waseda index from 0 to 100. The progress of the United Kingdom's e-government development and readiness was assessed between the years 2008 and 2014. As can be seen in the Figure 1, the most significant progress was made by the EPI, which is primarily focused on the use of online services to facilitate provision of information by governments to citizens (e-information sharing), interaction with stakeholders (e-consultation), and also engagement in decision-making processes (e-decision making). The United Kingdom is also currently the global leader in the open data movement; see the GODI and ODB rankings. Finally, there can be seen a decline in the period 2008 – 2010 which, in part, is attributable to the outbreak of the Global financial crisis and the European debt crisis.

Figure 1: The progress of the United Kingdom's e-government development and readiness



Source: Author

5. Main Findings and Implications for Practice

Based on the above literature review and comparative analysis of e-government readiness; a list of potential factors that are widely recognised as having significant impacts on a nation's readiness was gathered. It describes a set of best practices and recommendations addressing technology, strategy and the broader approach to realizing e-government in practice. Further,

the findings provide some important information related to what strategies could yield more successful results to enhance and improve the nation's position in the related rankings.

Firstly, the current state is influenced by the rise of the Internet and broadband, better and faster IT infrastructure and networks, increased outsourcing and privatization, improvements in business processes, improvements in procurement processes, increased productivity, system integration, performance measurement and accountability, increased public expectations, and the globalization process, which creates opportunities for the establishment of e-government systems in the public sector, especially in the developing countries, since the introduction of standard strategies and initiatives in building e-government in these countries are based on ideas and practical recommendations which come from more developed nations. Therefore, the main global trends for the last few years are summarized in the Table 3. This summary should help to monitor and assess the digital divide, and highlight areas for improvement. The key trends evolved from the support of mobile phones, broadband and integration of systems to the use of cloud computing, multichannel approach, participation, and open and big data. Nowadays, the paradigm shift movement is focused on the sustainability represented by the emphasis on transparency, accountability, interoperability and green technologies.

Table 3: Summary of the main global trends in the e-government development and readiness

Report	Index	2008+	2010+	2012+	2014+
1.	IDI	mobile phones, broadband, connectivity for schools	fixed broadband penetration, participation, gender equality	cloud computing, multichannel approach and services, big data	social media, cybersecurity, inclusiveness, sustainability
2.	NRI	connected gov., mobility and connectivity, broadband	sustainability, cloud computing, broadband, smart economy, web 2.0	social media, smartphones, cybersecurity, mobile broadband	inclusive growth, open and big data, green policy, digital content
3.	EGDI, EPI	connected gov., broadband, knowledge econ., integration	broadband, global participation, mobile phones, open data	cloud computing, social media, m-government, coordination	sustainability, coordination, transparency, open and big data
4.	Waseda index	participation, new e-services, broadband, promotion	mobile and green government, multichannel gov., open data	cloud computing, open and big data, digital inclusion, social media	cloud computing, cybersecurity, local e-gov., interoperability

Source: Author

The political leadership and e-government leaders need simpler and effective information about e-government readiness for visualizing, conveying, and applying the related strategies and initiatives. These should be built with strategic thinking and sustainable long term plans. These plans then should encompass aligned e-government projects, each having concrete and measurable outcomes. Further, adoption of government enterprise architecture responding to emerging ICT trends such as service-orientation, open and big data, mobile broadband, social media or cloud computing, is also vital to the success of e-government systems. Hence, e-government initiatives should ensure citizen centric e-services which can be accessed through convenient channels of delivery. Finally, the key factors and trends contributing to a high level of e-government development and readiness are past and current investments in human capital and education of individuals in a country resulting in wider participation and collaboration with the public sector; in telecommunication and ICT infrastructure resulting in better nation's critical infrastructure security; and provision of online services.

Based on these findings, the following gaps should be filled: security and privacy of data as well as public services, multichannel approach and services delivery (one-stop portals), cross-border digital public services, interoperability, m-government, promoting sustainable (green) infrastructure with the use of cloud computing, lack of coordination, and digital divide, which refers to the gap between citizens, households, businesses and geographic areas at different socio-economic levels with regard both to their opportunities to access ICT and to their use of the Internet. Generally, an e-government ready country is one that has: the national ICT policy and regulatory environment; physical infrastructure (high bandwidth, reliability, affordable prices), telecommunication and ICT infrastructure (critical infrastructure and cybersecurity), status of national cybercrime laws, status of electronic signature legislation; integrated current ICT throughout businesses (e-commerce, ICT sector); human capital (quality of education and technology skills, knowledge economy growth), and communities (applications using open data, organizations online, ICT used in everyday life); e-participation and international cooperation in global projects through the harmonization with internationally recognized and already established platforms, procedures and standards in promoting universal e-government; open government, open (big) data portals, data processing and publication services and tools; and green technologies and the use of cloud computing related strategies and initiatives.

6. Conclusion

Factors like globalization, economic recession, and increasing regulation are forcing many governments to transform their initiatives and infrastructures. Therefore, this paper offers a comprehensive view on the assessment of e-government readiness for globalization process. Overall, it found that the international e-government readiness frameworks and reports are in agreement with the technological changes and the current best practices of the public sector in the developed countries. The results imply that the developing countries should benefit from the experiences of the developed countries, which were thoroughly described in this paper.

The main technological trend is a standardization of e-government realization procedures on a global scale. In addition, the active promotion of open data-driven and civic engagement projects and platforms has the potential to the development of e-government readiness, i.e., open data portals, multichannel approach and services delivery, cross-border digital public services, m-government or promoting sustainable (green) infrastructure with the use of cloud computing. On the other hand, there should be the lack of adequate infrastructure in many developing nations which may be an obstacle in setting the global projects. Therefore, the first steps should be done in the area of ICT infrastructure and broadband quality. Further progress will require an understanding of the many challenges, in particular, in mitigating the effects of the global digital divide and national, regional and also local ICT disparities.

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UNIVERSITY IN A COMPETITIVE GLOBAL MARKETPLACE

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Abstract. Like several other nonprofit and for-profit industries, the higher education sector has been subject to a series of fundamental challenges in the past decade. Now, higher education is becoming a global service delivered by quasi-companies in an ever-more complex and competitive knowledge market place. Constantly growing number of universities and decreasing number of secondary education graduates in the Slovak Republic cope with many challenges. Higher education institutions need an appropriate strategy, a necessity reflected in numerous calls for research on strategy in the higher education sector. It is important to realize, that the university in the emerging market is striving to gain sustainable competitive advantage. This paper makes an attempt to study university marketing communication. This article's purpose is to contribute to this discussion by providing prescriptive guidance to higher education managers in areas of competition strategy and sustainability of higher education as well. Marketing is being transferred from business applications to many academic institutions, and the pressure of a global economy and the pervasiveness of the internet had profound influence on education. The paper through descriptive statistics and regional analysis evaluates the current state in comparison with past situation of higher education in the Slovak Republic and discusses the necessary changes.

Keywords: university, marketing communication, regional analysis, global market place

JEL Classification: M30, I21, F01

1. Introduction

Like several other non-profit and for-profit industries, the higher education (HE) sector has been subject to a series of fundamental challenges in the past decade (Dei, 2011), (Madlenak et al. 2015), (Pucciarelli et al. 2016), (Burch et al. 2012). Education used to be considered a public good, provided by non-profit organizations that were unexposed to market pressure and had clear societal missions. Now, education is becoming a global service delivered by quasi-companies in an ever-more complex and competitive knowledge market (Blaskova et al., 2016), (Hemsley, 2011), (Komljenovic et al., 2007) Increasing competition between universities heightens the need for institutions to understand, manage, and leverage a strong brand (Rauschnabel et al., 2016), (Corejova & Rostasova, 2015). The globalization processes have become challenge for the university education. The paper presents the state of the higher education, (university education) in the Slovak Republic. The paper monitors the number of universities, their regional distribution and evaluates the regional disparities in HE in the Slovak Republic. All these disparities paper evaluates in relationship to demand for the most and the least requested field of the study. There are many studies and strategies presented

regarding to higher education worldwide. Demographic changes and changes in the labor market as well are the reason for the change not only in university education, but the university strategy as whole. European experts discuss the opportunities and issues of creating the unified European higher education space as a way to the leadership in the international labor market (Ritzen, 2011). In this respect the objectives of the European community have been defined in the Bologna Declaration and Lisbon Conference documents (2000). Over 50 countries have adopted by now the two-level system of higher education proposed by the Bologna Declaration. According to the forecasts, by 2050 the number of European youth studying at higher educational institutions at the age of 20 – 24 years will have amounted to 35 million people. As compared to 2010, it will decrease by 15 million (Ritzen, 2011), this trend probably caused the criticism of the Bolony process. Mainly the introduction of a mandatory three-year bachelor study every university has achieved the level of professional education, which had sense only in the countries, in which don't existed the system of professional education. It's eliminating the cold way the meaning of university as a place of scientists training for profession, in which presupposes are the unity of research and teaching (Liessmann, 2008).

The Slovak university education

There are many universities in the Slovak Republic, but what is missing is long-term concept and definition of the various universities, the lack of focus on the needs of society, but also students, reserves in imperfect legislation, insufficient diversification of curricula, expanding bureaucracy and downright painful financially starving. There is some evidence of such claims. While in July 2000 there were 21 state universities and two non-state universities in Slovakia, in the academic year 2012/2013, 20 public universities, three state universities, as well as 13 private universities and two foreign universities based in the Czech Republic provided higher education (Madlenak & Madlenakova, 2015) in 2015 there were 21 public, 3 state and 12 private universities. Despite all the complexity of today we must do all we can in order to prepare highly qualified professionals, people who will know and will want to prove more in their field. Average student will give an average performance in practice. If higher education should provide a path to professionalism in a particular field, then we shall insist on that. It is in the hands of teachers. Teachers are the ones who must guard the level of the field. Unprofessionalism, indifference, superficiality, sometimes inability or lack of preparation to provide students with an adequate form of what they need, unfortunately, shall return to teachers and certainly none of teachers wishes so (Isman & Krajčiová 2014). The negative effect is also the unilateral evaluation of universities according to scientific work and the degradation of study on to disliked activity. It is a sabotage of the traditional unity of scholarship and research, the mark along which is the University differs from other research and educational institutions. Significantly, for better use of didactic skills, are university professors and teachers send to centers for business advisories where are they being trained with counselors with bachelor's or master's education, mostly with psychological education. Here are the banal knowledge of the business ideology sold to universities as new way knowledge, from blended learning, diversity management to „balanced leading,.. (Ozdamli & Dubovec, 2014), (Ozdamli & Hafize, 2012)

2. Methodology

The methodology followed two phases. The first consisted of collecting data from universities. The intention was to collect data on academics' characteristics. Secondly, authors

measured the regional distribution, to be able to evaluate the regional disparities in HE in the Slovak Republic. All these disparities this paper evaluates in relationship to the demand for the most and the least requested field of the study.

Location quotient (LQ) measures a region's industrial specialization relative to a larger geographic unit. An LQ is computed as an industry's share of a regional total for some economic statistic divided by the industry's share of the national total for the same statistic. LQ of 1.0 means, that the region and the nation are equally specialized, where a_x – employment in the i -th sector in the selected region, c – total employment in the selected region, b_x – employment in the i -th sector in the whole country and d – total employment in the relevant country. (1)

$$LQ = \frac{\frac{a_x}{c}}{\frac{b_x}{d}} \quad (1)$$

Location Index (IL) measure the region's industrial specialization relative to a larger geographic unit, in terms of population, where X_{ij} – number of employees of the i -th sector in the selected region, Y_i – number of employees of the i -th sector in the relevant country, S_j – population in the selected region, S – population in the relevant country.(2)

$$IL = \frac{\frac{X_{ij}}{Y_i}}{\frac{S_j}{S}} \quad (2)$$

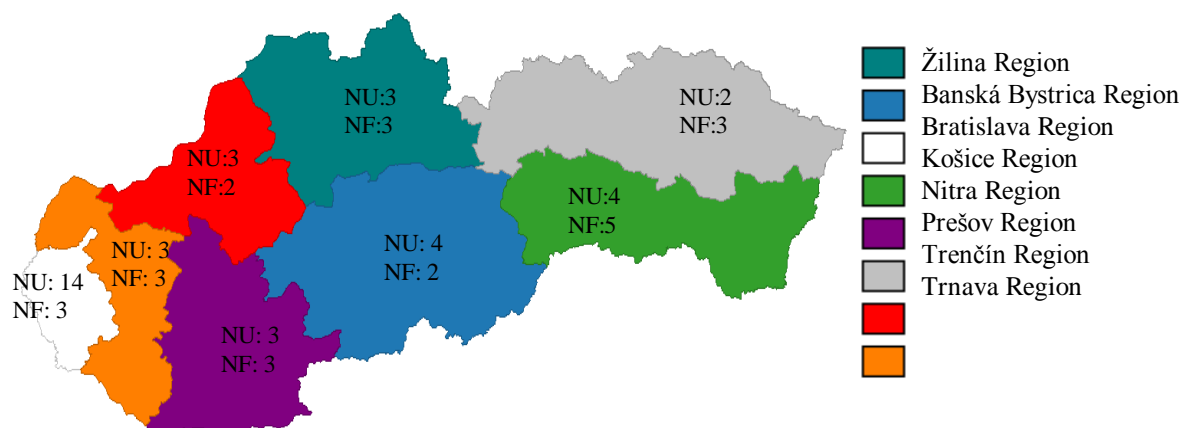
The overall level of region's specialization can be determined also by *the Index of relative regional specialization (IRS)*, where E_{ir} – employment in the i -th sector in the r region, E_r – total regional employment, E_{in} – total employment in sector i , E_n – total employment in the relevant country (3).

$$IRS = \sum_i \left| \frac{E_{ir}}{E_r} - \frac{E_{in}}{E_n} \right| \quad (3)$$

3. Results

Due to features of the HE system: only one of 36 Slovak universities had in 2015 more than 15 000 students (situated in Bratislava region), one university have more than 10 000 students (situated in Bratislava) as well, 9 universities have more than 5000 students (less than 10 000), 8 universities have more than 1 000 students (less than 5000), and finally the most – 19 universities have less than 1000 students. Figure 1 describes a number of universities and the number of faculties of universities in different regions of the Slovak Republic. The most universities are located in Bratislava region (with the capital city Bratislava). The region, with the largest number, where only faculties are situated is Košice Region. This situation can be justified by the importance of this region, where the second largest town in the Slovak Republic is situated (Košice). It is interesting, that despite the large socio-economic differences in the Slovak regions, there is about the same number of universities situated in all regions (except of Bratislava Region).

Figure 1: Number of universities and faculties (of different university) 2015



Note: Number of Universities (NU), number of Faculties (NF).
 Source: Author

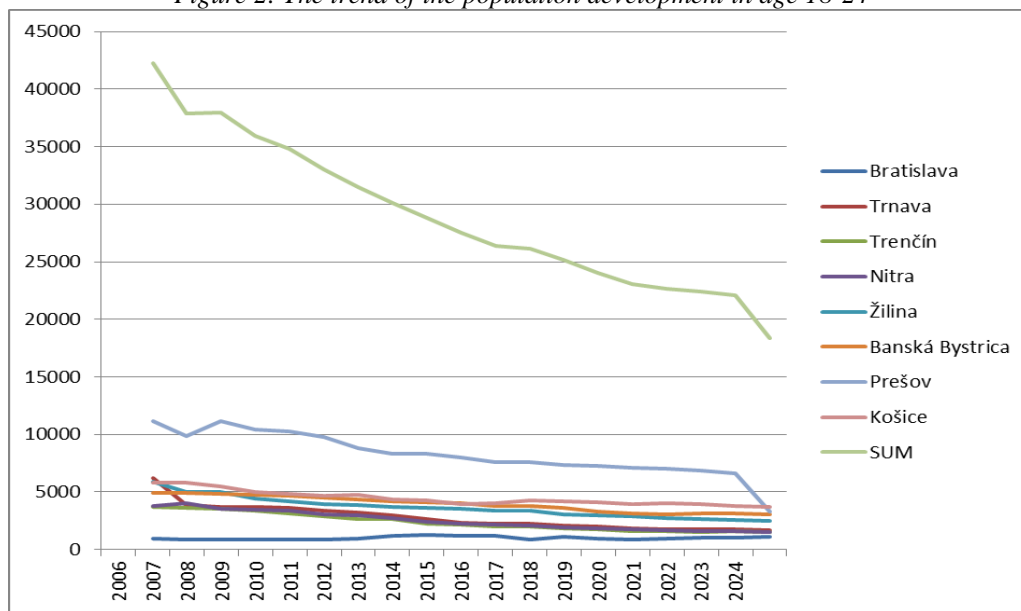
Table 1: Regional specializitation

Index	Year	Bratislava Region	Trnava Region	Trenčín Region	Nitra Region	Žilina Region	Banská Bystrica Region	Prešov Region	Košice Region
LQ	2013	1,75	0,62	0,24	0,87	0,85	1,25	0,5	1,25
IL		3,71	0,55	0,22	0,76	0,75	0,89	0,32	1,02
IRS		0,024	0,001	0,01	0,01	0,023	0,02	0,04	0,02
LQ	2014	1,74	0,63	0,25	0,87	0,87	0,75	0,50	1,25
IL		3,79	0,58	0,26	0,78	0,77	0,68	0,33	1,40
IRS		0,006	0,003	0,006	0,001	0,001	0,002	0,004	0,002

Source: Author

The regional disparity calculations highlighted the expected differences in individual regions. Taking into account the representation of the higher education sector in the region, calculated in relation to the number of employees, the largest location of the higher education is in Bratislava and Banská Bystrica and Košice region, where the Location quotient reaches a value higher than 1. This means the significant specialization of this sector in the region. When the specialization is calculated in a relation to the population (Location index), the specialization can be found in Bratislava and Košice Regions. In a deeper calculation, the Index of relative regional specialization shows the identity of the sectoral employment structure with the employment structure at the national level (Table 1). Negative phenomenon for the future of the university education in the Slovak Republic is the development trend of the population. Despite the declining number of people in age 18-24 years, the number of universities, in particular the private universities increases every year. This trend in addition to reduced quality of university education and the employment may affect the various regions. This can lead to make discharge university employees, what can significantly affect the unemployment situation in individual regions and economic situation as well.

Figure 2: The trend of the population development in age 18-24



Source: Author

If we compare the number of students in the first study year at all the universities in the academic year 2014/2015, the number was 165,000 students with the trend of development of population in age 18-21 (see Figure 2), we can see a situation when the number of potential students in this academic year was lower than the capacity of the offered university places. In the past, of course, the demand for university study far exceeds the supply. Under these conditions, in the past, students enrolled 96 % of received applications. The gradually increasing interest of third level (university study), university ambitiously increased their capacity in terms of the planned number received applications. But the trend of more applications than received student has not been followed by the same success. Even when since 2006 the number of registered and consequently enrolled student continuously declined, in 2015, the situation has highlighted when the number of applications amounted to 83 % of offered capacity (number of study places). To this situation, universities respond by the way of lowering the complexity, requirements and difficulty of the admission procedure, what did not influence the number of full-time university teachers, lecturers and professors (see Table 2). Another interesting finding is that, while the public and state universities dominate by the number of students in full time education of students in part-time studies, at private universities phenomenon occurred when the numbers of students in part-time studies exceed the number of full-time student. Student calculated per one university teacher quantifies Table 3. The number of university teachers in individual regions is approximate, because it is not

Table 2: Full time university teachers in all the Slovak universities regionally

Year	Bratislava Region	Tnava Region	Trenčín Region	Nitra Region	Žilina Region	Banská Bystrica Region	Prešov Region	Košice Region
2013	4552	626	282	1060	1047	1192	527	1634
2014	4638	655	265	1068	1051	892	540	1639
2015	4574	655	224	1067	1034	867	537	1628

Source: Author

taken into account location of individual faculties of the university in another region than the university domicile is situated.

Table 3: Student per one university teacher in academic year 2015/2016

	Bratislava Region	Tnava Region	Trenčín Region	Nitra Region	Žilina Region	Banská Bystrica Region	Prešov Region	Košice Region
Number of full time teachers	4574	655	224	1067	1034	867	537	1628
Number of students	57 962	11 179	5064	17 956	12 984	12 239	9025	17 754
Index*	12,67	17,06	22,61	16,8	12,55	14,11	16,80	10,90

Note: *Students per one university teacher

Source: Author

Table 4 describes the fields of study with the largest and smallest interest of prospective students, when the number of applications is taken into account in academic year 2014/2015. Based on the evaluation of the overall ranking interested applicants for the study of individual fields of study and evaluation of descriptive statistics can be stated that the average number of applications per one field of study is 676.19 applications and achieved a median value is 274 applications. As can be seen from the table 5, the most interested are students in is the field of "teaching subjects in combination" (4826 applications, the same like it was in 2013) and the least interest in 2015 was in the "Physical Engineering" field of study (3 application). The total number of applications for the 36 Slovak universities was 79,114 applications. Positive value of kurtosis indicates sharper peak (distribution) than the symmetric distribution, what can be presented that the bulk of the data (number of applications) were near the average of 676.19 applications.

Table 4: Rank of attractiveness of selected fields of study in 2015/2016

Rank	The highest interest		The lowest interest	
	Field of study	Number of applications	Field of study	Number of applications
1.	Teaching subjects in combination	4 826	Physical Engineering	3
2.	General Medicine	4 745	International business	4
3.	Economics and management of enterprise	3 827	Physiologically and clinical nutrition	6
4.	Preschool Elementary Education	3 044	Synecology	10
5.	Psychology	2 827	Evangelical Theology	15
6.	Law	2 422	Musicology , Process Technology	18
7.	Informatics	2 363	Insurance, Orthodox Theology	19
8.	Management	2 173	Classical Archeology, Mineralurgy	20
9.	Nursing	2090	Classical Languages, Mining Geology and Geological research	21
10.	Social Work	1606	Restoration	27

Source: Author according to CVIT

Table 5: Selected indicators of university attractiveness

Rank*	University (Slovak name)	University (English name)	Number of forms of the marketing communication	Number of applications 2015/2016	Number of students 2015/2016
1.	Univerzita Komenského v Bratislave (UK)	Comenius University in Bratislava	11	13193	20 905
2.	Slovenská technická univerzita v Bratislave (STU)	Slovak University of Technology in Bratislava	14	6283	13 005
3.	Univerzita Konštantína Filozofa v Nitre (UKF)	Constantine the Philosopher University in Nitra	12	5394	8513
4.	Prešovská univerzita v Prešove (PU)	University of Presov	12	4782	8644
5.	Univerzita Mateja Bela v Banskej Bystrici (UMB)	Matej Bel University	10	4403	8505
6.	Ekonomická univerzita v Bratislave (EU)	University of Economics in Bratislava	11	4130	8069
7.	Univerzita P.J.Šafárika v Košiciach (UPJS)	P.J.Šafárik University in Košice	11	4080	5849
8.	Žilinská univerzita v Žiline (ZU)	University of Žilina	13	3966	8306
9.	Trnavská univerzita v Trnave (TU)	Trnava University in Trnava	11	3015	4927
10.	Slovenská poľnohospodárska univerzita v Nitre (SPU)	Slovak University of Agriculture in Nitra	11	3009	7880

Note: * The university rank according to number of applications in academic year 2015/2016.

Source: Author

The bulk of the data is at the left, so the distribution is skewed left. However, this skewness, points out that despite the fact that a bulk number of applications reach a value near the average, bulk of data is less than the average. This mean, prevalent the phenomenon when a bulk number of fields of study (higher than average) were applied by a small number of applicants. The number of applications to universities can be considered as the information indicating the interest of the Slovak universities. Reflecting this demand, the table 5 presents

the rank of the best Slovak universities, when taking into account number of applications in academic year 2015/2016. When taking into account a number of applications, we could say, that the first one the UK is the prestigious university, followed by universities presented in this table. The table compares the number of applications, forms of the marketing communication and number of students as well.

4. Conclusion

Higher education sector in the Slovak republic has been subject to a series of fundamental challenges in the past decade. Constantly growing number of universities and decreasing number of secondary education graduates cope with many challenges. Higher education institutions need an appropriate strategy, a necessity reflected in numerous calls for research on strategy in the higher education sector. It is important to realize, that the university in the emerging market is striving to gain sustainable competitive advantage. Slovak universities should stronger apply their marketing communication mainly due to the large increase in the number of study places (a greater number of admitted students) at the individual universities. However, a reflection on the university high quality marketing communication should be a number of submitted study applications. Hopefully, the quality of higher education institutions will not continue to decrease but increase. Each university should uniquely define its core brand and communicate it with a greater degree of pervasiveness and consistency across various marketing mediums. Good communication strategy as a part of the university strategy can attract academically gifted students. To this effect, each university should try to identify the institution's strategic differentiators and actively promote them. It is clear that higher education institutions need to become more customer-oriented by identifying customer needs. This means that instead of students compering for selection, institutions should actively market themselves making student more aware of how the higher education institution can satisfy their needs. Finally, the communication strategy should take into account main trends that will influence higher education in the short-to medium term as well:

- Increasing competition
- Decreasing number of secondary graduates
- Large increase in the number of university accepted students

As written above, the number of applications does not independent on the number of marketing communication forms. Dynamic and challenging environments change reaches, that the marketing strategy becomes a priority for the university and higher education in assuring strong student and faculty recruitment attention. This study is based on national survey attempts to develop a research methodology than can be in a future easily duplicated in other national markets.

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INTEGRATED AUDITING OF ENTERPRISE MANAGEMENT SYSTEMS IN A GLOBALIZED ENVIRONMENT

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Abstract. European Economic Area currently substantially affects the free exchange of goods, services, capital and persons. The basic prerequisite for the functioning of this single market, however, is the unification of technical regulations and standards in all parts of the global market. Uniform Rules concerning of EU Member States (for regulated sphere) and technical standards (for non-regulatory sphere) have meaning if the whole market need only a single attestation of conformity. To demonstrate compliance must be ensured infrastructure of places of performing accreditation, certification, authorization, notification, inspection, testing, calibration and auditing. ISO standards and instructions for conformity assessment represent an international consensus on best practices. Their use contributes to the unity of conformity assessment, facilitate trade in non-regulated sector. Organizations are currently implementing globally standardized managements system not only to meet the requirements of individual standards EN ISO, but also to carry out the processes by combining, more effectively and efficiently. The authors present progressive trends and knowledge of foreign authors within the paper in confrontation with their own research outputs in the field of auditing and in this way implemented integrated management systems. The authors developed a concept of model for auditing integrated management systems by synthesizing knowledge and their own experience from professional audits. The main benefits of the integrated audits were formulated, their sources were specified and a conceptual approach, including its support was designed in this form of auditing. This connection is necessary to know in particular in relation to current European development programs and their implementation.

Keywords: international standards, integrated auditing, standardized management systems, modelling

JEL Classification: M42, L15, H12

1. Introduction

Auditing of standardized management systems in organizations is becoming more frequent in social practice, in scientific research, professional and educational areas. In principle, an audit is an effective system tool of accreditation, certification and notification to enforce uniform rules and procedures for conformity assessment and also in a non-regulated sector in globalized markets.

Integrated auditing of standardized systems in management seems to be a very progressive and effective tool for verifying the successfulness of implementation, updating and continuous improvement of management systems of quality, environment, occupational health and safety, information security, social responsibility etc. in the future. Therefore, it is necessary to develop more exact methodologies for their integrated auditing.

2. Theoretical and methodological approaches to integrated auditing of management systems

Our knowledge gained from research and monitoring undertaken in the field of integrated auditing of corporate management systems abroad was also confronted with its own audit practice.

It appears that now organizations implement standardized management systems into their processes, not only to meet the requirements of the standards, but also to perform the processes in a combined, efficient and overall more effective way. The organizations with this aim can focus on achieving significant internal benefits, as well as the fulfilment of external requirements (Asif et al., 2010).

Organizations that have implemented several management systems, regardless of whether these systems are integrated or not, they can carry out audits in relation to the requirements of the relevant standards of management systems in an integrated way. It is also possible to expect that organizations that have integrated their management systems at a certain level, they carry out also internal audits in a certain extent integrated (Bernardo et al., 2009).

Studies by Karapetrovic et al. (2003) and Bernardo et al. (2009) provide empirical evidence that internal audits show the level of integration in accordance with the level of integration of management systems. In this sense, the standard ISO 19011: 2012 can provide some assistance to an organization that seeks to integrate audits of implemented management systems. Audits of management systems in general in the foreign literature have been addressed by several authors (e.g. Karapetrovic & Willborn, 2003). Some guidance on integrated auditing can also be found in national standards, for example in the standard NZS 4581: 1999 applied in Australia / New Zealand, in Denmark DS 8001: 2005, in Spain UNE 66177: 2005, for example in British Specification PAS 99: 2006 (Bernardo et al., 2009).

The main advantages of integrated audits which are most frequent in the publications of foreign authors are:

- more optimal use of resources (Karapetrovic & Willborn, 1998; Douglas & Glen, 2000; Karapetrovic, 2002; Zutshi & Sohal, 2005; Salomone, 2008)

- creation of audit competences for different standards of management systems (Douglas & Glen, 2000; De Moor & De Beelde, 2005; Kraus & Grosskopf, 2008).

Empirical studies about the integration of management systems and the integrated auditing is generally very little and they are different (Bernardo et al, 2010). They are also contained in the publications of the authors Douglas and Glen (2000), Beckmerhagen, Berg, Karapetrovic, Willborn (2003), Fresner & Engelhardt (2004), Zeng et al. (2005, 2007), Zutshio & Sohal (2005), Karapetrovic et al. (2006), Salomon (2008), Bernard et al. (2009), Domingues, Sampaio & Arezes (2011).

However, we can state that practical studies related to the integrated auditing of standardized management systems are in insufficient number. This is also due to the fact that audits, regardless of whether they are integrated or not, are not generally widely reviewed. Many standards concerning management systems under which audits are performed, they are constantly reviewed, or new standards are developed.

2.1 Conclusions from foreign researches of the issue

Results of the research conducted by the authors Bernardo et al. (2009) in Spain on the sample of 435 organizations point out the following facts:

1) On the survey sample of the organizations, it was not possible to identify the organizations that did not have integrated audits of management systems that they have implemented in their processes at least at a minimum level. However, they prefer an integration of audits in such a way that they manage them and perform separately. Up to 86% of the surveyed organizations view internal audits are one of the most common integrated practices in management systems.

2) There are significant similarities between internal and external audits, but an integration of internal audits is more likely than an integration of external audits. External audits are conducted by external accredited certification companies and therefore they may require more time to adapt to changes in the environment of audits or subjects of integrated management systems (Kraus & Grosskopf, 2008). Another important fact is an impact of various stakeholders and a pressure to conduct one type of audit or another type of audit (Darnall et al., 2009).

3) Internal audit teams are integrated at a much higher level than a corresponding external audit team. Difficulties in creating an audit team for different standards of management systems or for related management systems are bigger in a case of an external certification company. This needs to have an ability to control different types of organizations which is not the situation in a case of internal audits of one organization. Therefore, Renzi and Capelli (2000) argue that it would be better to employ two teams of auditors (auditors of quality and auditors of environment) separately because of special skills that are required for each management system. Kraus and Grosskopf (2008) emphasize that it is difficult to find an auditor or a team of auditors with all the knowledge and skills needed to carry out an audit at the same time for different management systems.

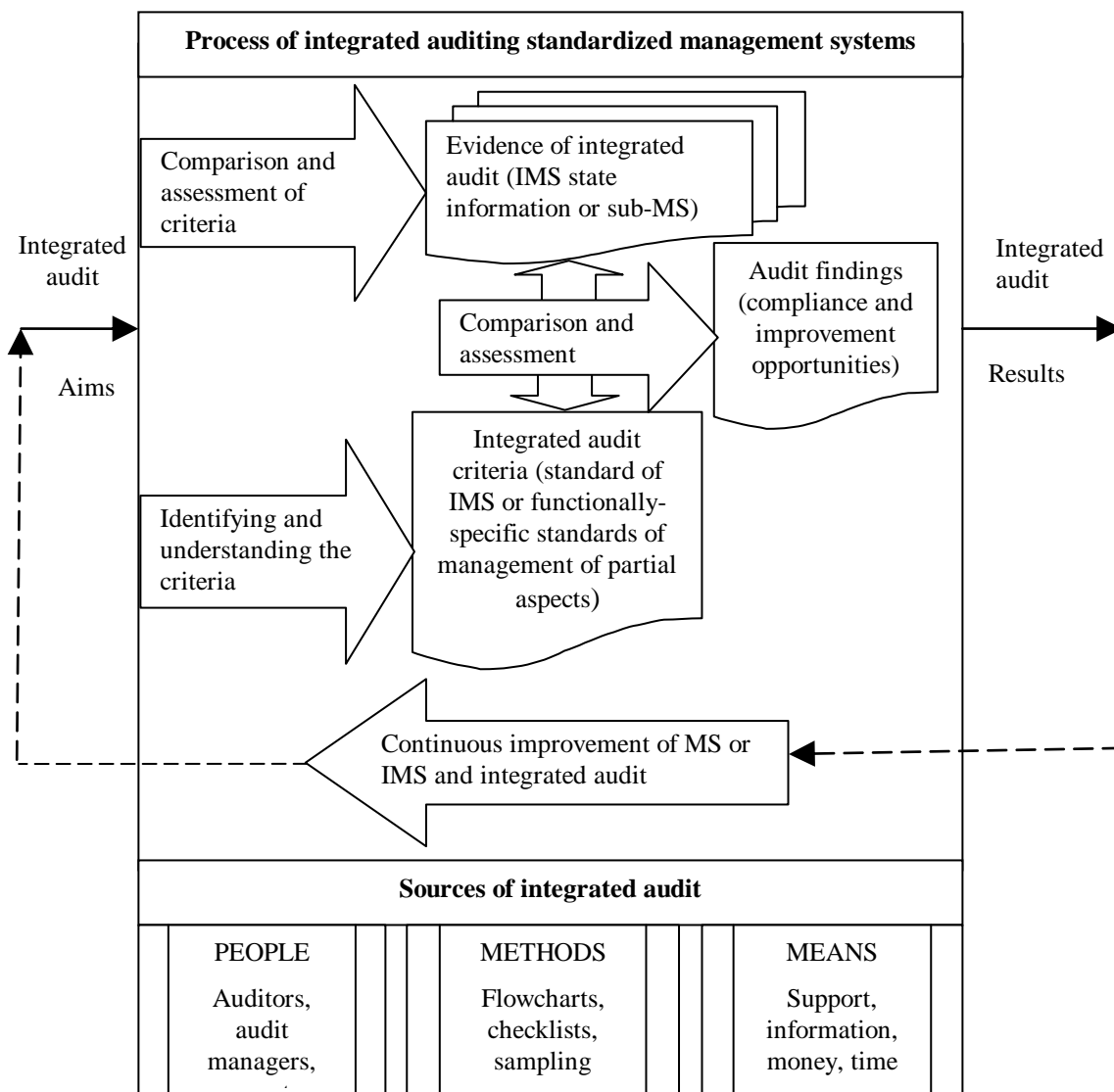
We consider mainly the results of the research of the authors Beckmerhagen, Berg, Karapetrovic, Willborn (2003) as relevant in relation to integrated auditing. They concentrate on the audit which is a support structure for system integration. They consider a system concept as essential for modelling and development of individual functionally-specific

management systems and integrated management system (IMS). (Štofko et al., 2016) They present general answers to the questions: How can the audit assist in the integration of management systems? What are the requirements for an effective audit at various stages of the integration of management systems? If there is already an implemented integrated system, how can audits help management strengthen and improve the IMS and audit?

3. Modelling integrated auditing of management systems

A model framework of audit system is shown in Fig. 1 as a result of our research which can be used for audit of either a functionally-specific or an inter-functional (i.e. integrated) management system.

Figure 1: The concept of model of auditing integrated management systems



Source: own processing

Auditors with specialized experience and competences must learn to make audit that helps management integrate functionally-specific management systems. During implementation of

joint audits conducted between functionally-specific management systems auditors should be familiar with common elements of various systems, which serve as building blocks for creating IMS.

Auditors, the audited organizations at a certain extent and executive management as the audit client, must be properly motivated and prepared for a new type of audit. At the time when the integration is determined, initiated, planned, implemented, maintained and improved, audit can generate important findings, view of research topics and recommendations theoretically. Specialized consultants and professional auditors should be involved in efforts of developing an innovated system.

It is necessary to expand and to modify partially audit resources and competences of auditor from audits of specialized management systems in the case of integrated audits.

Auditors of different functionally-specific management systems should cooperate in joint audits as well as in the preparation of structure of integrated audits. A joint audit team should be able to prepare and perform an audit for development or improvement of IMS. In this situation, the auditors may behave as consultants and system developers, not as independent auditors from the beginning and also during it (not necessarily during the auditing) they may determine system performance.

In today's volatile business environment, auditors must help management identify necessary improvements IMS across all its parts. This help must be specially focused on particular weaknesses, conclusions for improvement and corrective and preventive actions.

New methods of audit must also be adapted to change of objectives and to the focus of the audit. For example, if a self-estimate is permitted, trainings and appropriate checklists are necessary. Appropriate resources for audit also need to be developed. Technical resources contained in Table 1 are necessary for a continuous effective integrated audit. The theory and practice of management systems and their integration must be closely linked and integrated to create a real value.

The concept of model of integrated audit, Fig. 2, must be based on the following aspects and must include:

a) The objectives, strategy and vision

One of the eight principles of standardized quality management system states that an organization should promote mutually beneficial relationships with stakeholders. Objectives, policies and ideas should be adapted to ensure the mutual beneficial relationships with its shareholders, particularly with suppliers, customers, employees and society in integrated management environment. We can assume that the mutual beneficial relationships will be created automatically within the IMS, as individual management systems should deepen and support the compatibility among them.

b) The principal auditor: roles and profile

The principal auditor should be someone with deep knowledge of the standards against which they assess the system. The assessment which process is integrated and which is not, it should belong to responsibilities of the principal auditor. The principal auditor should expect whether the communication among the various integrated systems is clear. The audit team should provide the principal auditor evidence of these parts. It turns out that conceptual

investigation of leadership should be on the agenda more than defining a virtual super profile of auditor.

c) Determination of interactions

The IMS creates interactions between different management systems. This fact and also management of several issues are the main characteristics of the IMS at the same time with a need to balance various goals, a so-called holistic approach. In fact, the procedures used in the process of implementation, management and development of management systems are deliberately similar since they all are based on the Deming Cycle P-D-C-A. Determination of interactions among management systems should be taken into consideration by the organizations and auditors. The determination of interactions should provide a deeper and more accurate knowledge of the level of maturity and efficiency of the integrated management system.

Table 1: Sources of the integrated audit

Sources for the integrated audit	
During the development phase of the IMS	After the termination of the system integration
<ul style="list-style-type: none"> • A standard for IMS or an official guide of quality for the integration of management systems. • Results of internal research that can be used for repeated re-training of auditors and managers. • Trainings and cooperation in relevant scientific events. • A structure of the documentation for the audits by various external parties and according to specific criteria. • During the integration phase a support from competent consultants and technical experts. • Understanding and accepting potential risks by all participants of the audit. • Special control documents and relevant assessment criteria. • Meetings with management for the purpose of feedback, audit results, and other improvements. • Cooperation of the audit team, audit participants and managers. • The audit performed by external auditors along with the required experts. 	<ul style="list-style-type: none"> • A continued support for the audit management and individual auditors for the purpose of conformity, improvement and subsequent improvements of subsystem of the integrated audit. • An adoption of innovative computer methods of audit and software along with adequate research and technical assistance. • Re-training, if required. • Facilitating innovated forms of audit. • Cooperation of external and internal auditors in order to identify improvements. • Supporting ongoing enhancement of the integrated system as the primary objective of the audit. • Obtaining registration of the system (if it is real) and confirmation of the continued effectiveness of the audit.

Source: own processing

d) The audit team

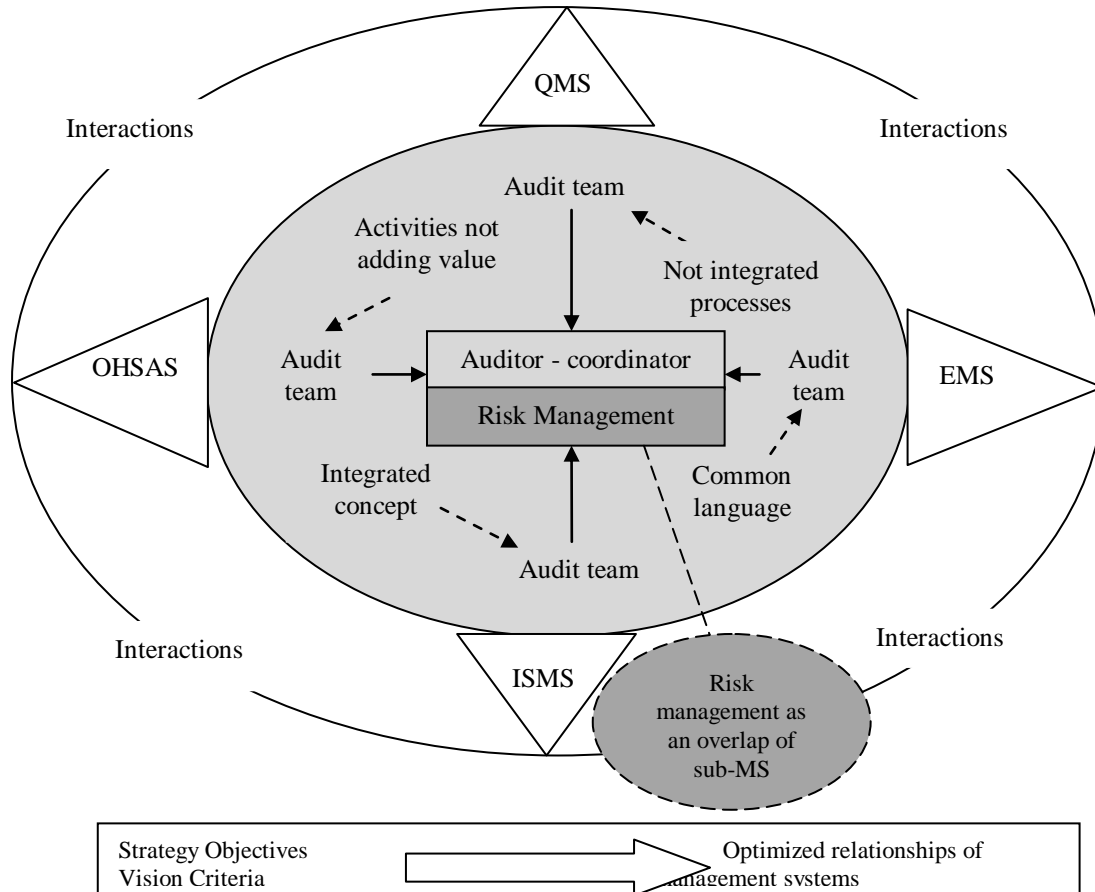
Any change, except desirable outcomes, will create also outputs that are unwanted or they do not have a value. The integration of management systems is a process of transformation that produces undesirable outcomes such as worthless activities that the audit team should focus on when it adapts a lean philosophy, i.e. when it performs an integrated audit. Regarding the audit team, the other subject of examination is the competence of the internal auditors in the different systems is fully covered by the extent of audit, ensuring the objectivity of the audit.

e) Outputs from the integrated audit

The written report of the audit should provide an integrated evidence of conformity, weaknesses and potential of development of IMS. Possibilities for improvement identified by

the team of auditors should be integrated with respect to all the objectives of sub-systems. In order to avoid difficulties to achieve mutual solutions, the report of the integrated audit must be thorough and accurate with a description of the opportunities for improvement and a potential added value.

Figure 2: The concept of model of an integrated audit



Source: own processing

4. Conclusion

In accordance with the proposed model and the defined conceptual framework, it is important to emphasize the dynamics of the elements within the structure of the integrated audit. The principal auditor plays a crucial role. The auditors team of partial management systems should provide the principal auditor sources of information concerning the processes which are not integrated, they do not add value to activities that have been created from the system integration, as well as information about integrating factors or understanding subsystems, and information about whether this concept or the model allows the required effective common language. The integration of management systems encourages the interactions. As in other systems in other scientific fields, such interactions should be identified and subsequently quantified. Traditional management indicators assess the activity. New indicators should be developed in order to focus on assessment of the broader concept of the interactions. The audit team should investigate whether the strategies, objectives and processes

of the organization are set in order to increase the value of mutually beneficial relationships between the management systems for the purposes of assessment criteria.

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THE ROLE OF CLUSTERS IN INNOVATIVE DEVELOPMENT OF RUSSIAN REGIONS IN CONDITIONS OF GLOBALIZATION

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Abstract. The innovative development and the innovative activity are becoming the components of modernization and competitiveness of the national economy and the economy of the region in the context of globalization. Due to significant disparities in regions' development the role of economic clusters is increasing. This explains the relevance of the research in which the authors draw on scientific works of Russian and foreign scientists: Khairetdinova, R.; Asaul, A.; Najafov, V.; Castano, M.; Mendez, M.; Galindo, M.; Liu, C.; Jayakar, K., and others. The purpose of the author's research is the understanding of the general problems of Russian regions' innovative development and the justification of economic clusters in improving the regions' innovation development level in conditions of globalization. To achieve this purpose, the authors solve the problems: (1) A retrospective review and analysis of innovative activities and functioning of clusters is performed; (2) The author's vision of theoretical and practical contradictions of the implementation of the cluster concept is given. The key issues that lead to low innovative activity of Russian regions are clarified and systematized, and the proposals for their elimination are stated. The overview picture of the innovative activities is given and the analysis and functioning of clusters in Russia and Volgograd region is held in the research; the role of clusters in innovative development of Russian regions in conditions of globalization is identified; the theoretic-methodical approach of implementing the cluster concept of regions' economy aiming at raising the level of innovation development in conditions of globalization is proposed.

Key words: globalization, innovative, development, region, cluster

JEL Classification: O11, O12, O18, O30

1. Problems of innovative development on the basis of the cluster concept in the conditions of globalization

In the context of globalization the new vector of development of the Russian regions is required. Low level of innovative activity of the Russian regions doesn't allow competing fully with economies of developed countries. With respect thereto, forming of strategy of innovative development of regions on the basis of the cluster concept becomes an important task of the Russian regions.

Russian regions' development is characterized by a significant gap and instability at the present stage. Unevenness in social and economic development is observed. A number of regions, such as Tatarstan, Krasnodar Krai show progressive dynamics. It is directly connected with rates and amounts of innovative process, however many regions including the Volgograd region are outsiders for the present.

The long-term period priorities of Russian economy's development are determined by innovative policy of the state. For last 11 years huge work on creation and development of institutes and infrastructure of innovative activities in Russia is carried out: only in standard aspect of the organization of these activities 17 federal laws, 3 presidential decrees, about 50 federal departmental and interdepartmental acts, 10 federal state programs are developed and started in action. It not to mention that practically all federal target programs and projects are in a varying degree connected with innovative activities (Gorshkov, 2015). This fact creates positive prerequisites to strengthening of an economic situation of the Russian regions against the background of global economic transformations.

On May 21, 2010 in Tomsk during the XIII Innovative forum "Innovus" with active participation of JSC RUSNANO, Russian Academy of national economy and public service in case of the Russian President the memorandum of creation of interregional "Association of innovative regions of Russia" is signed. Participants of this association are the Tomsk, Novosibirsk, Irkutsk, Kaluga, Samara, Ulyanovsk, Lipetsk regions, the Republic of Tatarstan, Bashkortostan and Mordovia, the Krasnoyarsk, Perm and Altai regions, but these only 13 of 85 subjects of the Russian Federation.

For the tasks' solution of the state innovative policy the associations and the various forms of public agents' associations, society and business are created in Russia. Among them there are Skolkovo, RUSNANO, the Russian venture capital company, science and technology parks, business incubators, the innovative and technological centers, innovative and industrial complexes, the collective use centers, innovative clusters.

The "Program of basic scientific research in Russian Federation" is the basic researches development mechanism in Russia. Implementation of this program will lead to strengthening of a fundamental science role when forming innovative society and ensuring effectiveness of scientific research.

It is known that a management systems' creation is the process which determines success of any beginning. Quality of this system is determined by the purposes, tasks, functions, levels, the relations, communications, resources and in general by the scale. It is possible to state that in Russia this system is developed and functions at the macrolevel, partially is implemented at the mesolevel, at the same time there a wide spacing of performance indicators is. The picture develops so polar that it is possible to speak about lack of efficient management systems by innovative project at the microlevel.

The results of many national and innovative projects and programs which are directed to increase in economic potential and stability of Russia witness about it. In spite of the fact that there are bright samples of innovations and activities of high-technology and innovative clusters, it isn't necessary to speak about essential quantum technological leap so far

2. The overview and the analysis of innovative activities and functioning of clusters on materials of the Volgograd region and the Republic of Tatarstan

Uneven development of innovative activities, implementation of innovations, activities of high-technology and innovative clusters in regions of the Russian Federation is caused by many factors. First, not only the national economy scale, but also the scale of regional economies' majority are considerable. Historically regional systems were created taking into account territorial features, a transport geographical location and natural resources' availability or natural resources' lack. Regions' development disproportions testify to low innovative rates and a low innovative performance.

In our opinion, now the Volgograd region is the most problem region. During the preperestroika period the Volgograd region's industry was characterized by high potential. There were 378 large and medium scale enterprises in the industry with products amount over 54 billion rubles in the end of 2001. About two percent from industrial outputs of the Russian Federation were issued by the Volgograd region's industry (Kanygina, 2009).

The greatest specific weight was occupied by the heavy industry in industrial output structure – 79,2%, including fuel and energy complex (30,8%), metallurgy (17,4%) the chemical and petrochemical industry (15,6%), mechanical engineering and metal working (15,4%). Various products were made: tractors, car tires, the caustic soda, synthetic pitches and plastics, diesel engines, bearings, oil equipment, oil processing products, fiber and wood chipboards, ceramic tiles, cement, etc. An overwhelming part of all Volgograd region's industrial production is concentrated in six large cities: Volgograd, Volzhsky, Kamyshin, Mikhaylovka, Uryupinsk, Frolovo, Zhirnovsk, Kotovo (Kanygina, 2009).

The mono-industry town of Kotovo is characterized by social and economic regression as the city-forming productions of LLC "Lukoil-Korobkovsky Gas Processing Plant", LLC "VNIIBT-Burovoy instrument" are curtailed (Kanygina, 2009).

The large city-forming enterprises functioned in Volgograd: JSC "Volgograd Tractor Plant", CJSC "Krasny Oktyabr Steel Works", JSC "Volzhsky Pipe Plant", LLC "LUKOIL-Nizhnevolzhskneft", LLC "Lukoil-Volgogradneftepererabotka", JSC "VOLTAYR", JSC "Khimprom", OJSC "Kaustik", JSC "Orgsintez", JSC "Volgograd Motor Plant", etc. The most part from them doesn't exist anymore or is in a bankruptcy condition. One of the main reasons – the low competitive potential or its complete loss in view of an inattention and not implementation of innovations (first of all technological) throughout very long period.

We observe other picture on the example of the Republic of Tatarstan which is socially and economically safe region. The high business and innovative activity in the region is the basis of it. There is an opinion that the leading role in it is played by creation and start in action of high-technology clusters. The industry, construction sector, agrarian sector, special economic zones and technopolises are points of growth of the Republic of Tatarstan's investment and innovative attractiveness.

The multistructure economy is created in the Republic of Tatarstan, the Tatarstan's industrial production index constituted 101,4%. The leader is JSC Tatneft, the share of the small oil-extracting companies constituted about 20% (Hayretdinova, 2015).

The Kama innovative territorial and production cluster of the Republic of Tatarstan is also created. The development program of a cluster unites tens of large and average projects in the

field of oil and gas chemistry, mechanical engineering, business services, trainings, etc. Benefits of the development program of a cluster are: well worked development mechanisms of scientific infrastructure of a cluster; development mechanisms of the international scientific backgrounds; approaches to integration of educational institutions of a cluster to the problem resolution of training and advanced training of a personnel. Rather detailed study of actions for improvement of a transport, energy, engineering and social infrastructure will provide complex social and economic development of this territory.

3. The comparative analysis of determinations of a cluster from line items of cross-disciplinary approach and author's vision of contradictions in the theory and practice of implementation of the cluster concept

The determination of a cluster are various in the different fields of science. On the basis of the review of the existing concepts, it is possible to read that a cluster in economy – the phenomenon taking place at one of stages of formation and functioning of networks of entrepreneurial type. Division of public reproduction into clusters really embody ideology of network approach (Asaul, 2009).

The international experience of clusters' creation (Carbonara & Giannoccaro, 2014), (Yun, & Lee 2013), (Manning 2013), (Breznitz, 2013), (Hong & Shao Y, 2013). (Dominicis, Florax, & Groot 2013), (Parfenova & Klochkova, 2012), (Herrman, Taks, & Moors, 2012), (Jarvinen, Lamberg, & Pietinalho, 2012), (Engel, & Palacio, 2012.), demonstrates that the economic growths' cluster conception as an ideology is armed with the instruments of high technology productions' stimulation which promote growth of employment, a regional budgets revenues and territorial, regional development in general. However everything has the time span of action (Nadjarov, 2009).

So, at the beginning of the 20th century Detroit was a point of growth of the American automotive industry, having territorially united suppliers of resources and skilled workers. It resulted in economies of agglomeration effect. The effect was connected with increase in cost efficiency and effectiveness of activities of each of participants. Growth of an industry was provided due to reducing transactional and transportation costs.

In our opinion in Russia the cluster in pure form, was created for the purposes of implementation of the large-scale project under the conditional Name "Winter Olympic Games in Sochi". All other existing examples which are referred to in scientific economic literature as various type and scale of clusters, after all more correspond in the main of just network for industry type organization. So, by 2020 in the Volgograd region it is planned to create 5 main clusters: "Cereal grain", "Sunflower", "Vegetables", "Milk", "Meat". Whether it will be clusters, time will show. However innovative activity of the region production enterprises is not up to standard.

4. The key problems causing low innovative activity of the Volgograd region by the analysis of innovative activities of small enterprises

The decrease in technological potential and the loss of a capability to adaptation of a new technological development inevitably leads to deterioration of the situation in the market and, strategically, it leads to the decrease in sales volumes and to the loss of financial stability. For

the beginning of 2014 the Volgograd region borrowed: the 20th place among regions of the Russian Federation by the number of small enterprises; the 25th place by quantity occupied at small enterprises; the 30th place on a share of the personnel working at small enterprises of area; the 70th place on number working on small enterprises; the 61st place on indicators of turnover and revenue of small enterprises. Leading regions are: Moscow, Khabarovsk Krai, the Voronezh region, Ingushetia.

Lately, the state carried out many works on creating favorable conditions for an entrepreneurship and small business. Efforts of the state are directed to increase in innovative activity. The youth entrepreneurship, the new small innovative companies, the operating innovative companies, social entrepreneurship and the centers of leisure of children receive a priority in support and, first of all to a financial support. The creating favorable conditions program for investment attraction is oriented by the most part to large and medium business. At the same time small enterprises as recipients of direct investments, in general, are not considered. And small enterprises constitute the main growth potential of innovative activity in the form of entrepreneurial network or a cluster.

Dynamics of indicators and results of activities of small enterprises of the Volgograd region in total with data on turnover and revenue allows to draw a conclusion: negative tendencies of quantitative and high-quality growth remain in development of small business in the Volgograd region. It is considered to be that basic reasons of reducing number of small enterprises in the Volgograd region lie in the plane of the system problems peculiar to the Russian economy in general. Treat such problems: noncompetitiveness of small enterprises, low investment activity of business, etc.

However, in our opinion, sources of the designated problems in a varying degree are always inevitable and it isn't the basic. Especially it concerns the new small innovative companies and the operating innovative companies, that is those organizations which can give an impetus to development of economy, first of all in the production sphere. Follows from the materials received in the course of assessment of the index of technological readiness (ITR) which is an indicator of readiness of the entity for implementation of new technologies and upgrade that the number of small enterprises ready to work and solve problems of low innovative activity is very insignificant.

So, more than a half of 13 surveyed entities can't fulfill high requirements to formalization of the procedures and processes connected with development and deployment of innovations in particular small and the microentities don't document a number of procedures and processes. The most important problem of low level of small enterprises' innovative development in the Volgograd region consists in weak knowledge and security of small businesses, and also in their misunderstanding and mistrust to implementable programs of the state support of innovative activities and an entrepreneurship. Besides, small enterprises, as a rule, don't interact with large, average, and other small enterprises, so, there are no real clusters, and entrepreneurial networks that, in the author's opinion, more truly.

In general, assessment of potential of innovative development of the Volgograd region doesn't meet the requirements of the potential investors interested in implementation of innovative projects on the basis of cluster ideology. It aggravates competitive threats for regional economy in the conditions of globalization of the economic relations. In the conclusion we will note that implementation of any concept, is it cluster, innovative or any other, shall rely on real basis which can be created, only working with the real entities and

entrepreneurs, proceeding from conditions of their activities, their role and the place in economy of an industry and the territory.

5. Conclusion

The overview and the analysis of innovative activities and functioning of clusters in Russia showed wide spacing of regions of the Russian Federation on indicators of innovative activity and functioning of innovative and high-technology clusters. The inattention and not implementation of innovations (first of all technological) throughout this long period led to loss of competitive potential, bankruptcy and liquidation of the region-forming entities.

Some contradiction in the theory and practice of implementation of the cluster concept is observed. For the last years in economic science and practice there was a replacement of a concept "network" on more fashionable concept "cluster". It didn't replace essence of a network form of the organization of business activity and interaction of the participants combining resources and efforts to the purposes of implementation of any project having determined time, territorial, industry frames. But it entailed the large-scale standard and organizational activity in many cases replacing the real practical activities creating results and incentives of social and economic development.

The successful international experience of implementation of the cluster conception of innovative development of economy of regions, testifies to need of the state support of the entities, especially in the conditions of globalization of economies. However it doesn't mean at all that the state shall become the main engine of development. Growth of innovative activity and innovative potential substantially depends on the entities. The state shall create conditions for growth, as the initiative shall proceed from the entities. For implementation of the cluster conception of innovative development of regions, the entities need to raise degree of information illumination in the field of implementable programs of the state support of innovative activities and an innovative entrepreneurship. At the same time it is necessary to lower extent of formalization of procedures and processes within which the entities can get the state support. And the most important, the entities of the region shall direct the activities to interaction with other entities as without this interaction it is impossible to create group or a cluster. It will allow regional economy to sustain high extent of the competition in the conditions of globalization.

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GLOBALIZATION IN THE FIELD OF FOOD RETAIL ST.PETERSBURG: CONCENTRATION AND COMPETITION

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Abstract. In this series of two articles devoted to the same research and incorporating a rich factual and statistical material, we analyze the modern condition of the Russian food market, estimate the consequences of its inclusion into the globalization process and attempt to determine its type. Within the first article, we used the certain criteria to choose the chief retail chains, dominating the food retail market of St. Petersburg, a city that rightfully assumes the role of the Russian «window into Europe». We also established that this market is not a humongous whole and that, in order to successfully reach our goal and determine its type, it is necessary to start with dividing the market into segments. The next stage of our study included the analysis of the pricing policy implemented by the major retail chains, which allowed us to make some conclusions about the competitive pattern and domination in this market. This second article in the authors' series on the state and prospective development of the food market in St. Petersburg concentrates on solving the problem of objective evaluation of the concentration level within this sector of the city's economy. To accomplish this, the authors have used traditional methods of statistical processing of extensive factual material.

Keywords: food retail market, market concentration indexes, type of market, price policy.

JEL Classification: C43, D21, D43

1. Introduction

As already mentioned in the first article, in 1990s the market structure of the food retail industry in Russia could be fairly precisely described as a *monopolistic competition* with some elements, characteristic for the *perfectly competitive markets*. This situation, however, drastically changed in the first decade of the new century. Both Russian and globally well-known retail chains entered the market and quickly spread to the new regions of the country. St. Petersburg has long become an unquestionable leader among the other regions of Russia in regards of the concentration of the chain retail business: it is the only city in Russia, where the share of the organized retail in the total turnover of the market constitutes 84%, which is comparable to the levels of the West- and Central-European cities. St. Petersburg is also the founding place of the many major federal retail chains, which are currently among the leaders of Russian food retail industry: *Pyaterochka*, *Lenta*, *O'KEY*, *Karusel'* etc. In view of all these things, it becomes clear, why we chose the St. Petersburg food retail market as the *object* for our research.

Due to the definite cutting-edge they had over the small food stores in regards of the operational costs, product assortment, sales geography etc., the major food chains started to gradually replace the small to medium business within this important industry (Valaskova & Gregova, 2013), both as a result of the open competition, but also by the administrative measures.

As a *working hypothesis* that needed to be proved, we assumed that the food retail market in St. Petersburg most closely resembles the market of «fuzzy oligopoly», which besides the price competition uses also the product mix policy and the growing number of the sales outlets.

The early stages of the research, as described in the first article, helped to establish that the prevailing characteristics within the industry are those of the oligopolistic market, since the players look out to accommodate the price behavior of other competitors. The model of oligopoly most suitable for this situation is the «Forchheimer model». At the same time the industry retains some qualities of the monopolistic competition, since the main methods of differentiation within the sold products are carried out through other instruments.

Since the analysis that we performed did not bring us to a firm conclusion concerning the type of the food retail market in St. Petersburg, there was a need to perform a further evaluation of the market using the known market concentration indexes.

2. Methodology

The method of the analysis included monitoring and the processing of the acquired information using the statistical methods (Salhofer et al., 2012, Valášková & Kramárová, 2015, Dengov & Tulyakova, 2015). The factual and statistical bases of our research, thoroughly analyzed in the first article, were used in the second article for the calculation of the concentration indexes. To evaluate the concentration of the food retail market in St. Petersburg we used the market concentration ratio (CR), the Herfindahl-Hirschman Index (HHI), and the Linda index (IL).

The market concentration ratio (CR) was one of the first indexes to be used in the modern praxis. As you know, its main advantage is the simple calculation method. This ratio does not usually take into the account the market in general, and provides the evaluation for only the major players therein. In Russia, the official statistical records started calculating and publishing this ratio since 1992 for three (CR3), four (CR4), six (CR6) and eight (CR8) major retailers (Kotsofana & Stazhkova, 2011). The ratio is calculated according to the following formula:

$$CR_n = \frac{\sum_{k=1}^n V_k}{\sum_{k=1}^n V_k + \sum_{j=n+1}^N V_j} \quad (1)$$

where, CR_n – market concentration ratio; V_k – sales k -th a major player in the market; V_j – sales of the j -th less than a major player in the market; n is the number of the largest players in the market; N is the total number of market operators.

Unlike the concentration ratio, the HHI takes in the account both the number of the companies within the market and their unequal positions therein. The HHI is calculated as a sum of squares of the market shares of each of the players in the industry:

$$HHI = Y_1^2 + Y_2^2 + \dots + Y_n^2 \Leftrightarrow HHI = \sum_{i=1}^n Y_i^2 \quad (2),$$

where Y_1 – market share of the largest company; Y_2 – the market share of the next-of firm specific weight, etc. to Y_n .

The Linda index is also among the most popular indexes of the market concentration. It is widely used in the EU. Unlike the previously described indexes, the calculation of the Linda index is carried out in stages, with the number of stages one less than the number of the major companies in the industry. The calculation of the index looks as follows:

$$\begin{aligned} \text{first stage : } IL &= \frac{k_1}{k_2} \times 100\% \\ \text{second stage : } IL &= \frac{1}{2} \left[\left(\frac{k_1}{(k_2 + k_3)/2} \right) + \left(\frac{(k_1 + k_2)/2}{k_3} \right) \right] \times 100\% \quad (3) , \\ \text{third stage : } IL &= \frac{1}{3} \left[\left(\frac{k_1}{(k_2 + k_3 + k_4)/3} \right) + \left(\frac{(k_1 + k_2)/2}{(k_3 + k_4)/2} \right) + \left(\frac{(k_1 + k_2 + k_3)/3}{k_4} \right) \right] \times 100\% , \text{ etc.} \end{aligned}$$

where k_1, k_2, \dots, k_n – the market share of firms.

3. The evaluation of the level of concentration in the food retail industry of St. Petersburg

3.1 Analysis of market concentration indexes

The number of companies within the industry is one of the most important criteria, defining whether the market belongs to a particular type of a market structure. Since our research concentrates on the monopolistic and oligopolistic types of competition, the main task lies in the finding out the threshold where one of them begins to transform into another. Both in theory and praxis (Severova & Sredl, 2010), the number of the companies within the market as such cannot give us a conclusive answer on whether the industry belongs to some particular market type (the obvious exclusion is monopoly, where there is only one player). It is necessary to study each major player and the industry as a whole (Mikacova & Gavlakova, 2013, Wood, 2013). Another important aspect of the analysis is the determination of cartel agreements between large companies (Radaev, 2013, Severova & Bendl, 2013). If this phenomenon is not observed, the industry most likely refers to the type of monopolistic competition market (Marini et al., 2015). And only on the basis of comprehensive analysis of all the obtained results will be possible to make a definitive conclusion.

If we look on this problem from the perspective of the Russian law, the first thing to consider is the index of the **threshold market share**.

According to the article 5 of the Federal Law «On the Protection of Competition» (2006): «The position of an economic entity (except of the financial organizations) is recognized as dominant: if its share in the certain goods market exceeds 50%, unless in the course of examination of the case of violation of the antimonopoly legislation or in the course of exercising the state control over the economic concentration it is established that despite the

excess of the aforementioned quantity, the position of the economic entity in the goods market is not dominant». Besides, «The Federal Laws can establish the cases where the position of an economic entity whose share in the market of a certain commodity is less than 35% can be considered dominant». They are considered dominant if their share does not change within a lengthy period, if the new players have trouble entering the market, and if the commodity sold by the company in question cannot be substituted with another commodity in the process of consumption. If the market share of the company exceeds the threshold level, the organization is included into the registry of the economic entities with the market shares exceeding 35%. Thus, we will consider the 35% share as the threshold level for our research. According to the law, the position of the company with such a market share may not be considered dominant; however, a market share of over 35% definitely shows that the industry in question has an obvious leader.

The threshold share only points out the leader in the industry, but there is still insufficient data to define the market structure. It is necessary to carry out the quantitative evaluation of the market concentration. As we know, for this purpose the modern praxis uses the following indexes of concentration: 1. Market concentration ratio (CR); 2. Herfindahl-Hirschman Index (HHI); 3. Gini index (G); 4. Linda index (IL); 5. Index Hall-Taydman (HT) or Index Rosenbluth (IR); 6. Other indicators of market concentration.

It worth mentioning, that according to the Directive of the FAS of Russia # 220 «On Approval of the procedure for conducting the analysis of the state of competition in the commodity market» the Federal Antimonopoly Service uses the market concentration ratio and the HHI for the evaluation of the concentration level of the commodity market. The market concentration ratio is measured in percent. The higher the percent, the stronger is the market concentration and the more pronounced are the characteristics of the oligopolistic competition.

As noted by Kotsofana and Stazhkova (2011), the most convenient way is to use this index for three to four major companies within the industry. In this case, the criteria for the market structures will look as follows:

- 1) *non-concentrated* market - $CR3 < 45\%$;
- 2) *moderately concentrated* market - $CR3 = 45-70\%$;
- 3) *highly concentrated* market - $CR3 > 70\%$.

Despite the fact that currently this index is one of the most popular ones, it has certain limitations.

The main problem of this index is the impossibility to take into the account the situation «on the fringes» of the industry. For instance, if there are eight major companies within the industry and the concentration ratio is calculated only for the first four of them, it is obvious that one cannot precisely measure the concentration of this industry by using this index alone.

The other limitation lies in the fact that this index does not take into account the differences in the market shares of the companies constituting the so-called «nucleus» of the market. For the illustration purposes, let us take two industries. Both have four major players, which control 80% of the market. However, in the first case each company has a 20% share, and in the second case, the first company owns 55%, the second – 20%, the third – 4%, and the fourth one – only 1%. The calculation of the concentration indexes for the four companies will provide an equal result, though clearly in the second case the market has an obvious leader.

The index usually used for the more precise evaluation of the level of concentration within the industry is the HHI. The values of the index range from 0 to 10000.

The criteria for the evaluation of the market concentration according to this index were given in the antimonopoly policy of the U.S.A in the 1980s.:

1. If $HHI < 1000$, the market is *non-concentrated*.

2. If $1000 < HHI < 1800$, the market is considered *moderately concentrated*. However, it is noteworthy that in Europe these thresholds are set wider: the market is considered to be *moderately concentrated*, if $1000 < HHI < 2000$. It is also necessary to mention that the index values over 1400 may cause the heightening of the FAS interest.

3. The market is considered as *highly concentrated*, if $1800 < HHI < 10000$.

If we compare the HHI to the market concentration ratio, the former has two clear advantages. Firstly, the HHI can encompass an unlimited number of players within the industry and reacts to the individual market share of each company.

Secondly, Kotsofana and Stazhkova (2011) maintain that the main advantage of the HHI index «is its ability to sensitively respond to redistribution of the shares among the active companies within the market. Thanks to this sensitivity of to the changes in the company's market share, the index attains the ability to provide the circumstantial evidence on the value of the economic profit, obtained as a result of the monopolistic activities».

The Linda index, just as the concentration ratio, takes into the account only the leaders of the industry. However, it provides the possibility to study the differences in the «core» of the market. For any conclusions, one needs to calculate it for at least two stages (three companies). The Linda index for the second stage will be calculated as the arithmetical average of the two ratios. If there are four major players within the industry, it is necessary to perform the third stage, where the IL will be calculated as the arithmetical average of three ratios (3).

During the calculation for each new stage, the value of the Linda index should steadily diminish. As soon as the new result turns out bigger than the previous, one can draw a conclusion about the «nucleus» of this industry. For instance, if on the third stage the value of index turned out bigger than the result obtained in the second stage, one could assume that the «nucleus» of this industry consists of two companies. The industry may also have one obvious leader, in which case the function starts to increase from the first stage onwards.

We can conclude that the main advantage of the IL lies in the possibility to clearly distinguish the key players of the industry. Besides, this index, like the HHI, shows the relative strength of the major players within the market.

Thus, in the course of the preliminary comparison of different indexes, we have come to the following conclusions:

a) in the most cases, the number of the major companies within the market cannot provide a clear answer on whether the industry belongs to a particular market structure. To find it out one needs a more detailed analysis that will show the level of market concentration;

b) in the economic theory, there are more than ten indexes for the evaluation of the level of market concentration. The most commonly used though are the three indexes: CR, HHI and IL;

c) after the study of these indexes we were able to define the threshold values for the non-concentrated, moderately concentrated and highly concentrated types of the market. The combined results are given in the table 6.

Table 6: Summary results of the threshold values of the indicators of market concentration

Index	Concentration level		
	low	middle	high
Market share threshold	not more than 35% for one company, in some cases, allowed 50%		
CR	<45%	45-70%	>70%
HHI	<1000	1000<HHI<1800 (2000)	>1800 (2000)
IL	There are no precise thresholds level of concentration: the index defines the core industry		

Source: own processing

3.2 Evaluation of the level of concentration, and finding the «nucleus» and the dominant subjects for the food retail industry in St. Petersburg

In the course of further research, each subject of the industry was scrutinized for its compliance to the condition of a threshold market share. Thereafter we calculated the CR, HHI and IL for the industry as a whole and each of its segments in particular, at the end of which we carried out the final analysis of the obtained results.

As previously noted, the minimal threshold share for the economic entity to be considered as dominant in its industry constitutes 35%. According to the analysis carried out in the first article of these series, there are no such entities in this industry (Dengov and all, 2016). The maximum market share belongs to the companies of the *X5 Retail Group*, and it is 24.63% (Tab. 1).

The FAS materials show that the recent breaches within the industry are mostly related to the cases of price collusion or creation of the discriminating conditions. The most significant proceedings took place in 2010, when the price collusion for flour and buckwheat was registered among the six retail chains, which are subject of this work: *Lenta*, *Sem'Ya*, *O'KEY*, *DIXI*, *Pyaterochka*, and *Perekrestok*. Thus, the symptoms of oligopoly can be definitely found in the industry. Besides, the fact that the structure of the key players within the industry has not changed for more than four years also testifies for the presence of the characteristics of an oligopolistic market.

For the calculation of the **concentration ratio** for the industry as a whole, we limit ourselves to the first three or four companies: *X5 Retail Group*, *Lenta*, *O'KEY*, *INTERTORG Trading Company*. In order to calculate the ratio, we will need the data in the table 2 (Dengov and all, 2016). Given that the revenue of the St. Petersburg food retail business in 2012 constituted 380 billion rubles, the concentration indexes for three and four companies are as follows:

$$CR_3=(78,4+65,94+58,7)/380=0,534 (53,5\%).$$

$$CR_4=(78,4+65,94+58,7+24,2)/380=0,598 (59,8\%).$$

To determine the levels of concentration for a segment, it is necessary to calculate the total revenue of each segment. To do so, we used the data of the Figure 2:

$$\text{Segment 1} = 380 \times 0,47 = 178,6 \text{ billion rubles}$$

$$\text{Segment 2} = 380 \times 0,09 = 34,2 \text{ billion rubles}$$

$$\text{Segment 3} = 380 \times 0,42 = 159,6 \text{ billion rubles.}$$

The revenue of the segment 1 constitutes about 179 billion rubles, for the segment 2 it is 34 billion rubles, and for the segment 3 – 160 billion rubles. Then, the concentration ratios for the segments are as follows:

$$CR_{\text{Segment 1}} = (13,71+65,94+49,54+13,46)/178,6 = 0,80 \text{ (80\%);}$$

$$CR_{\text{Segment 2}} = (13,72+9,16+2,21)/34,2 = 0,73 \text{ (73\%);}$$

$$CR_{\text{Segment 3}} = (50,97+24,2+20,5+13,3)/159,6 = 0,68 \text{ (68\%).}$$

The CR index shows the average level of concentration within the industry. If we compare this index segment-by-segment, the highest concentration exists in the segment 1.

For the following analysis, we had to calculate the shares of the retail chains within the segment. The results of these calculations are shown in the table 7.

Table 7: The structure of the retail chains in segments

Segment 1		Segment 2		Segment 3	
Retailer	Share in the segment	Retailer	Share in the segment	Retailer	Share in the segment
Lenta	44,04	Perekrestok	56,89	Pyaterochka	30,36
O'KEY	32,43	O'KEY-express	32,89	DIXI	15,31
Karusel'	14,38	Auchan City	8,78	Sem'Ya	18,10
Auchan	8,62	-	-	Polushka	9,93

Source: own calculations

Based on the data of the table 4, let us calculate the HHI index for the industry as a whole:
 $HHI = 24,63^2+20,7^2+18,43^2+12,75^2+7,6^2+6,43^2+4,9^2+4,17^2 = 606,6+428,49+339,66+57,76+41,34+24,01+17,39 = \mathbf{1515}$

Now, using the data in the table 8, let us compare these indexes for the separate segments:

$$HHI_{\text{Segment 1}} = 44,04^2+32,43^2+14,38^2+8,62^2 = 1939,5+1051,7+206,78+74,3 = \mathbf{3272}$$

$$HHI_{\text{Segment 2}} = 56,89^2+32,89^2+8,78^2 = 3236,4+1081,75+77,08 = \mathbf{4395}$$

$$HHI_{\text{Segment 3}} = 30,36^2+15,31^2+18,10^2+9,93^2 = 921,73+234,4+327,61+98,61 = \mathbf{1582}$$

As well as the concentration ratio, the HHI shows the moderate level of concentration within the industry. However, the value of 1515 hints on the possibility of the evolvement of an oligopolistic market. The FAS should definitely pay attention to this industry.

In what concerns the segment-by-segment analysis, the highest concentration exists in the segment 2 (supermarkets) and segment 1 (hypermarkets). It is logical to assume that the high concentration in the segment 2 may be caused by the low popularity of the supermarkets in the city, as a result the competition in this segment is also low.

The last index that we must calculate within this research is the Linda index. The calculation of the IL for the industry as a whole showed the following result:

$$\text{Stage 1: IL} = \frac{24.63}{20.7} \cdot 100\% = 119$$

$$\text{Stage 2: IL} = 0.5 \left[\frac{24.63}{(20.7 + 18.43) \cdot 0.5} + \frac{(24.63 + 20.7) \cdot 0.5}{18.43} \right] \cdot 100\% = 0.5 \cdot (1.26 + 1.23) = 124.5$$

Any further stages are unnecessary, since the function assumed the increasing character right from the beginning (the result for the second stage was bigger than the result for the first one).

Thus, we may conclude that the «core» of this industry in Petersburg consists of one player – *X5 Retail Group*.

The calculation IL for the segments according to the data of the table 8, provided the following results:

Segment 1

$$\text{Stage 1: IL} = \frac{44.04}{32.43} \cdot 100\% = 135.8$$

$$\text{Stage 2: IL} = 0.5 \left[\frac{44.04}{(32.43 + 14.38) \cdot 0.5} + \frac{(44.04 + 32.43) \cdot 0.5}{14.38} \right] \cdot 100\% = 0.5 \cdot (0.94 + 2.66) = 180$$

Segment 2

$$\text{Stage 1: IL} = \frac{56.89}{32.89} \cdot 100\% = 173$$

$$\text{Stage 2: IL} = 0.5 \left[\frac{56.89}{(32.89 + 8.78) \cdot 0.5} + \frac{(56.89 + 32.89) \cdot 0.5}{8.78} \right] \cdot 100\% = 0.5 \cdot (1.36 + 5.11) = 323.5$$

Segment 3

$$\text{Stage 1: IL} = \frac{30.36}{18.10} \cdot 100\% = 168$$

$$\text{Stage 2: IL} = 0.5 \left[\frac{30.36}{(15.31 + 18.10) \cdot 0.5} + \frac{(30.36 + 18.10) \cdot 0.5}{15.31} \right] \cdot 100\% = 0.5 \cdot (1.8 + 1.58) = 169$$

The calculation of the IL demonstrates that within each segment there is a retail chain, the share of which considerably surpasses the shares of its rivals. This tendency is the least noticeable in the segment 3: the value on the second stage of the calculation increases over the one for the first stage only by 1. Let us sum up the obtained results by putting them into a summary table (Tab. 8).

Table 8: Summary table of the results of the index

Index	value of an indicator in the industry	estimate the concentration level in the industry	Results by segment		
			Segment 1	Segment 2	Segment 3
CR	CR ₃ =53,5%	middle level	80%	73%	68%
HHI	1515	middle level	3272	4395	1572
IL	"Core" of the industry is made up of one player		"Core" segment consists of one player		

Source: own processing

4. Conclusions

As a result of this research, we can say that the St. Petersburg retail market of everyday commodities is highly consolidated, with seven companies controlling about 85% of the market. In the course of this work, we came to the following conclusions:

1. As you know, the main symptom of the monopolistic competition is the product differentiation. In the course of our study of the St. Petersburg food retail market, we discovered the presence of two types of differentiation: the price differentiation and non-price one. In the process of analysis, we determined the three most prominent criteria distinguishing the monopolistic competition from the oligopoly: a) the number of companies within an industry; b) the possibility to control the market price; and c) the independence of the pricing

policy. The most detailed analysis was carried out in regards of two of those criteria – the pricing behavior of the companies and the number of companies within the industry.

2. During the analysis of the market structure of the industry, we determined the seven key companies, owning the eleven retail chains. In the course of the research, we had to divide the St. Petersburg food retail market into three main segments: the hypermarkets, the supermarkets and the neighborhood convenience stores. Undoubtedly, all three forms of outlets compete with each other, however, each of them has its own priority target customer group.

3. The study of the symptoms of the price differentiation showed the highest activity in the segment 1. Despite that, this segment also shows the most obvious characteristics of an oligopolistic market: the identical forms of price differentiation demonstrated by three out of four retail chains and a nearly complete lack of economic benefit for the customer choosing a particular chain in the first segment. The study of the pricing behavior showed the characteristics of oligo-poly in the segment 3 as well, leading us to the assumption that this market has a price leader.

4. In regards of the calculation of the concentration indexes, the market concentration ratio and the HHI show a moderate level of concentration within the industry. The LI, on the other hand, demonstrated that the «nucleus» of the industry consists of only one multiform company – *X5 Retail Group*, *Lenta* and *O'KEY* keep close to this nucleus, but do not belong to it. As we have pointed out from the start, the results for the particular segments can be only evaluated in a segment-by-segment comparison. It is impossible to consider the quantitative results for the segments separately, since their only purpose is the analysis of the industry. Besides, in the analysis of the industry we speak of the companies, whereas in the analysis of the segments we speak of the retail chains. Thus, among the three segments, the highest level of consolidation is present in the first and second segments. The segment 3 demonstrates a relatively high competition level (which is an obvious characteristic of the monopolistic competition). In each segment, the «core» consists of one retail chain.

To sum up the results of a complete research, one can say that the working hypothesis assumed already on the task-setting stage of our study, namely, that the food retail market in St. Petersburg comes the closest to the «*fuzzy oligopoly*» market type, which besides the price competition also actively uses the product mix policy and the growing number of the outlets, was largely confirmed. Undoubtedly, as of now the process of transformation of the Petersburg food retail market from the monopolistic competition to the «*fuzzy*» oligopoly with highly differentiated products is far from completed. In some of its segments (e.g. the "shops walking distance"), the level of competition is still relatively high. At the same time, even in this segment one can clearly see the price leadership of one company, so that the situation closely resembles the Forchheimer model of oligopoly.

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THE IMPACT OF GLOBALIZATION ON HEALTHY LIFESTYLE OF CONSUMERS

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Abstract. According to the World Health Organization, obesity is one of the biggest health problems of the 21st century. It suffers from it about 130 million Europeans, which is every fifth inhabitant of our continent. This disease associated with unhealthy diet and lack of exercise, is not a matter of just one country, but is a serious problem around the world, as it threatens the health for the entire population. Although EU countries spend considerable funds for the treatment of obesity, it is important for everyone to realize that basis is the prevention, which is based on nutrition, physical activity and lifestyle changes. The promotion of healthier lifestyles, as a way of life that reflects the values and attitudes of the man leading to a healthy body and mind, it is very popular not only in our society, but also in the world. Healthy lifestyle, healthy eating, regular exercise, an ecological approach to the world, it is all part of this popular trend. All commercial companies are well aware of this, which hold the password "what is healthy, it is sold". This matter, of course, can become a target of criticism as well, but the fact remains that more and more people have an interest in healthy way of life, who are aware of the consequences of the present, often unhealthy life speaking of their health and condition. The aim of the paper is to highlight the factors that have an impact on healthy lifestyle of consumers.

Keywords: consumer, healthy lifestyle, nutrition, health, condition, globalization

JEL Classification: M00, I10, I11, I15

Introduction

Nowadays, obesity together with overweight become a kind of global epidemic. According to World Health Organization, the number of obese people constantly increases and becomes and acquires the character of an epidemic. Obesity is not just a disease of lifestyle of the rich countries of the West, but increasingly becomes a disease in industrial and developing countries. The reason of the increase in obesity is poor diet, overeating, lack of exercise, lack of sleep, excess stress, thus unhealthy lifestyle which results is fat storage and ultimately a variety of cardiac, vascular and other health problems. There are more than one billion overweight adults in the world and at least 300 million of them are clinically obese. In the United States, there is more than 65% of the adult population obese or overweight. In the UK there are 75% of people overweight and 22% of them are assessed as obese.

The World Health Organization says that the current level of obesity ranges from less than 5% in China, Japan and some African countries and 75 % in islands of Samoa. But even in countries with relatively low prevalence such as China, there is the incidence almost 20 % in some cities. It is estimated that there are 22 million overweight children under the age of 5 years in the world. According the WHO the number of obese children in age from 6 to 11 years has more than doubled from sixties of the last century.

Alarming increase in obesity is in European countries as well. According to statistics in EU 27% of men and 38% of women suffer from overweight or even from obese and childhood overweight and obesity has increased too. Nowadays, there are approximately 22 million overweight children and even 5 million are obese in European Union. Given that the number of obese people rises every year and expenses for the treatment of obesity and problems associated with it are reaching 4% – 7% of the total health services costs. The European Commission has started to solve this problem by adopting so-called White Paper, from 30 May 2007, which contains proposed solutions to this problem to reduce incidence of obesity-related diseases. Part of this book are various measures as well which are targeted at food manufacturers and which support teaching in schools aimed at encouraging a healthy diet and childrens’s physical activity. (GSK,2016)

Infographics compiled by the Clinic Compare, which was based on the data from CIA, shows the level of obesity in the world. Countries marked in red have the highest percentage of obese, while on contrary, green marked countries have a small extent of the problem.

Figure 1: The level of obesity in the world



Source: (aktuálne.sk, 2016)

Figure 2: The level of obesity in the world



Source: (aktuálne.sk, 2016)

1. Consumer behavior

Field of consumer shopping behavior is a dynamic process that is constantly evolving and directly affects the market mechanism. (Fašiang, 2015) Consumer behavior could be understood as behavior that consumers show in finding, purchasing, using, evaluating, disposing of products and services from which they expect to meet their needs. (Richterová 2015) However, this behavior cannot be seen in isolation, it is strongly determined by the action of internal, external and situational influences. The external factors which significantly affect consumer behavior can include a culture in which the individual grows up and lives. Everyone appropriates certain attitudes, customs, traditions values from early childhood, which are typical of the culture and based on that we can say the culture is one of the determinants that influences long term and through values is reflected in the psychological characteristics of consumer behavior in the form of certain attitudes, perceptions and motivations (Ďurková et al., 2014). Another determinants of consumer behavior are demographic characteristics such as age, gender, income, location, religion, etc. Combination of these parameters creates so-called subcultures in society, which are characterized by different patterns of behavior in comparison to the majority society (Jánošová, 2015). The subculture is based on the fact that people who live in the same locality, or people of the same religion, have most likely similar behavior as two randomly selected respondents from different subcultures. The same could be said for members of different social classes, also because the status of an individual in the society has a huge impact how the individual will behave, what he will buy, how he will respond to different marketing communication tools, etc. Whether we are talking about culture, subculture and social class, it is also important to mention reference groups, for example family, which can affect its members through care, encouraging the aspirations and investing time and money in their education or health (Šipikalová, 2015), further association, aspiration or dissociation groups formed by people who have similar interests and with which consumer comes into contact. The groups have a specific impact on consumer and his behavior as a source of information about products, they mold standards what is acceptable and what is not. Their influence on individual decision-making increases together with frequencies of contact and degree of mutual trust between members and decreases with the increasing number of group members.

Currently, consumers are much more educated, more informed and more demanding than in the past. As part of purchasing decisions they verify and compare not only the products and services of their interest but also companies providing these products and services to them. (Máliková & Rybanský, 2015). Their behavior is erratic. Each consumer has unique personality which is influenced by various factors under which is formed its buying behavior. Nobody knows exactly how the consumer will react, we can only assume his behavior. Even if we take into account cultural, social or economic factors, the behavior of consumer may not be as we suppose because the actual impact of purchase situation respectively situational factors as f. e. atmosphere in shop, its appearance, an attractive product offer, people in the shop, enough or lack of time for purchase decision, decision for whom is the product intended, whether it is for own need or for another person, current mood, health condition, etc. could change established ways of consumption or pre-considered choice of consumer.

It follows that consumer behavior currently entails a number of questions, many unresolved problems and challenges that should marketers try to solve and understand especially. Furthermore, they have to thoroughly investigate the product itself and its benefits, as well as

target customers and determine appropriate marketing strategy. (Soroková & Petříková, 2015).

2. Healthy lifestyle

The result of action of internal and external factors, and at the same time as their noticeable appreciation, is lifestyle of consumer. Lifestyle is characterized by summary of voluntary behavior (selfselection method of behavior) and life situation (therefore offered options). This reflects the thinking and action of man, equipped with a certain genetic predisposition, which in turn reflect the traditions, respect of compliance with the standards, life values, interests, education but also age, race and gender and possibilities with regard to the economic situation and state of health (Blaha, 2001).

Term lifestyle was first time used by Alfred Adler, who considered it as one of the dynamic components of human personality. According to him lifestyle is the kind of external expression of values, interests, attitudes and beliefs of individuals.

Kulčáková defined lifestyle as a way how people live their life, therefore how they live, eat, educate, behave in different situations, enjoy themselves, work, consume products, communicate with each other, act, decide, travel, profess and adhere certain values, care of their children, produce something, etc. (Kulčáková, 2010; Duffková, 2008).

Frequent, and in sociology has been for a long time dominant perception of lifestyle as a differentiating feature of social classes. Until a little later, that concept began to be associated with the area of consumption and consumer culture in which changes in production technologies and the transition from Fordist mass production enabled a wider choice of consumer items and created a more segmented and nuanced consumer market, that did not depend on a single dominant fashion. At making the choice of products, the rules which were bound for a fixed status group ceased to exist, and the lifestyle started being understood as the matter of a personal choice, even in some cases it becomes a necessity for individuals at building their own identity (Chorvát, 2015).

Consumers choose products, services and activities within purchase that define their lifestyle, help to shape their identity, help them to successfully manage their social roles, double as means of communication and expression of membership of a particular social group. They also need to feel that their opinions are taken into consideration, desire to affect changes and adjust lifestyle in response to the area in which they live, work and spend their leisure time. (Olšiaková et al., 2015). Lifestyle is in this sense „a way how individual creates himself, and conviction in possibility and necessity of self-creation is constitutive for culture of individualism (Jacyno, 2012).“

Currently, the concept of lifestyle is associated with concept of healthy lifestyle. Healthy lifestyle can be defined as regular perform of certain activities in the long term that are beneficial to human health, respectively is avoidance of activities and influences which are harmful to human health. This is basically a way of life that reflects the attitudes and values of individual leading to the strengthening of health and soul.

Health is an important factor on which depends the quality of our lives. Society in which we live leads many people to bad eating habits, overeating and subsequent weight problems with which are often associated a variety of health problems. In addition, we are exposed to many

harmful factors, such as smoking, alcohol, drugs, stress, low physical activity. There are many of these factors and unfortunately their consequences is aware of only a small group of people who are trying to eliminate these negative impacts by taking care of their body and health through a healthy lifestyle (Kollárová & Ungerová, 2014).

In the context of a healthy lifestyle, it should be added that this is not a short-term issue but it is a regular carrying out activities which are beneficial to health in long term. Adherence to a healthy lifestyle should be based on inner conviction of each individual and it should become a sort of life philosophy.

Media have a significant impact on consumer behavior which not only influence the behavior, attitudes and opinions of consumer, while expanding the horizons of knowledge education, help in decision-making or influencing consumer lifestyles. (Máliková & Rybanský, 2014) Despite the fact that people have enough information about healthy lifestyle, they take most of them lightly. They usually realize their importance when they start to have some health problems. Until that time they buy groceries without having to be aware of their composition, they often prefer semifinished products which are prepared for longer storage, do not eat enough fruit and vegetables, drink alcohol, smoke, do not exercise, they rather spend their free time playing on computers at home or in bars. Only when a problem occurs they resort to a „healthy lifestyle,“ but usually only until such time as these problems subside. Of course, there are those who really adapt a healthy lifestyle in their lives. Those are people who care about what they eat, how can different products affect their health, they do some sports, relaxation, etc. Their convictions to live healthy is a result of findings about the benefits, respectively harmfulness of individual factors on their organism. Among this group are allocated groups of people who within a healthy lifestyle prefer only foods that are organic or groups of people who are focused on gluten free diet, lactose free diet, vegetarian, vegan, low carb, paleo, viatrian, frutarian, macrobiotic food, etc. Of course, even in these cases there can be, but does not have to, some health problems, because there is no universal diet plan for everyone in the world. Therefore, nutritionists recommend to try different foods and combinations to find out which foods are beneficial and meet us in terms of maintaining desired weight and satisfy our taste buds. In addition to a balanced diet they therefore recommend more physical activity and relaxation, which have a beneficial effect on the human psyche and also to avoid smoking and drinking alcohol.

In the contest of a healthy lifestyle it is necessary to point out the behavior of consumers in making purchasing decisions (Grešková & Kusá, 2015). The growing number of overweight people respectively obese people is a problem all over the world. Production of cheap, harmful or even dangerous foods is a huge world business for many companies. The food industry plays an important role in that determines what products are getting to supermarkets, restaurants, pharmacies, schools. In order to sell as many of these products, they offer to consumers products that are regulated by various flavorings, flavor enhancers, candied or deliberate manipulation of food in terms of marketability (dependence on sugar, chocolate, salt, burgers, fast food restaurands,...) and that encourage dependence on these foods. Besides, offering a large, favorable packages at a lower price is another factor that influences consumers to buy just these foods regardless of their negative impact on health. Other factors which often promote purchasing of unhealthy foods are impact of culture in which the individual grows up, eye-catching packaging of foods, the impact of social groups, low awareness of the harmfulness of these foods, stress, low physical activity, etc.

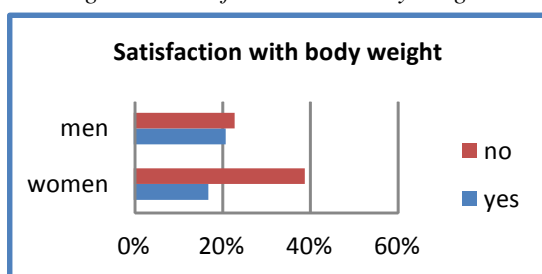
Bearing in mind the negative consequences of such as overweight, obesity and other health problems, begin increasing number of consumers who are aware that only the consumption of healthy food and prefer healthy lifestyle enabling them to improve their quality of life and on the ground has also changed their buying behavior. Consumers are increasingly interested in products with lower calories, without preservatives and containing health-promoting substances. They look for foods that are fresh or foods labeled as BIO at the same time. In their purchase they are interested not only in price but also in the composition of the foods, its nutritional value and origin of foods as well. Given that diet form does not mold a single component which has an impact to human health, consumers are beginning to care more about their physical strength. Especially the younger generation chooses various sport activities, while the older generation prefers more activities associated with relaxation such as wellness, which is intended to ensure a sense of overall satisfaction, leads to the harmony of body, mind and spirit, or activities such as walking, traveling, etc., which do not require to such a physical condition, which might be a burden rather than a health-enhancing activity for these individuals. Of course, the selection of individual actions is conditional on the state of health of every single person. The fact that today's consumers want to feel good and look good too we can even see in the selection and purchase of cosmetics. The product composition and, of course, achieved results are important for consumer here as well.

3. Survey Questionnaire Results

We conducted a survey on a sample of 330 respondents from Trnava region as part of determining how the healthy lifestyle affects to consumers. The questionnaire was distributed electronically and was designed for people aged over 15 years. We have identified limit of fifteen years because from this period young people get into puberty, their body begins to change and in many cases this change is just the initial impulse, especially for girls, pointing to a healthy lifestyle. This is a period when young people reviewing their current diet and they begin to care for their body in order to look and feel better.

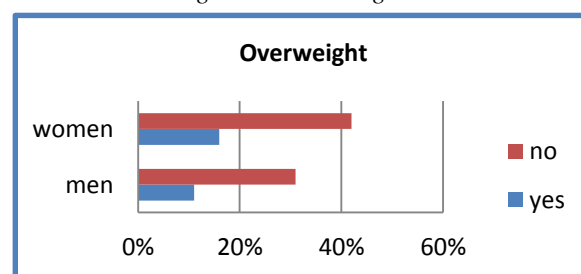
Based on the results we have come to these conclusions. From 330 respondents 19 % think that they live healthy, 38 % try to live healthy but they do not completely avoid foods and activities that are not considered as a healthy and 43% of respondents assessed their way of life as unhealthy. We were wondering wheter the respondents are satisfied with their weight in the next question. The most of them answered that they are not satisfied (62%) and 23% respondents think that they are overweight respectively that they are obese.

Figure 3: Satisfaction with body weight



Source: own created graph

Figure 4: Overweight



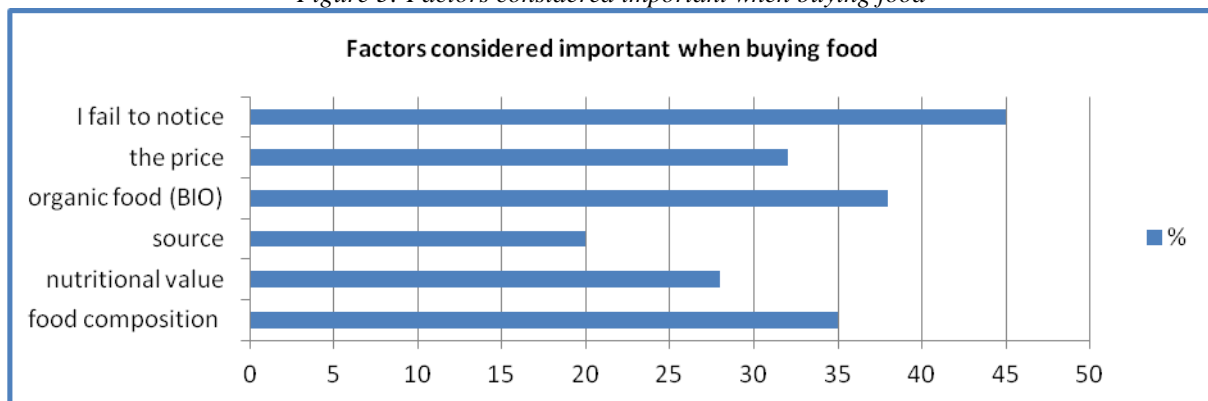
Source: own created graph

Next, we asked respondents whether they have already held a diet. The results showed that 76 % of respondents already have an experience with diet. Also in this case we got an positive

answers mainly from women. Although some respondents try to live healthily, 23% of them can not refuse cigarettes and they smoke daily, 21% of respondents said that they smoke only occasionally and 56 % of respondents do not smoke at all.

Next question was aimed to finding on what the respondents look at the most when they are buying food. For 35% of respondents is important food composition, 28% of respondents note nutritional value, for 20% of respondents is important the origin of food, 38 % of respondents focus on foods that are labeled as organic, 32% of respondents take in mind price of foods and 45 % of respondents purchase without the perception of these factors. They just buy what they currently want.

Figure 5: Factors considered important when buying food



Source: Own created graph

Penultimate question was focused on physical activity. According to the answers of respondents 46% of them do not conduct any physical activity, on the other side 55% of respondents do a physical activity more than two times a week and 9% of respondents do a physical activity daily. In the last question we asked respondents which way of relax they prefer. The most of respondents prefer to relax with friends (63%), 52% of respondents prefer sport activity and spending time at the computer prefer 21% of respondents, option „other“ chose 19% of respondents and 25% of respondents marked last option – they do not have any time to relax.

Conclusion

Obesity and its related health problems present a complex global problem that has been developed due to a combination of genetic, behavioral, cultural influences and environmental influences. The solution of obesity is healthy lifestyle. We have our health in our own hands and for every human being is undoubtedly one of the most important values. Nevertheless, there are still many people who will start to appreciate the value of their health only after serious health problems. If we want to keep our health in good condition we have to do something for ourselves. This change should be reflected in the conviction to live healthy, in healthy food choices and also in appropriate physical activity. Besides that solving of obesity requires not only changes in behavior on level of individual and family, but also interventions in health policy, social field and cultural norms as well as in the mass media policy.

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THE IMPACT OF GLOBALIZATION ON TOURISM DESTINATION MARKETING MANAGEMENT IN SLOVAKIA

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Abstract. Globalization, high competition, changes in visitors' behavior and fragmented nature of tourism have caused exceptional changes in managing and marketing of tourism destinations as well as experiences of their visitors. For tourism destinations is now crucial responsible attitude to tourism development, forming and becoming a part of collaborative entity - destination management organization connecting interests of individual stakeholders supporting their competitiveness and long term success on the market. Cooperation among different stakeholders from private, public sectors and residents presents the means how to achieve strategic goals of tourism destinations which are unreachable, if stakeholders prefer their individual interests. The tool ensuring cooperation and coordination of different stakeholders is destination marketing management. Application of this concept enhances tourism development in destinations, systematic planning, product development and distribution, with the purpose to achieve goals of stakeholders and destination. The aim of the paper is to emphasize the importance of globalization and its impact on destination marketing management in Slovak tourism regions. The paper documents utilizing of destination marketing management and analyzes its contribution to tourism development in the tourism regions of Slovakia. The paper focuses on activity of local and regional destination management organizations in tourism regions of Slovakia and selected indicators of tourism development. The material utilized by the authors are in major secondary data. The data are processed by selected methods of correlation and regression analysis interpreted by the Pearson correlation coefficient.

Keywords: globalization, destination management organization, destination marketing management, tourism destination, tourism development

JEL Classification: L83, Z32, Z33

1. Introduction

Globalization presents a process making the world more uniform, integrated and interdependent. It has influenced behaviour and strategies of every industry as well as a sector of tourism. Traditional attitude of managing was no more effective and both practitioners and academics tried to find out new way of managing, adapting for continuously changing

conditions in tourism destinations. New concept of managing tourism destinations has been created in 90s as “destinations marketing management”. The concept presents a tool ensuring cooperation and coordination of stakeholders in tourism destinations and enhances systematic planning of tourism development. Responsibility for fulfillment of these objectives has destination management organization (DMO), which connects individual stakeholders and their different interests.

The aim of the paper is to emphasize the importance of globalization and its impact on destination marketing management in Slovak tourism regions. The first part of the paper focuses on the concept of globalization and its impact on tourism management and marketing. The second part characterizes local and regional DMOs in Slovakia and on the basis of selected variables (subsidy, number of visitors in accommodation facilities, employment in accommodation and hospitality facilities, turnover of accommodation facilities) analyzes a contribution the DMOs to tourism development in regions of Slovakia. The paper was built on secondary data, such as professional books, journals, web sites and annual reports. Furthermore, the data were processing by selected methods of correlation and regression analysis. Their results were interpreted by Pearson’s correlation coefficient. The Pearson correlation coefficient measures the strength of linear association between two variables. The coefficient can take a value from -1 through 0 to $+1$ and the sign determines direct (plus sign) or indirect (negative sign) linear correlation. Empirical research was limited by availability of data and by applying of the Pearson correlation coefficient which has a tendency to overvalue a true intensity of association.

2. Globalization and its consequences of managing and marketing tourism destinations

The multi-faceted nature of phenomenon of globalization is reflected in a variety of ways and areas, including political, social, cultural, scientific and legal (Pohoryles, 2015; Potrafke, 2015). Some see it as a process, others stress the inception of its era. Accordingly, the phenomenon of globalisation can be defined as both a state and a process. The statistical approach, regarding globalisation as a state, treats it as another period in global economy characterised by a substantial integration of diverse participants into a body exhibiting new regularities of collective behaviour. The condition of full globalisation signifies absence of any restrictions or signs of discrimination between national economies, a consistent global jurisdiction and business activity not hampered with national borders. The dynamic approach sees globalisation as a process of continuing development of the international division of labour and its parallel transformation into a new global order, with roles and responsibilities spread not only internationally but also trans- or supra-nationally. A. Zaorska (2007) supports the theory that globalisation involves long-term functional integration of economies, industries/sectors and enterprises above national borders owing to expansion, strengthening and intensification of various (trade, investment, cooperation, information) links, which makes for a co-dependent, worldwide economic system, that is, a global economy. B. Liberska (2002), on the other hand, defines economic globalisation as a gradual process of integration of national and regional markets into a single global market for goods, services and capital. She considers economic globalisation as a process of expanding and tightening of interdependences among countries and regions due to rising international flows and activities of transnational

corporations, which provides for new quality of links between companies, markets and economies.

Process of globalization, increasing competition, multidisciplinary of tourism industry, its fragmented nature and changing requirements of visitors have significantly influenced attitudes how to manage tourism destinations. Tourism destination is considered as basic element of whole system of tourism. The approaches towards defining the tourism destination vary in the literature sources. Considering attitudes of domestic and foreign authors we define tourism destination as the area with appropriate and attractive cultural – historical potential and infrastructure, that offers visitors unique product. To develop such a product cooperation of stakeholders is inevitable (organizations from public and private sector and residents) operating in the tourism destination. Reflecting globalization and other factors that we have mentioned before, in 90s new attitude towards managing tourism destination – destination marketing management has become more spread out (Antonescu, Stock, 2014). This concept relates the best practice and knowledge of two disciplines – management and marketing of tourism destination. While management of tourism destination presents systematic attitude to managing all its components (businesses, municipality, residents, visitors, attractions, and environment), marketing of tourism destination can be defined as a philosophy based on understanding needs and wishes of visitors. For the long term success of tourism destination is necessary to possess knowledge from both fields that are combined in destination marketing management. Destination marketing management is a continuous process consisting of market research and SWOT analysis of tourism destination, creating the vision, strategies and goals, identifying of key products, creating marketing mix, realization and evaluation of all these activities. For a fulfilment of this concept in tourism destination marketing organization (DMO) is being created. DMOs present specific forms of cooperation between public, private sector and residents. The most common forms of DMOs are local and regional DMOs, clusters, associations, networks and partnerships. DMOs are responsible for managing and marketing tourism destinations (Zach, 2016) and present a driving force of development in tourism destinations, leaders and coordinators of planning, marketing and promotion, product development, lobbying and stakeholders' education (Morrison, 2013; Casanueva, Gallego, Garcia-Sanchez, 2016; Merinero-Rodriguez, Ignacio Pulido-Fernandez, 2016).

3. The impact of globalization on destination marketing management in Slovakia

The social and political changes in 1989 and the integration of the Slovak Republic into European Union in 2004 made possible to influence globalization process every branch of industry, including tourism. The increasing competition and lagging behind the developed countries have emphasized the need to change the view how to manage tourism destinations in Slovakia, representing by establishment of tourism associations and tourism clusters. The activity of these DMOs has not been sufficient. Slovak tourism destinations have not been enough competitive and well – prepared for changing behavior of visitors demanding quality and unique experience. The most important deficiency has been the ambiguous specification of responsibility for creating products in tourism destinations. Because of the process of globalization and its impact on tourism management (demographic and socio-economic changes on tourism market, creating global culture, developing of platform for cooperation between and within tourism destinations, faster transfer of knowledge and innovations,

growing competition, emphasizing sustainable development) (Mariani, 2016; Komppula, (2016) has been for future success of tourism development in Slovakia inevitable to change the view how to manage tourism destinations. Globalization has changed the traditional view of tourism destination from the area determined by geographically or politically boundaries to the area consisting of some overlapping parts determined by flows of visitors. In this area should be established dynamic DMO creating added value for visitors as a synergy following from public-private cooperation (Reinhold, Laesser, Beritelli, 2015). The need to adopt the changing environment was the reason why in 2010 the Tourism Support Act no. 91/2010 was adopted. This law make possible to establish national and regional DMOs based on the public-private partnership. The law clearly defines competencies of these organizations, duties and ways of their financing. Its main purpose is to create complex system of destination marketing management in tourism destination in Slovakia on local, regional and national level.

3.1 Contribution of local and regional DMOs to tourism development

Local and regional DMOs support and create conditions for tourism development in destinations, protect interests of their members, create products and realize marketing activities, make plans for sustainable tourism development in destinations, help to secure natural and cultural heritage. Local DMOs are based on partnership at least two businesses with at least five villages or cities (in which was a number of overnight stays minimum 50 000 in a previous year), or less than five villages or cities (if a number of overnight stays were more than 150 000 in a previous year). Members of regional DMOs are a region and at least one local DMO. Both local and regional DMOs can apply for a subsidy from state budget, which purpose is to motivate stakeholders to establish DMOs in destinations. A subsidy for local DMOs is the same as an amount of contribution of all members (no more than 90% of the tax for accommodation collected in members' villages/cities in a previous year). A subsidy for regional DMOs is the same as a member contribution of a region (no more than 10% of the tax for accommodation collected in villages/cities which are members of local DMO in a previous year).

Table 1: An overview of existing DMOs in 2016 in Slovakia

Region/ Number of DMOs	Bratislava region	Trnava region	Trenčín region	Nitra region	Žilina region	Banská Bystrica region	Prešov region	Košice region
Local DMOs	3	4	4	2	6	6	7	3
Regional DMOs	1	0	1	0	1	0	1	1
Total	4	4	5	2	7	6	8	4

Source: Own elaboration according to Ministry of transport, construction and regional development of the Slovak Republic (MTCRD SR), 2016.

In Slovakia were in 2016 established 35 local and 5 regional DMOs. Most of local DMOs are situated in the regions with the biggest areas - Prešov, Banská Bystrica and Žilina. Only 2 local DMOs were established in Nitra region. We can explain this situations that these DMOs fulfil their task, stakeholders in the region are willing to cooperate and do not need to establish another one. Interesting situation is in Bratislava region. In this the smallest region of Slovakia were established 3 DMOs in spite of it is one of the most visiting destination on Slovakia with the capital city Bratislava. Regional DMOs were established in Bratislava, Trenčín, Žilina, Prešov and Košice region. In Trnava, Nitra and Banská Bystrica region they have not been

established for now. The reasons may be sufficient results of existing local DMOs and positive tourism development in these regions.

Table 2: An overview of subsidies for local and region DMOs in the years 2012-2015 in Slovakia

Regions/ Subsidy in €	2012	2013	2014	2015	Total
Bratislava region	694 837,20	696 729,00	699 409,00	837 516,00	2 928 491,20
Trnava region	163 679,12	169 047,20	169 047,20	186 520,36	688 293,88
Trenčín region	37 529,46	37 529,46	176 656,44	154 853,80	251 715,36
Nitra region	93 045,60	75 851,19	75 851,19	56 300,00	301 047,98
Žilina region	649 804,10	702 913,51	1 099 234,53	1 195 553,57	3 647 505,71
Banská Bystrica region	280 866,55	266 435,31	268 442,03	354 388,66	1 170 132,55
Prešov region	843 605,70	890 520,72	1 000 520,72	1 082 575,80	3 817 222,94
Košice region	163 054,91	162 989,25	206 028,35	427 333,16	959 405,67
Total	2 926 422,64	3 002 015,64	3 695 189,46	4 295 041,35	13 918 669,09

Source: Own elaboration according to MTCRD SR, 2016.

For local and regional DMOs presents one from the others financial sources a subsidy from state budget. Table 3 summarizes amount of money granted to local and region DMOs in years 2012-2015. Total amount of money for supporting activities of DMOs and tourism development in destinations was in the years 2012-2015 about 14 millions €. The biggest amount of money was gained to Prešov and Žilina region. This situation may caused two facts – (1st) in the regions is operating a lot of DMOs and (2nd) these regions belong to the most visiting destinations in Slovakia. Afterwards the sum of collected tax of accommodation is really significant. A lot of money has flown also into Bratislava region which is very popular among the visitors, too. The table confirms that the most money is proving the most visiting regions in Slovakia. The result of this is an intensification of disparities between regions in Slovakia. In 2015 obtained DMOs the biggest amount of financial sources.

To find out the contribution of financial support of state to tourism development in Slovakia we used selected statistic methods – correlation analysis. We have used Pearson's correlation coefficient to interpret the dependency of selected variables. We found out association between the subsidy and the number of visitors in accommodation facilities, the employment in accommodation and hospitality facilities and the turnover of accommodation facilities in the years 2012-2015 in Slovakia.

Table 3: Correlation between the subsidy and the number of visitors in accommodation facilities in the years 2012-2015 in Slovakia

Region	Pearson's correlation coefficient
Bratislava region	0, 863
Trnava region	0, 959
Trenčín region	0, 544
Nitra region	- 0, 999
Žilina region	0, 198
Banská Bystrica region	0, 969
Prešov region	0, 465

Košice region	- 0, 521
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Source: Own elaboration according to Slovak tourist board, 2016.

Pearson's correlation coefficient indicates in the majority of regions (Bratislava, Trnava, Trenčín, Žilina, Banská Bystrica, Prešov) direct linear correlation, but the strength between these variables differs. In Banská Bystrica, Trnava and Bratislava region the coefficient indicates strong association. In other words, more than 70 % of changes in a number of visitors were caused by changes in amount of the subsidy. In Trenčín and Prešov region is the strength of association moderate. It means that a subsidy has not a significant influence on a number of visitors in these regions. The weak linear correlation was founded out in Žilina region. A subsidy caused only 4 % changes in amount of visitors coming to the region. Interesting results were noted in Nitra and Košice region. In these regions is Pearson's correlation coefficient negative indicating indirect linear correlation between variables. In spite of decreasing subsidy of DMOs in Nitra region number of visitors was growing. In Košice region the coefficient indicates moderate indirect linear association.

Table 4: Correlation between the subsidy and the employment in accommodation and hospitality facilities in the years 2012-2015 in Slovakia

Region	Pearson's correlation coefficient
Bratislava region	0, 467
Trnava region	0, 648
Trenčín region	0, 681
Nitra region	- 0, 991
Žilina region	0, 509
Banská Bystrica region	0, 941
Prešov region	0, 363
Košice region	- 0, 127

Source: Own elaboration according to Slovak tourist board, 2016.

The Pearson's correlation coefficient indicates positive influence of the subsidy on a development of the employment in accommodation and hospitality facilities in a majority of regions. In Prešov, Bratislava, Žilina, Trnava and Trenčín region was founded out a moderate direct association between variables. The coefficient indicates strong direct association in Banská Bystrica region. In this region was founded the most significant influence of a subsidy on employment in accommodation and hospitality facilities. The changes in an amount of state's financial sources caused 89 % changes in a number of employed in accommodation and hospitality facilities. The lowest direct correlation was noted in Prešov region. In the region only 13 % changes in a number of employed in accommodation and hospitality facilities were caused by changes in amount of state support. In Nitra and Košice region was founded out indirect linear correlation between selected variables. An interpretation of correlation coefficient in Nitra region is the same like in previous text. In Košice region is an association between variables weak.

Table 5: Correlation between the subsidy and the turnover of accommodation facilities in the years 2012-2015 in Slovakia

Region	Pearson's correlation coefficient
Bratislava region	0, 685
Trnava region	0, 899

Trenčín region	0, 724
Nitra region	- 0, 989
Žilina region	0, 486
Banská Bystrica region	0, 797
Prešov region	0, 792
Košice region	0, 624

Source: Own elaboration according to Slovak tourist board, 2016.

Turnover of accommodation facilities are important indicator of tourism development in destinations. Except Nitra region is Pearson's correlation coefficient positive and indicates direct linear association between selected variables. The strongest association were found out in Trnava region. In the region a subsidy caused 81 % of changes in turnover of accommodation facilities and their growth. Strong association were noted also in Banská Bystrica and Prešov region. It also demonstrates a positive influence of a subsidy on turnover and their changes are in the region about 63 %. Except regions Banská Bystrica and Prešov, moderate association was found out also in Trenčín, Bratislava, Košice and Žilina region. In Žilina region is a value of Pearson's correlation coefficient the lowest. Only 24 % of changes in turnover of accommodation facilities were caused by changes in amount of public financial sources. A value of correlation coefficient in Nitra region is almost the same as before. In spite of relative low support of state in the region the turnover of accommodation facilities are growing as well as number of visitors and an employment in accommodation and hospitality facilities.

4. Conclusion

Globalization as a world-wide phenomenon has significantly changed a view how to manage tourism destinations. The new concept of managing tourism destinations is destination marketing management. It represents activities focus on creating added value for visitors and to developing mutual relationships, in a way bringing benefits for all stakeholders and destination. The concept consists of market research, creating the vision, strategies and goals, identifying key products, creating marketing mix, realization and evaluation of all these activities. Responsibility for performing these tasks is carried by DMOs. Their creating supports cooperation between stakeholders in destinations enhances competitiveness and long term tourism development. Utilization of destination marketing management in Slovakia started in 2010 passing the law about the support of tourism development in destinations. The law has made possible to establish local and regional DMOs on a base of public-private partnership. As a motivation for their establishment can DMOs gain a subsidy from state for financing their activities. Because this financial help comes from state budget, we decided to analyze amount of these financial sources in individual regions in Slovakia and to find out their contribution to regional tourism development. In the years 2012-2015 was the total sum of a subsidy for regions in Slovakia 13 918 669,09 €. The biggest amount of money has gained regions Prešov, Žilina and Bratislava. The analysis of association between the subsidy and the number of visitors in accommodation facilities, the employment in accommodation and hospitality facilities and the turnover of accommodation facilities confirmed in a majority of Slovak regions moderate or strong linear correlation between these variables. We can conclude that the subsidy has a positive impact on tourism development in Slovak regions. We noted

significant impact of the subsidy on the number of visitors and on the turnover of accommodation facilities.

To sum up, the analysis proved positive impact of the subsidy to tourism development of Slovakia. However, the conditions for gaining a subsidy have shown as insufficient and have intensified disparities between developed and developing regions. The most amount of money is spreading into regions with well tourism infrastructure and where regularly comes the most visitors. Further research of tourism development in Slovakia should focus on a suggestion better way for financial support of DMOs from state budget and on its economic activities.

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THE MODEL OF FINANCIAL BUDGETING AND PLANNING FOR MICRO AND SMALL ENTERPRISES

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Abstract. Micro and small enterprises create a crucial part of the economic potential of the European Union. The prosperity of every European country in the current globalized world depends on their vitality, flexibility and competitiveness. Budgeting is one of the most used tool for financial planning in micro and small enterprises. Standard methods of budgeting used in these enterprises have some gaps which make it non-transparent and not suitable for current turbulent age. The aim of this paper is to create a model of financial planning through the connection to the economic value added (EVA), as a modern method of performance measurement and budgeting. The proposed model was based on the analyses of primary and secondary sources in the environment of Microsoft Office Excel 2013. This model was implemented, verified and tested in the practice of selected micro and small enterprises. The model will support gathering and analysing of information for financial planning, setting financial goals and control with emphasis on analyse of the variance. It is expected that implementation of this model into the practice will help managers to dispose better information about the main financial indicators. According to these indicators they will make right, quick and effective financial decisions which help to improve the competitiveness and market value of micro and small enterprises.

Keywords: financial planning, budgeting, economic value added, micro and small enterprise, globalization

JEL Classification: M20, M21, M29

1. Introduction

Moderné technológie, predovšetkým internet, otvárajú nové trhy pre mikro a malé podniky (MaMP) a vedú k zmenám podmienok v podnikateľskom prostredí. Z dôvodu globalizačných tendencií, rastu komplexnosti a dynamiky podnikateľského prostredia, konkurencie a celosvetového dopytu, ako aj rozvoja informačných a komunikačných technológií je systém riadenia podniku vystavený novým výzvam (Bikár, Kmeťko, 2015; Dworski, 2011; Úradníček, Zimková, 2009). MaMP tvoria chrbtovú kosť európskeho hospodárstva a pod tlakom všetkých zmien vplyvom globalizácie sú nútené zavádzať nové metódy a postupy v oblasti riadenia podniku, medzi ktoré patrí aj kontroling, rozpočtovníctvo, plánovanie

a moderné postupy merania a hodnotenia výkonnosti podniku (Burešová, 2015; Horvathova, 2014; Vavrová, 2014). Každý manažér MaMP realizuje na určitom stupni proces plánovania a rozpočtovania svojich finančných prostriedkov. Hlavnou úlohou kontrolingu, ako integrovaného manažérskeho nástroja, je prostredníctvom cielenej koordinácie dosiahnutie podnikových cieľov, čím je priamo prepojený s plánovaním a rozpočtovníctvom v danom podniku. Súčasťou systému inštrumentária kontrolingu sú aj nástroje merania výkonnosti podniku. Pomocou nich je manažér schopný odhaliť, resp. prognózovať dopad svojich rozhodnutí. Jedným z takýchto nástrojov je ekonomická pridaná hodnota (EVA), ktorá prostredníctvom desagregácie ponúka manažérovi pohľad nie len na hodnotu podniku (súčasnú alebo budúcu), ale aj na súbor ďalších ukazovateľov, ktoré túto hodnotu ovplyvňujú, čo mu umožňuje efektívnejšie plánovať a rozpočtovať finančné prostriedky (Ptackova, 2014). Väčšina nových nástrojov v systéme kontrolingu alebo merania výkonnosti sú častokrát vytvárané pre implementáciu do stredných a veľkých podnikov, čím sa vytvárajú bariéry pre MaMP (Peel, 1998). Cieľom predloženého príspevku je navrhnúť model finančného plánovania prostredníctvom prepojenia ekonomickej pridanej hodnoty, ako modernej metódy merania výkonnosti, a rozpočtovníctva (model „BEVA“), čím sa vytvorí unikátny nástroj pre podporu manažérskych rozhodnutí a následne rastu trhovej hodnoty a konkurencieschopnosti MaMP.

2. Materiál a metodika

2.1 Materiál

Rozpočtovníctvo je popri procese plánovania najdôležitejší riadiaci nástroj kontrolingu pre koordináciu a kontrolu operatívneho presadzovania strategických úloh. Na druhej strane je podľa Dambrowského (1986) práve vo väčšine podnikov dokonca jediným riadiacim inštrumentom, avšak mnohí praktici, experti a akademici ho považujú za veľmi obmedzujúci nástroj (Umpathy, 1987). Množstvo autorov sa zaoberá problematikou vymedzenia rozpočtu a rozpočtovníctva. V nemeckej odbornej literatúre sa za rozpočet považuje hodnotovo vyjadrený plán, ktorý je formálne cieľovo orientovaný a predstavuje rozhodujúcu časť pre určitý časový úsek s určitým stupňom prepojenia (Dambrowski, 1986; Horváth, 2003). Rozpočtovanie sa v tomto zmysle definuje ako proces tvorby, odsúhlasenia a kontroly rozpočtov (Pffaff, 2002). Pod rozpočtom sa pritom rozumie formálne orientovaný, v monetárnych hodnotách formulovaný a periodizovaný plán, ktorý má jednoznačne určenú zodpovednú osobu pre vymedzenú oblasť s fixovaným stupňom prepojenia.

Rozpočtovníctvo formuje podnik vzhľadom na jeho úplnosť a detailnosť, ale vyžaduje preto veľa zdrojov (personálnych aj finančných) a veľmi špecifické informácie. Spotreba zdrojov neprestajne rastie z dôvodu zvýšených nárokov manažérov na ciele podniku, ktoré sa neustále v priebehu plánovania rozpočtu a jeho pravidelného opakovania a úprav vo vzťahu k plánovaniu menia. Slebioda (2009) uvádza, že z dôvodu prílišnej detailnosti a prepojenosti, reaguje rozpočtovníctvo veľmi neflexibilne na zmeny trhu a stratégií. Vzhľadom na neustále zmeny dopytu potrebuje rozpočtovníctvo neustále variantné prehodnocovanie, ktoré poskytuje kontroling. Z toho vyplýva, že eventuálne modifikácie zaberajú príliš veľa času. Ďalším aspektom je, že v praxi sa rozpočtovníctvo a operatívne plánovanie vykonávajú nezávisle od strategického plánovania, t. j. operatívne a strategické plánovanie sa samostatne odsúhlasuje. Okrem toho, ako zdôrazňuje Dworski (2011), klasické rozpočtovníctvo neposkytuje žiadne správy o nemonetárnych faktoroch, pretože je cielene fixované na finančné veličiny.

Rozpočtovníctvo berie do úvahy hodnotové veličiny z účtovníctva, čo umožňuje stanovenie cieľov, meranie výkonnosti a koordináciu vzhľadom na hodnotové ciele podniku. Hodnotovo orientované riadenie podniku s najvyšším cieľom zvýšiť hodnotu podniku sa medzičasom stalo medzinárodne uznávaným kľúčovým riadiacim princípom. Súčasná dynamická doba podrobujú manažerov skúške vytrvalosti. Čím efektívnejšie a flexibilnejšie nástroje pre riadenie má manažér k dispozícii, tým je podnik pod jeho vedením konkurencieschopnejší (López, 2015). Podľa Barila (1997) je tento fundamentálny finančný koncept základným kameňom každého podniku. Prebiehajúca hospodárska kríza zosilňuje nutnosť orientácie riadenia podniku na tvorbu hodnoty a kapitálu. Tradičné ziskovo orientované riadiace veličiny už nestačia aktuálnym výzvam. Všeobecné nedostatky ziskovo orientovaných ukazovateľov sú už dlhodobo kritizované. Medzičasom vznikla široká škála konceptov, ktoré sa obmieňajú v závislosti na ich systematizovanom výpočte základu. Na jednej strane sú to systémy založené na výpočet cash flow, na druhej strane sa vyvinuli systémy, ktoré vychádzajú striktnie z údajov z účtovníctva.

Koncept ekonomická pridaná hodnota (EVA) bola vyvinutá poradenskou firmou Stern Stewart a následne sa rozšírila po Severnej Amerike a Európe (Stewart, 1990). Ukazovateľ EVA vychádza z ekonomického zisku, tzn. zisku tvoreného rozdielom medzi výnosmi kapitálu a ekonomickými nákladmi, teda nákladmi, ktoré okrem účtovných nákladov zahŕňajú i tzv. oportunitné náklady. V praxi sú oportunitnými nákladmi predovšetkým úroky z vlastného kapitálu podnikateľa, vrátane odmeny za riziko a prípadne jeho ušlá mzda. Koncept EVA je primárne orientovaný na posúdenie periodickej výkonnosti, ale ak je súčasťou systému určovania hodnoty podniku je možné ju použiť aj napr. na posúdenie variantov investícií (Sloof, 2012). Bez ohľadu na koncept si každý podnik vyžaduje originálne riešenie, a preto existuje viac než 164 možností úprav, napr. z dôvodu majetku nadobudnutého lízingom. V súčasnej dobe už veľké množstvo podnikov založilo svoj systém riadenia na koncepte EVA a prieskumy svedčia o jeho úspešnosti (Matejova, 2015). V Nemecku koncept EVA používajú medzi inými aj Metallgesellschaft AG, VIAG AG, Siemens AG, Metro AG a Karstadt Quelle AG (Keller, 2001).

Pre efektívne riadenie potrebuje manažér poznať faktory, ktoré najviac ovplyvňujú hodnotu EVA, čo je možné dosiahnuť prostredníctvom jej desagregácie. Variant desagregácie EVA je jeden z mnohých variantov previazaných sústav ukazovateľov (pyramidálneho rozkladu), ktoré je možné tvoriť viacerými spôsobmi a použiť rozklad len na toľko úrovniach, koľko je primerané danej situácii. Dôležitý je však základný cieľ – zachytiť vo vhodne zvolenej štruktúre celý okruh faktorov, ktoré pôsobia na zvolený ukazovateľ. EVA, prostredníctvom jej desagregácie na nižšie úrovne, umožní podnikateľovi sprostredkovať prehľad o všetkých potrebných monetárnych údajoch o jeho podniku (Scholleova, 2015). Koncept EVA sa primárne používa na stanovenie výkonnosti podniku, zistenie jeho hodnoty, či posúdenie efektívnosti investícií, avšak na druhej strane je pre jej určenie potrebné veľké množstvo interných informácií, čím sa vytvára databáza vhodná pre ostatné nástroje riadenia podniku (Li, 2011). Databáza informácií je špecifická vznikom nových upravených informácií o údaje z finančného a manažérskeho účtovníctva, vzhľadom na to, že koncept EVA pre správne vyjadrenie hodnoty vyžaduje upravený výpočet svojich ukazovateľov.

2.2 Metodika

Výskum prebiehal v piatich kľúčových etapách. V prvej fáze riešenia bolo potrebné na základe analýzy sekundárnych zdrojov realizovať literárnu rešerš domácich a zahraničných autorov s cieľom porovnať názory rôznych autorov na skúmanú problematiku a tiež vytvoriť si teoretický základ pre návrh modelu. V tejto fáze boli použité metódy vedeckej práce, ako sumarizácia, syntéza poznatkov a metóda analógie. V druhej fáze bola realizovaná analýza stavu riešenej problematiky v dvoch vybraných podnikateľských subjektoch z prostredia MaMP na Slovensku. V tretej etape bol na základe analýzy primárnych a sekundárnych zdrojov navrhnutý model „BEVA“ v prostredí Microsoft Office Excel 2013. Pri vytváraní modelu boli použité rôzne funkcie formátovania, hypertextových odkazov, vzorcov a podmieneného formátovania. Skúšobná verzia prešla modelovým testovaním. V štvrtej etape sa výsledný model po zistení a odstránení nedostatkov implementoval do vybraných podnikateľských subjektov. V záverečnej fáze boli metódou sumarizácie zhodnotené dosiahnuté výsledky a definované prínosy modelu pre vedu, teóriu, ale najmä pre prax MaMP.

3. Výsledky a diskusia

3.1 Analýza súčasného stavu v praxi mikro a malých podnikov

Na základe štruktúrovaných riadených rozhovorov s manažermi vybraných dvoch MaMP boli zistené skutočnosti o aktuálnom stave zavedenia plánovania, finančného plánovania, rozpočtovania, merania výkonnosti a kontrolingu. Zistené údaje sú prezentované v tabuľke 1.

Table 1: Využívanie metód plánovania, rozpočtovníctva, kontrolingu a merania výkonnosti v MaMP

Funkcia/proces	Podnik A – mikro podnik	Podnik B – malý podnik
Plánovanie	Plán vypracúva manažér podniku pred začiatkom každého roka. Jeho priebežné plnenie nekontroluje, hodnotí subjektívne.	Plán vypracúva manažér podniku pred začiatkom každého roka. Na konci mesiaca realizuje spätnú kontrolu, o ktorej informuje aj svojich zamestnancov. Plánovanie realizuje pomocou vlastných zápiskov v diári.
Finančné plánovanie	Realizuje manažér pri rozhodovaní o investovaní do majetku podniku v spolupráci s externou ekonómkou.	Realizuje manažér na záver mesiaca, zhodnocuje stav a nákup súčiastok, prípadne nákup majetku, v spolupráci s externou ekonómkou.
Rozpočtovanie	Manažér nezostavuje formálny rozpočet.	Manažér nezostavuje formálny rozpočet.
Meranie výkonnosti podniku	Nerealizuje	Nerealizuje
Kontroling	Nerealizuje	Nerealizuje

3.2 Model finančného plánovania „BEVA“

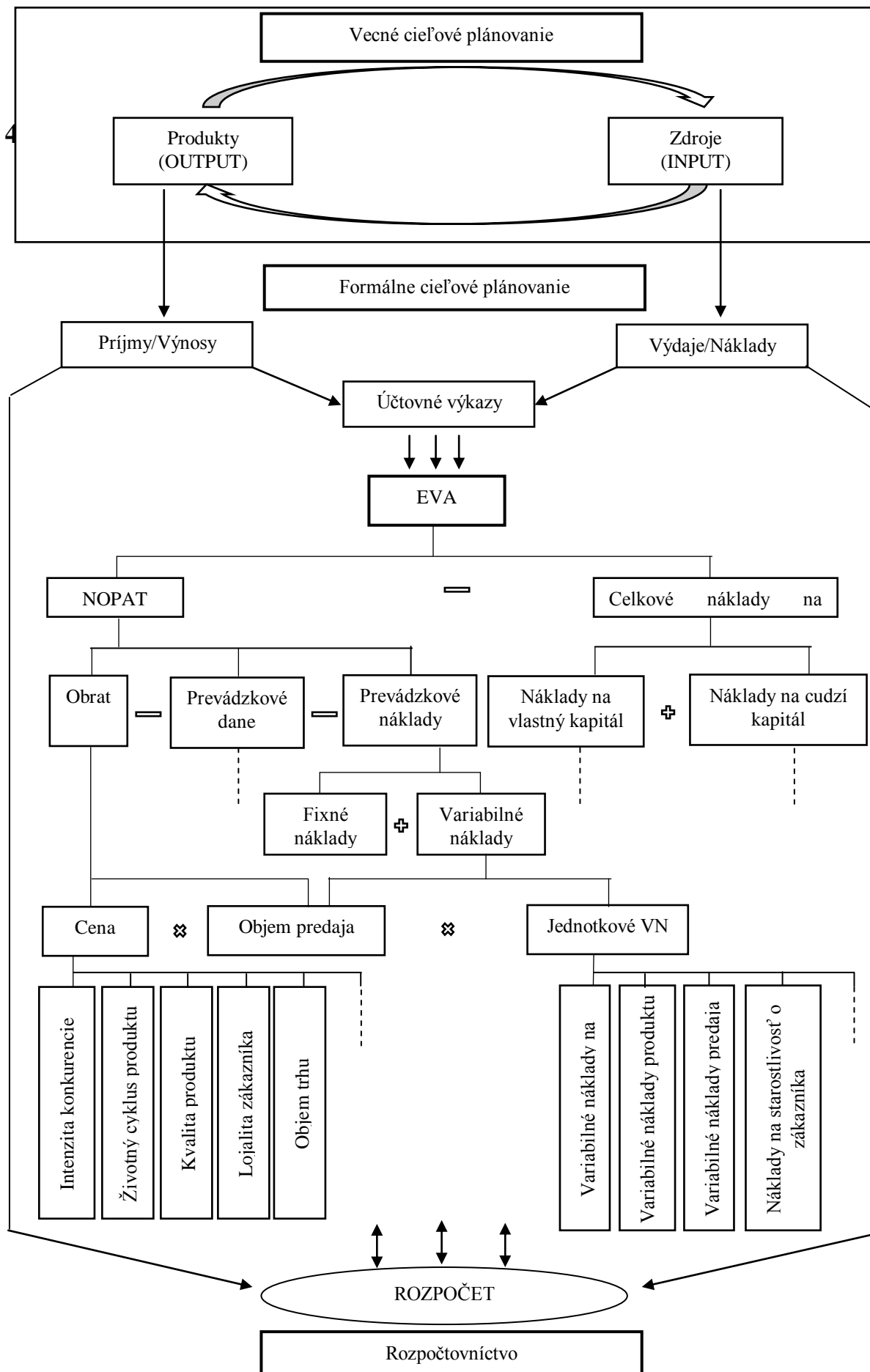
K vytvoreniu modelu nás motivoval nielen fakt chýbajúceho článku v teórii, ale aj samotní manažéri, ktorí nezávisle od seba uviedli, že daný nástroj by im veľmi uľahčil niektoré rozhodovacie úlohy. Do modelu boli zakomponované také metódy a postupy, ktoré nie sú časovo a finančne náročné pre prax MaMP. Model bol pomenovaný „BEVA“ (B – budgeting, EVA – economic value added), čo predstavuje kombináciu rozpočtovníctva a EVA.

Vo vecnom cieľovom plánovaní sú realizované predovšetkým hmotné výsledky plánovacieho procesu (množstvo, kvalita, počet), pričom formálne cieľové plánovanie zahŕňa ohodnotenie výsledkov vecného plánovania a prevod na monetárne veličiny (náklady, výnosy). Informácie získané vo formálnom plánovaní postupujú ďalej v spracovaní do účtovných výkazov, ktoré slúžia ako vstupné údaje pre výpočet ukazovateľov, na ktorých je založená ekonomická pridaná hodnota. Prostredníctvom jednoduchej desagregácie EVA môže manažér podniku vidieť všetky ukazovatele, ktoré ovplyvňujú hodnotu jeho podniku, zároveň tieto ukazovatele plánovať a prognózovať výsledky budúceho obdobia. Rozpočet tvorí výsledok vecného a formálneho plánovania. Na základe spätného prepojenia rozpočtu na ekonomickú pridanú hodnotu, dokáže manažér tvoriť finančné plány a modelovať situácie, čím získava potrebné informácie pre jeho súčasné aj budúce rozhodovanie. Zároveň model znázorňuje ako rozpočet vplýva aj na nemonetárne ciele, čím priamo manažér dokáže zhodnotiť vplyv svojich rozhodnutí. Obrázok 1 prezentuje navrhovaný model.

Za hlavné prínosy navrhovaného modelu pre teóriu, vedu a prax možno považovať:

- vytvorenie fungujúceho informačného systému na podporu manažérskych rozhodnutí pre prax MaMP v prostredí Microsoft Office Excel 2013 ,
- vybudovanie informačnej databázy v konkrétnom podniku, ktorá uľahčuje zber informácií a zefektívňuje výstup z databázy,
- spracovanie unikátneho prístupu k finančnému plánovaniu v MaMP,
- odstránenie nedostatku rozpočtov, ktoré sa zameriavajú len na monetárne veličiny,
- efektívnejšie finančné plánovanie, prognózovanie a rozhodovanie manažérov,
- rast konkurencieschopnosti MaMP,
- priblíženie teórií plánovania, rozpočtovníctva, kontroingu a nástrojov merania výkonnosti podniku manažérom MaMP.

Figure 1: Model „BEVA“



4. Conclusion

Podľa Horvátha (2003) je odstúpenie od klasických tradičných metód koordinačným prístupom k riadeniu a nutným krokom nielen pre zachovanie podniku. Globalizačné tendencie v podobe nových technológií, rastu konkurencie a zmien podmienok na trhu nútia manažerov MaMP zavádzať nové postupy a metódy do systému riadenia. Klasické postupy majú niekoľko nedostatkov, vyžadujú množstvo zdrojov a času, čo ich robí nevhodnými pre súčasné podmienky MaMP. Na druhej strane moderné metódy a postupy sú vytvárané prevažne pre stredné a veľké podniky, čím vznikajú bariéry pre MaMP. V príspevku prezentovaný model „BEVA“ predstavuje prepojenie klasického rozpočtovníctva a ekonomickej pridanej hodnoty (EVA), ako nový model finančného plánovania vhodného do praxe MaMP. Model zabezpečuje vytvorenie takej databázy v podniku, ktorá skraca čas venovaný jednotlivým riadiacim nástrojom, odstraňuje určité nedostatky rozpočtovníctva, čím poskytuje manažerovi unikátny nástroj pre zvýšenie konkurencieschopnosti podniku a efektívnejšie riadenie vlastného podniku.

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SOCIO-ECONOMIC CONSEQUENCES OF GLOBALIZATION - SPATIAL ANALYSIS OF ECONOMIC CHARACTERISTICS IN EUROPEAN UNION COUNTRIES

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Abstract. Globalization is a process which is based on the integration in the economic, social and cultural fields of countries worldwide. In this article, the attention has been focused on measuring the socio-economic results of globalization for countries which are part of the European Union. It has been proved that the degree of access to the communication tools significantly influences the level of economic and social development of the EU countries, which, in turn, advances the globalization process within EU countries. Some consequences of the globalization process can be predicted and measured, however, the globalization process of a worldwide range is very complex, it depends on economic characteristics and widely on political decisions, therefore, its consequences cannot be clearly anticipated. EU countries belong to a group of highly developed countries, yet differ from each other in many aspects. Globalization, on the one hand, is a process which provides the EU countries with many benefits, on the other hand though, it can also cause threats. The article focuses on the advantages and the negative effects of globalization. The aim of the article is to study the correlation between the selected economic values and the social and economic development for the EU countries. The article attempts to verify the statement, that the socio-economic development has a significant influence on the process of globalization. The development level of the EU countries has been defined and the synthetic measures for different compositional characteristics have been compared using Hellwig's synthetic measure.

Keywords: globalization, socio-economic development, labour market, information society, multivariate comparative analysis

JEL Classification: C33, C34, C44

1. Introduction

Globalization means economic and social integration of the countries worldwide. We can enumerate four main, interfluent globalization measures: technical, socio-economic, cultural and political. Globalization is a secondary phenomenon towards scientific and technical progress, which in the first place influenced socio-economic relations and after that cultural and civilizational relations. Globalization means the interflowing of economic systems leading to the creation of international relationships lifting boundaries: e.g. economic, social or political.

Globalization is not a day to day process, it is the outcome of complex processes taking place at the same time on various levels and continents.

The economic and social aspects of globalization are formed by, among others, changes in the structure of education and occupation. The number of farmers and blue-collar workers in the society is decreasing while the number as well as the importance of white-collar workers is increasing; this is accompanied by a rising number of private entrepreneurs, which is the outcome of mechanization as well as specialization of work with the preservation of the same amount of workforce. When considering the social aspects of globalization, the Internet is also an important factor; it encourages making contacts with citizens from other cities, regions or countries, it also serves the purpose of sending information to the other side of the globe, it brings the people of the world closer levelling the distance barrier between them. As to the economic aspects of globalization, they are a lot more easier to notice and change faster compared to the social ones, although both are largely connected with each other [(Stanton & Ackerman, 2009), (Raab et al, 2008), (Baltagi & Lin, 2013), (Stiglitz, 2011), (Stiglitz, 2012)].

The article is a part of a reflective trend of socio-economic nature. The attention has been focused on the relationship, mutual influence, of the factors determining the socio-economic level of the countries as well as the determinants evidencing the development of labour markets and information technologies of the EU countries. It turned out that these fields are very strongly dependent on each other. Amongst the aims of the article we can therefore enumerate:

- the analysis of the degree of relationship between the level of socio-economic development of the EU countries and the basic economic determinants,
- measuring of the differentiation of socio-economic level of development of the EU countries,
- study of the differentiation level of development of EU countries' information society and analysis of the influence of the degree of information technology development on the socio-economic level,
- study of the relationship between the export and import scale and socio-economic development as well as between the migration scale and the community's standard of living.
- The article attempts to verify the following research hypotheses:
- a significant relationship exists between the level of socio-economic development and the globalization and internationalization of the EU countries,
- along with the growth of the development level of information society the socio-economic level of the EU countries is also rising and the process of globalization is becoming more advanced,
- the level of labour market indicators significantly influences the progress stage of EU countries' socio-economic development,
- income per person in the EU countries is the basic determinant of the socio-economic level of those countries.

The article consists of three basic parts: discussion on the topic of globalization in the EU countries, outline of research methodology as well as empirical analysis and conclusions.

2. Globalization process in the EU countries

The globalization process is a process of a worldwide range, however, the empirical study has been limited to the member countries of the EU. The existence of EU is the effect of globalization on the scale of a continent part, it facilitates contacts within the EU as well as the integration with other countries and continents. EU countries are commonly considered as well developed socially and economically. However, data analysis shows that large differences exist also between the member countries, these are especially differences in the amount of income, in the level of education and differences connected with labour market characteristics [(Engineer & King, 2013), (Gaygisiz, 2013), (Zambrano, 2014)].

Common economic policy of EU member countries, as well as free transfer of people with financial, as well as touristic aims, implies the necessity of constant and reliable communication regardless of the place of living, working or resting. Therefore, along with the reflections considering the labour market, we should also study the development of information society – it is one of the most important factors influencing the economic competitiveness of the EU countries.

In view of widespread globalization, which we are facing in the 21st century, in Europe, as well as worldwide, the facility of communication between the inhabitants of each continent and country should remain one of the most prominent goals in EU countries' policy.

2.1 Socio-economic effects of globalization

Globalization as a totality of processes leading to an increasing dependence and integration of countries, societies, economies and cultures, implies many positive as well as negative effects. Among the positive sides of globalization we can enumerate among others: scientific and technical progress, international trade, development of technology, reduction of military conflicts, growing national tolerance, increase of sales markets, economic integration. However, it is also considered as a phenomenon causing an increase of new, unpredictable forms of risk and the growth of social inequalities on global scale or on the scale of individual communities. An inconsiderable fall in the economic situation in highly industrialized countries can induce a deep economic crisis in developing countries. Economic globalization can bring about negative consequences not only in poorly developed countries but also in prospering ones. This results from, among others, the strategy carried out by modern international corporations which transfer the manufacturing of goods which do not require a highly qualified workforce to less developed countries. This causes elimination of workplaces in given sectors and a significant potential increase of unemployment. The negative effects of globalization also include: national identity threatening, downfall of small companies, rise of unemployment in countries less developed economically and endangering of natural environment (Mastalerz-Kodzis & Pośpiech, 2014).

In the 21st century we can also observe mass migrations from poor to rich countries. They can be caused by differences of economic background as well as by the ease of translocation. Immigrants, very often illegal, have problems with adapting to the new environment, which is enough to cause conflicts of different kinds. Globalization processes also contributes to the development of organised crime on international scale (Mastalerz-Kodzis, 2015).

3. Elements of research methodology – measurement of socio-economic development and Hellwig's synthetic measure

The following selected quantitative tools have been used in the empirical analyses: the measure of social welfare level HDI, methods of descriptive statistics and multivariate comparative analysis – Hellwig's synthetic measure [(Bilbao-Ubillos, 2013), (Pinar et al, 2013), (Lockhart & Rencher, 1997), (Salas-Bourgoin, 2014)].

United Nations Development Programme (UNDP) was founded in 1965, it works to promote globalization and creates a global net supporting the development of countries worldwide. UNDP determines the *HDI* (*Human Development Index*) indicator every year (the way of construction and the interpretation of *HDI* can be found in [UNDP Human Development Report 2015, Technical Notes]). The *HDI* is a synthetic measure – the geometric mean of three components determined every year for countries worldwide:

- health index, which is calculated on the base of average lifespan;
- education index, whose value is calculated as arithmetic mean of the average and expected number of years in the education period;
- standard of living index, whose base for calculation is income per person.

The interpretation of *HDI* indicator is as follows. A country is:

- very well developed, when the index is at least 0.800,
- well developed, for values ranging between [0.700; 0.799],
- medium developed, when [0.550; 0.699],
- poorly developed [0; 0.550).

In the article we have also used the method of spatial data classification – Hellwig's taxonomic development measure. Using this method we can compare the EU countries constructing a model measure. The construction of the measure is performed in a number of stages. We select the variables and construct the data matrices for the EU countries, we determine the character of the variables (stimulants, destimulants). We normalize the variables and determine the development model and anti-model for each feature. The normalized distance of the object from the model is the synthetic measure. The measure takes values from the range [0,1], the higher its value, the higher the level of development of a EU country.

4. Results of empirical study – spatial analysis of economic characteristics in European Union countries

In the analysis we have used the data for 2014: economic variables, values characterising the labour market and the scale of import and export, the use of the Internet and mobile network, as well as the migration scale for the EU countries. The data was taken from UNDP Human Development Report (www.hdr.undp.org) and the Eurostat base (www.eurostat.eu). The following characteristics were chosen:

- average life span,
- average number of years at school,
- expected number of years at school,
- GDP per person,
- employment to population ratio (% of population at the age of at least 15),

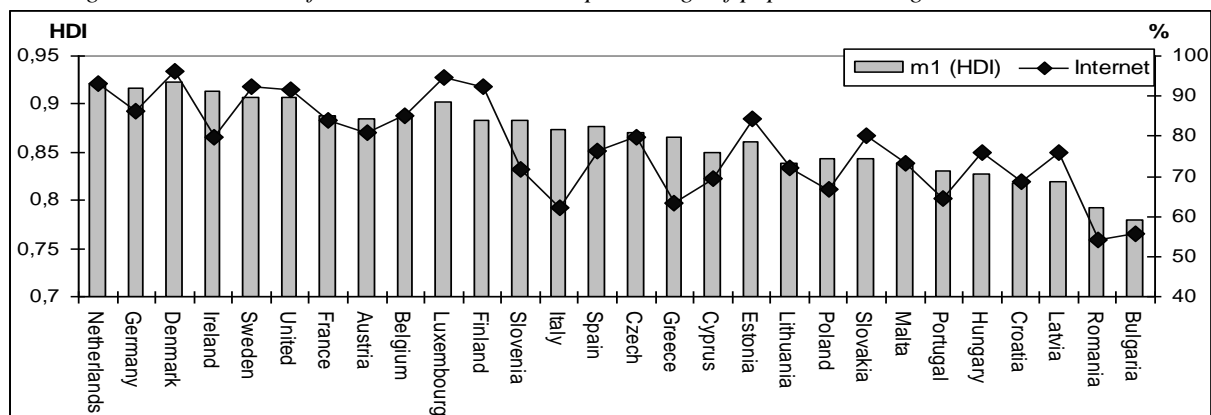
- unemployment total (% of workforce),
- youth not attending school and not working (% of people aged 15-25),
- export and import (% GDP),
- stock of immigrants (% of population),
- percent of population using the Internet,
- percent of population possessing a mobile phone.

The analysis of synthetic measure value m_1 – *HDI* indicator in 2014 allows to state that from 28 EU countries as many as 26 could be numbered in 2014 among very highly developed countries, for two countries the index indicated a high development (Romania, Bulgaria).

The data analysis of the other economic characteristics allows to draw the conclusions:

- the employment rate in EU countries ranged from the highest level 60.1% (The Netherlands) to the lowest level 38.7% (Greece),
- the percentage of youth not attending school and not working aged 15-25 was the lowest in France and Luxembourg (5%), and the highest in Italy (as much as 22.2%), Bulgaria (21.6%), Greece (20.4%),
- national income per person was the highest in Sweden (45 636 \$), and the lowest in Bulgaria (15 596 \$), a very large gap in the value of income was recorded in the EU,
- the percentage of population using the Internet belonged to the range (54; 96), the lowest value was recorded in Romania (only 54.1%), and the highest in Denmark (96%) (fig. 1).

Figure 1: *HDI values for EU countries and the percentage of population using the Internet in 2014*



Source: own study on the base of data from the UNDP Human Development Report and Eurostat bases.

A matrix of relationship between the analysed variables was constructed with the use of Pearson’s linear correlation coefficient. On the base of the elements of the matrix we can state that there exist many dependencies between the characteristics, of positive as well as of negative direction. We can, among others, note the following conclusions:

- there is a very strong, positive relationship between the HDI value and gross income value per inhabitant (0.876); we can state that income is the main and possessing the strongest influence determinant of the socio-economic development level of EU countries,

- access and use of the Internet is very strongly correlated with HDI (0.800), this means that the access to modern information technologies determines the level of socio-economic development,
- level of employment moderately influences income per person (0.525), but it is positively correlated with the degree of Internet usage (0.664),
- a very strong relationship was recorded between the variables: income per inhabitant and Internet usage (0.807); we can therefore state that using the Internet increases the standard of living of EU countries' inhabitants,
- a negative relationship was recorded between the destimulant – percentage of youth aged 15-25 not attending school or work and: the HDI indicator (-0.593), income per inhabitant (-0.649), percentage of population using the Internet (-0.756); this is a negative phenomenon as the rise in the percentage of youth without any duties corresponds with a smaller fraction of population using the Internet for educational reasons and in order to search for work!
- there is slight relationship between the value of the HDI indicator and the rate of immigration (0.43). This means that a percentage of immigrants in a given country slightly influences the standard of socio-economic life,
- export and import level as % GDP is moderately dependent on the immigration rate (0.51) – this may be an apparent dependence!

Synthetic measures were constructed for the analyzed values (table 1, figure 2):

- m1 – HDI measure,
- m2 – measure dependent on the following characteristics: employment to population ratio (% of population at the age of at least 15), unemployment total (% of workforce), youth not attending school and not working (% of population aged 15-25),
- m3 – measure dependent on the following characteristics: % of population using the Internet, % of population possessing a mobile phone.

Table 1: Values of sythetic measures m1 - HDI, m2, m3 for EU countries for 2014

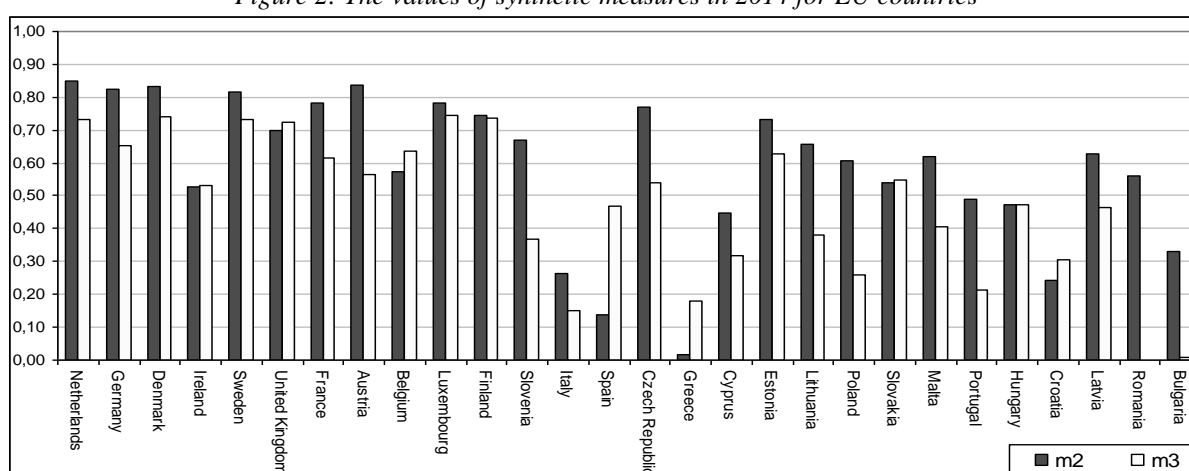
UE country	HDI	m2	m3	UE country	HDI	m2	m3
Netherlands	0.92	0.85	0.73	Czech Republic	0.87	0.77	0.54
Germany	0.92	0.82	0.65	Greece	0.87	0.02	0.18
Denmark	0.92	0.83	0.74	Cyprus	0.85	0.45	0.32
Ireland	0.91	0.53	0.53	Estonia	0.86	0.73	0.63
Sweden	0.91	0.82	0.73	Lithuania	0.84	0.66	0.38
United Kingdom	0.91	0.70	0.72	Poland	0.84	0.61	0.26
France	0.89	0.78	0.62	Slovakia	0.84	0.54	0.55
Austria	0.89	0.84	0.56	Malta	0.84	0.62	0.41
Belgium	0.89	0.57	0.64	Portugal	0.83	0.49	0.21
Luxembourg	0.90	0.78	0.74	Hungary	0.83	0.47	0.47
Finland	0.88	0.75	0.74	Croatia	0.82	0.24	0.31
Slovenia	0.88	0.67	0.37	Latvia	0.82	0.63	0.47
Italy	0.87	0.26	0.15	Romania	0.79	0.56	0.00
Spain	0.88	0.14	0.47	Bulgaria	0.78	0.33	0.01

Source: own study

The values of synthetic measure m2 indicate a high development level of the labour market of countries such as: the Netherlands, Austria and Denmark. The lowest values of the measure were recorded for Greece, Croatia and Bulgaria. The labour market certainly does not favour the economic growth and improvement of socio-economic situation in countries with a low

value of synthetic measure m2. Therefore, a remedy for the improvement of living conditions in those countries is the analysis of the labour market state and its increased flexibility as well as the improvement of its productivity. Measure m3 dependent on the level of access to technological tools confirms high positions of countries such as: Denmark, Luxembourg and Finland, while on the last positions we can find; Romania and Bulgaria. Internet usage enhances the improvement of the quality and standard of living of the population, it increases the level of socio-economic development. The coefficient of correlation between the synthetic measures m2 and m3 amounts to 0.68, in this case a significant dependence also exists between the labour market indicators and the development level and extent at which the information technology webs are used.

Figure 2: The values of synthetic measures in 2014 for EU countries



Source : own study

The construction of the synthetic indicator which includes the components: import and export as well as the percentage of immigrants is unfounded, according to the authors, as these characteristics are nominants. Therefore, for every country there is a safe range within which the values of variables are optimal. It is certain that the globalization process is favoured by large values of both of the characteristics, however, they do generate significant risk. Large import in a wide time range is dangerous for a country and a considerable percentage of immigrants in each of the EU countries is a source of problems.

On the base of the results of analyses included in table 1 and in figure 3 it can be stated that, considering the socio-economic standard of living and the development of the labour market as well as considering the communication level, in the foremost, prominent positions are: the Netherlands and Denmark, whereas, considering all analysed characteristics, in the last positions among the EU countries are: Bulgaria, Romania and Greece [compare with: (Mastalerz-Kodzis, 2016), (Mastalerz-Kodzis & Pośpiech, 2015), (Mastalerz-Kodzis & Pośpiech, 2016), (Pośpiech & Mastalerz-Kodzis, 2015)].

5. Conclusion

The observed social and economic characteristics, as well as those which indicate the level of information society development, remain in relation with each other. The knowledge of correlation between the variables and the awareness of mutual dependence of economic and social variables is valuable, since, as it has been proved in the analyses, the degree of access to

communication tools significantly influences the economic and social development level of the EU, which, in turn, accelerates the globalization process within the EU countries.

The globalization process is powered by the development of the world's financial and monetary systems and foreign economy. Globalization enables integration with others, allows for a more efficient communication, contributes to the reduction of hostility among nations, which considerably lessens the risk of wars and conflicts. Among politicians, scientists and EU citizens we can find many enthusiasts of globalization, on the other hand, there are also many people with a critical attitude towards the process. Nevertheless, on the base of the analyses it can be stated that the socio-economic, political, as well as cultural advantages are no doubtly greater than the inconveniences deriving from the globalization process. Therefore, on a global scale, it is a positive phenomenon.

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SOFTWARE SUPPORT FOR FACILITY MANAGEMENT AND VERSATILITY IN WORLDWIDE ACTION

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Abstract. Comprehensive management and property records, operating procedures, required resources and monitoring and evaluation of financial costs is not possible without computer technology. The planning and management of support processes (CAFM system - Computer Aided Facility Management System) belongs among three key systems and legitimately by his position could be in production companies, with a focus on greater attention and severity of data and their sources. The article informs about other systems such as - EIS / Economic information systems and / PTIS / operational and technical information systems /. An area of maintenance business, namely maintenance of machinery and technological equipment, support systems, CMMS (Computerized Maintenance Management System). This kind of information system can be used successfully in practice and for the technical management of buildings and facilities maintenance, which includes the processes: planning and implementation of maintenance activities. CAFM systems rarely can be effective without integration links to other information systems used in business, schools, in different institutions. Areas of integration links exists many and belong primarily links to: drawings, attendance records, billing, state or central registers and other companies' systems (eg. Customer Relationship Management - CRM). A comprehensive solution for asset management and support of facility management system provides - AMI (Asset Management Information). This system provides support for asset management and operational services.

Keywords: CAFM system, EIS system, PTIS system, CMMS systems, AMI system

JEL Classification: M15, M10, O32

1. Introduction

Modern information systems, CAFM included, are nowadays created modern object oriented programming tools, enable many interconnections and cross-links between forms and data information networks. As well as allow for the technical management and maintenance contract - considered with other modules and classes throughout the information system and so provide a comprehensive information service.

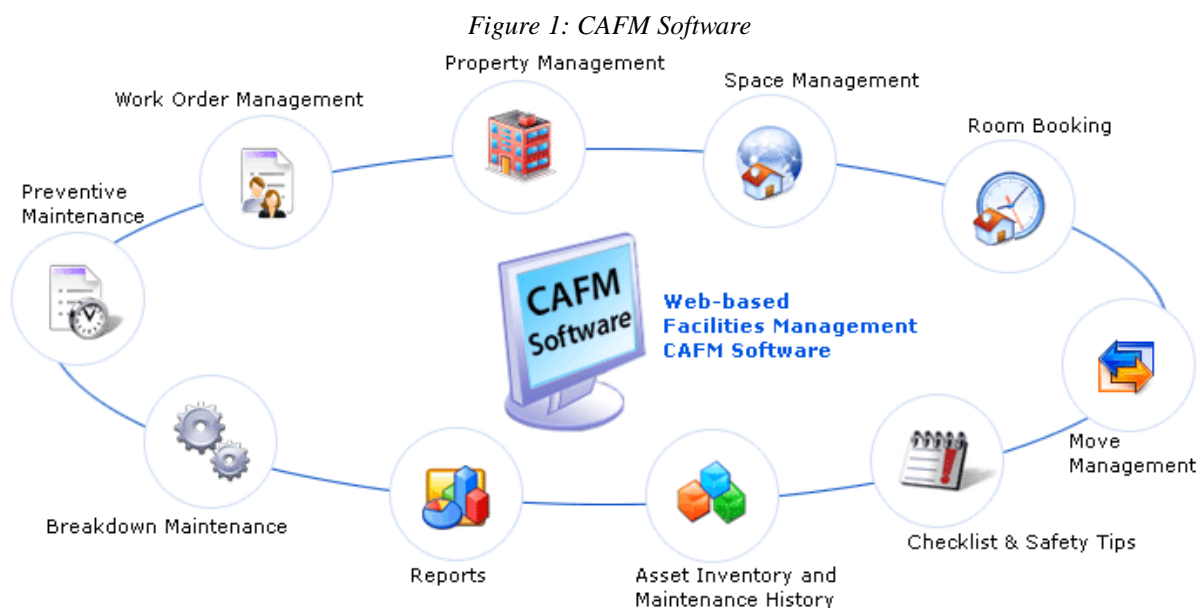
Maintenance can be considered as an information processing system. Therefore, the development of future maintenance information systems is one of the most important current research problems to model the effects of automatic condition monitoring systems enabled by embedded electronics and software. (Acquaviva et al., 2012) mentioned on the reason that

international literature is demonstrating that involvement and awareness in facility management can help energy saving. For this reason, it is necessary that the subject becomes active and able to fit inside the energy management information. (Mohanta & Das, 2016) underlines the fact – the advancement in architectural, engineering, and construction industries leads to optimization of resources, where facilities management is a great concern.

1.1 CAFM systems

CAFM is the support of facility management by information technology. The supply of information about the facilities is the center of attention. The tools of the CAFM are called CAFM software, CAFM applications or CAFM systems. The International Facility Management Association (IFMA) defines facility management as the practice of coordinating the physical workplace with the people and work of the organization. It integrates the principles of business administration, architecture and the behavioural and engineering sciences. As such, facility management has been practices, whether specifically identified as its own discipline or not, since the inception of the business organization. It has evolved over the years through the development and codification of processes into a clearly defined field of expertise.

CAFM refers to Computer Aided Facility Management – which means software and systems that enable facility managers to increase the utilisation of space and facilities, reduce office/building moves and reallocations, plan preventative maintenance, efficiently execute reactive maintenance, standardise services, and streamline processes. Ultimately, information from CAFM software allows managers to improve long-term planning of real estate, space, facilities, maintenance, and service requirements against budgets to ensure alignment with core business needs. According to (Kamaruzzaman, 2009) – CAFM is an approach that includes creation and utilization of Information Technology (IT) based system in FM practice. It is represented in Figure 1.



Source: <https://www.manageengine.com/products/facilities-desk/cafm-software.html>

In the world of information systems commonly used characteristic for some of the processes that can be included in the support process. Area maintenance business, namely maintenance of

machinery and technological equipment, support a range. *CMMS systems, systems for planning and management of maintenance processes*. There are currently offered in the market for facility management different types of software (SW) solutions and sophisticated systems. Author (Poor, 2014) stressed that for CAFM is a significant sign – evaluation of CAFM implementation into a company. This same opinion has got also (Poor, 2014) in your expressions – economic evaluation of effective CAFM software implementation in manufacturing company.

When the equipment is required to decide on what processes FM will be used and how they can respond to future expansion needs.

Such areas that deal with software for FM are:

- survey of the property, including a graphical presentation of data,
- manage and maintain assets (buildings),
- evidence of property,
- inventory of assets,
- management of lease agreement,
- management of stock control,
- recording and management of medical devices,
- accounting and tax property records,
- budget, investment management,
- the documentation and contracts,
- fire protection, training and occupational safety and health,
- tracking revisions, control, servicing and overhauls,
- car operation – management and maintenance services,
- cost control and energy,
- moving,
- cleaning.

Various CAFM systems contain generally a different modules, but the functionality contained therein is generally identical. One of the key modules that can be found in all of these systems are modules devoted to the key process of technical building management – procurement management and maintenance. Some of the available CAFM systems include the general functionality orders universal usability for all common processes and FM services, and others have a range of specific features of contracts for different types and kinds of processes and FM services. They have in common and what are the key principles for efficient data creation and subsequent information and explanatory power.

Contracts contain:

- numbering or code of order
- typology, respectively – generic term contract – internal, external, inspections, repairs, accident, cleaning, removal, disposal
- objects of the contract – building space, equipment, man, tenant, organizational unit, gauge, medical equipment, structural element of the building.
- dates and times of the contract – the date of the award, the desired date equipment, the date and time of commencement and completion

- sources of procurement – materials, tools and equipment, human resources and external resources
- providing subject – own employees when contracts internal or external entities and their representatives for external processing of orders
- working procedures – generally predefined procedures under the legislation or internal rules and regulations and the manufacturer's recommendations, sometimes well as instructions to transfer
- role of contract – specific steps and stages of implementation
- state of order – determine the current state of development and the execution of the contract according to individual needs and user settings
- priority contracts – generally called verbally, and it may even numerically or percentages
- other bonds – generally the law of periodic, requests or event; FM links to budget processes, links to senior /subordinate hierarchy renders for contracts, projects involving contract, a cost center, contracts of different nature.

1.1.1 The main features of CAFM

The first essential feature of the CAFM system is tight integration with GIS or CAD systems automatically. According to (Schurle, 1999) is between GIS and CAFM considerable similarity. CAFM software provides a tool that manages issues utilities, land and buildings, manage data on personnel, processes and areas inside buildings, data with high added value, while in their custody on a specific area that is clearly viewable graphical tools. CAFM systems track costs related to the management and maintenance, more technical breakdown of costs, and they do not care too much, under which account will encompass accounting. *The second feature of the CAFM system* is a storage of data into a single data warehouse – to a database, and the software provides common services to the management of related data such as the sharing, distribution, processing the transaction lifecycle, replicas and the like.

In each system, which is called CAFM, we might be able to identify the following modules:

- *module for management and administration areas,*
- *module for management and administration of rental relationship,*
- *module for management and administration of infrastructure well IT,*
- *module for management and administration of buildings and equipment,*
- *module for management, administration and inventory of movable property,*
- *management module and links with CAD and GIS systems automatically.*

(Wiessflecker et al., 2009) underlined the expression that static and dynamic data must be in one consistent information model. Sharing data with widely used CAFM applications promises fast deployment and high acceptance. The process is an integrated activity and must have a define start (input) and the end (output). Always determined person (process owner) responsible for the management, development and control its functions. The individual parts of the process (sub-activities) are usually responsible person (within the working portion), and this activity is carried out (expenditures, and approved purchase requirements). The individual parts of the process are defined influenced by possible changes its flow, but further direction specify the process. Other important characteristics that affect the process of the cost of their detention, the time required for building and organizational fort. Efficient management of facility management support processes significantly helps deploy appropriate CAFM system that allows these processes to fully cover it.

1.1.2 Source of data for CAFM system

About 40 per cent of the data, which are for the introduction of the CAFM system in the company need business in some form processing and most of them even electronically. According (Miske, 2011) is available to express of the idea for CAFM that facility management is a profession that encompasses multiple discipline to ensure functionality of the built environment by integrating people, place, process and technology. In view of the current business it is to identify the following data sources:

- construction documentation in the form – vector drawings (CAD, GIS), bitmap drawings and diagrams, photographs, films
- the data is processed and the required legislation (for the processing of property taxes) shall be in any business some how collected, as well as a source of accounting records
- inventory documents and databases,
- sources captured in databases, ERP system, its modules
- documentation of other elements of the building (lifts, air conditioning, lighting, access to the building, video) which is usually combines CAD (bitmap documents) with technical information database
- database older information systems in pursuit of state property, MS Office documents,
- corporate governance standards and work processes (workflow)
- electronic document management systems, process systems (databases) linked to graphics and business information systems (human resources, economics, finance, and accounting).

Common and technologically complex building technology over site maintenance, planned and unplanned repairs, maintenance and revisions – sufficient module Building Management CAFM systems. However, facility manager assumes responsibility for operating and maintaining complex machinery equipment manufacturing business (industrial use), then the system will need a CMMS (Computer Maintenance Management System). These systems use technical and operational sections of large manufacturing shoes. CMMS systems planned dates operational maintenance so as to minimize the effects of continuous manufacturing processes, providing support for personal maintenance operations (necessary material and impact, best practices), in addition monitored and warehouses of spare parts and operating materials maintenance, the traffic operations personnel; technological and maintenance procedures and repairs. When sufficient modules of the CAFM and CMMS modules again when the system depends on the individual situation.

1.1.3 CAFM systems in the Czech Republic and its practical using

First CAFM systems have been implemented in the Czech Republic around 1997. Businesses that use these systems are primarily large companies – such as: bank (ČSOB), telecommunications enterprises (O2), large industrial company (Škoda, ČEZ), which are also the major owner of real property. In areas where it is applied CAFM the world very often, such as health, education, army, government and public administration exists in the Czech Republic quite a few representative installations (with minor exceptions installation Fama in some hospitals and GT Estate ASP in Education). In the Czech Republic there are vendors field to encourage its own solution CAFM system (ASP companies, HSI, SOFT consult) as well as can be properly located and the world advanced CAFM systems (Archibus/FM, Planon, Aperture) through local partners producers. The systems are adapted and localized. According to

(Vodak, 2011) - if we are open in everything, including the information of the company; you will find out that employees are honest, open and reliable people. According to (Walder, 2006) – in future rescue companies shall take advantage of an integrated system, which supports the management of disasters based on commonly used CAFM-data and data gained through sensors. The same, for company and also for transport is according (Gregova and Dengova, 2014) important – economical issue and her effectiveness.

1.2 AMI system

AMI system is a comprehensive solution for asset management and related services. It consists of modules to enable efficient equipment and passport management of land, premises and buildings, efficient filling, management and maintenance property including management of assets. According to (Delgado, 2010) described that the main purposes for AMI implementation are: avoid complexity and inconsistency between the elements of the system and increase system's performance.

The AMI is based on management descriptive, graphic and multimedia of property, working with drawings and documents and supporting documented work processes (workflow). According to (Mak, 2009) is for AMI system - significant feature: *time element*. Current news in AMI functionality of the system is the ability graphical data in a lightweight client. This functionality, which was until now largely the domain of demanding clients will significantly increase the usefulness of the current users, and opens the way for other tasks such as fault isolation and spatial queries. (Uluski, 2008) was oriented by the utilization and shown on the important interactions of AMI system. (Hain, 2006) pointed that progress and performance are a significant issues for AMI system. According to (Hain, 2005) is AMI – based on a unified system architecture. Also (Kral & Janoskova, 2015) emphasize the cost-effectiveness analysis as a systematic tool applicable in the evaluation of projects of intelligent transport systems and also in selection of cost-effective solutions. Decision-making, problem-solving in the company is for facility management according (Rolkova and Farkasova, 2015) very important.

2. Conclusion

Management methods supporting process practiced by the information systems department provides comprehensive facility management for radically reforming how information effectively manage and optimize these ancillary activities and processes. These activities are understood, although such support, but its costs and results significantly contribute to the overall management of the company. Optimizing their management on the basis of facility management brings: *reduced operating costs, reduced space requirements, strategic planning survey, advanced accounting and inventory systems, the distribution of rent and depreciation, optimization of resources, addressing the exact costs.*

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INFLUENCE OF GLOBALIZATION ON FINANCIAL HEALTH OF BRATISLAVA AIRPORT WITH EMPHASIS ON PREDICTION BANKRUPTCY MODELS

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Abstract. The purpose of paper is to present result of financial analysis focused on financial health of Bratislava Airport. The main reason for investigating financial condition of given enterprise is high level of competition in countries of Visegrad Group (V4). In central Europe (including countries of V4 and Austria) there are situated a lot of international airports, such as Bratislava Airport, Kosice airport, Vaclav Havel Airport Prague, Vienna International Airport, Budapest Airport and so on. The competition among individual international airports is associated with globalization, too. Influence of globalization we can see in various areas, mainly in trade, transport, etc. In the theoretical part of paper, there are explanation of essential definition of financial analysis and description of historical development of prediction methods, for instance, model based on multivariate discriminant analysis (MDA), and then models based on regression analysis in the form of logit and probit models, structural models and models on principle of artificial neural network (ANN). In practical part of paper, there is brief overview about performance of airport in the form of traditional financial ratios. The performance of analysed airport related mainly to the number of passengers in compare with selected international airports in central Europe. Moreover, there are applications of individual prediction bankruptcy models. In conclusion, there is summary of results. For calculating individual methods of financial analysis we use data from financial statements of Bratislava Airport in the form of balance sheet, income statement and cash flow in the period from 2011 to 2015.

Keywords: financial health, international airports, prediction model, bankruptcy, enterprise

JEL Classification: F60, F61, G30, G33

1. Introduction

Financial analysis is an important tool for managing enterprise. The individual parts of financial analysis are ex-post analysis in the form of “traditional” financial ratios, such as liquidity ratios, asset management ratios, leverage ratios and profitability ratios, and ex-ante analysis in the form of prediction bankruptcy models. Forecasting bankruptcy of enterprises is very significant topic in the financial field, but also on academic ground. (Liang et al, 2016).

The meaning of forecasting failure of enterprises has increased mainly in connected with global economic crisis between 2007 and 2009. The beginning of economic crisis associated with collapse of significant bank – Lehman Brothers in the US. It had negative impact to global economy. It can be considered as primary reason for more frequent applying different bankruptcy models for estimating likelihood of bankruptcy of enterprises, such as MDA, logit models, probit models, etc. (Du Jardin, 2015). Most of financial analytics and economists prefer MDA due to better explanatory ability compared with univariate methods. Among the well-known models belong, for instance, Beaver model, Altman Z-score, Taffler-Tisshaw model, Springate model, Ohlson model, Zmijewski model, etc. The main reason for using of prediction model is its ability to point out possible financial problems of enterprise in the future. Therefore, bankruptcy models improve decision-making and time efficiency from point of view of finance management (Leshno & Spector, 1996), (Abdou et al., 2016).

2. The methods for forecasting likelihood of bankruptcy

Fitzpatrik (1931), is probably the first researcher, who focused on determine likelihood of failure of firms. Then, Beaver (1966) applied similar technique, and that univariate analysis. In general, his study can be considered as first significant essay in sphere of estimating financial health. Among the best-known authors definitely belong Altman. His Z-score is based on study of Beaver, however, Altman (1968) used statistical technique, and that MDA. At the beginning of constructing bankruptcy model, Altman tested 22 variables. These variables were chosen due to potential relevancy. After verification Altman chose 5 ratios on based of description ability. His sample includes 66 enterprises divided into two categories, and that perspective companies and non-perspective companies. According to result of Altman Z-score we can divide individual companies to three intervals, and that safe area, risk area and “grey” area. Altman constructed four models that vary depending on the type of firm (Lacher et al., 1995), (Reznáková & Karas, 2015), (Almany et al., 2016). Other prediction model was created by Taffler-Tisshaw (1977). Their model was set up for companies in Great Britain. The model is consisted of four ratios. If the result of Taffler-Tisshaw model is more than 30 % – given enterprise is considered to stable company. If the result of model is less than 20 % – analysed enterprise achieve potential risk of bankruptcy in the period of following 18 months. Then, Springate model (1978) is intended for enterprises in Canada. Original model involved 19 ratios that author gradually declined to four ratios. Springate verified model on the basis of 40 enterprises. If result of Springate model is less than 0,862, we can expect financial problems leading to the bankruptcy. Both models, Taffler-Tisshaw and Springate model are based on the principle of Altman Z-score (Glauter & Underown, 2001).

In 1980 Ohlson constructed so called O-score (Charalambakis & Garrett, 2016). The dataset of model is based on 105 enterprises in bankruptcy and 2058 perspective industrial companies in period from 1970 to 1976. O-score is focused on four primary factors, such that market size, financial structure, financial performance and liquidity. Moreover, in Ohlson model there are “non-traditional” variables in form of consumer price index (CPI) and indicators of binary nature. The primary benefit of Ohlson model compared with MDA is mainly to not create two groups with the same number of bankruptcy enterprises and non-bankruptcy enterprises (Hensher & Jones, 2007), (Charitou et al., 2013). In addition, other advantage is interpreting of results in the form likelihood of failure. If estimation of bankruptcy of enterprise is more than 0,5 – it means that company is threaten with failure. In the case that

result of Ohlson model is less than 0,5 – it means that enterprise is in relatively good condition, as to financial health. The accuracy of estimation of given model is 88 %. Other significant author is Zmijewski (1984) who created average probit model as alternative method in area of prediction model. The model is based on sample of 40 bankruptcy firms and 800 non-bankruptcy firms that are placed on the stock exchange in the period from 1972 to 1978. Therefore, prediction of financial health through Zmijewski model can be applied, for example, by manufacturing companies, banks, insurance companies and so on. The accuracy of likelihood of failure is at the level of 95 %. Most of analysts rather apply Zmijewski model than Altman Z-score because we can use Zmijewski model in various areas of business. Zmijewski claims that previous empirical studies are based on non-random samples at the same time the process create biased results in area of determining coefficients (Avenhuis, 2013), (Jiri & Lunacek, 2015).

Shumway (1999) developed a simple hazard model to predict failure of enterprises. In his study *Forecasting Bankruptcy More Accurately: A Simple Hazard Model*, Shumway shows to the primary disadvantages of single-period methods, and that ignoring facts connected with changes in time. The main reason for applying hazard model is consistent estimate. Shumway describes a simple technique in the form of discrete-time hazard model with using of logit model program. According to his study, almost half of the accounting variables used in previous models for determining bankruptcy are not statistically substantial indicators. Shumway model is combination accounting ratios and market data to improve accuracy of failure of enterprises, respectively financial health of firm is a function of latest financial data and its age (Shumway, 1999), (Vineet & Bauer, 2014).

Structural models are characterized with modelling value of enterprises to determine estimation of bankruptcy of firm. Among the well-known methods belong Option pricing theory (OPT) by Black, Scholes and Merton. According to OPT model, bankruptcy occurs in the case that market value of firm is lower than accounting value of debt. These authors created foundations of structural approach to credit risk to estimate probability of default of potential borrowers. The initial idea of the model is to create “health” credit portfolio (Paliathanasis et al., 2016), (Ma & Xu, 2016).

In last decade many publications are focused on application of artificial intelligence in the form of neural networks, genetic algorithms, etc. (Brozyna et al., 2016). Pioneers of neural networks in field of prediction of failure of companies were Odom and Shard (1990), who used input data of Altman model (1968). (Cleofas-Sánchez et al., 2016). The aim is to determine bankruptcy of enterprises. Methods based on ANN remove disadvantage in the form of linearity, for instance, in Altman model, Beaver model, etc. Other advantage of ANN is ability to detect linear relationship, but also ability to learn. On the other hand, neural networks are associated with difficult interpretability and high cost (Do Prado, 2016).

3. The brief overview of financial situation of Bratislava Airport

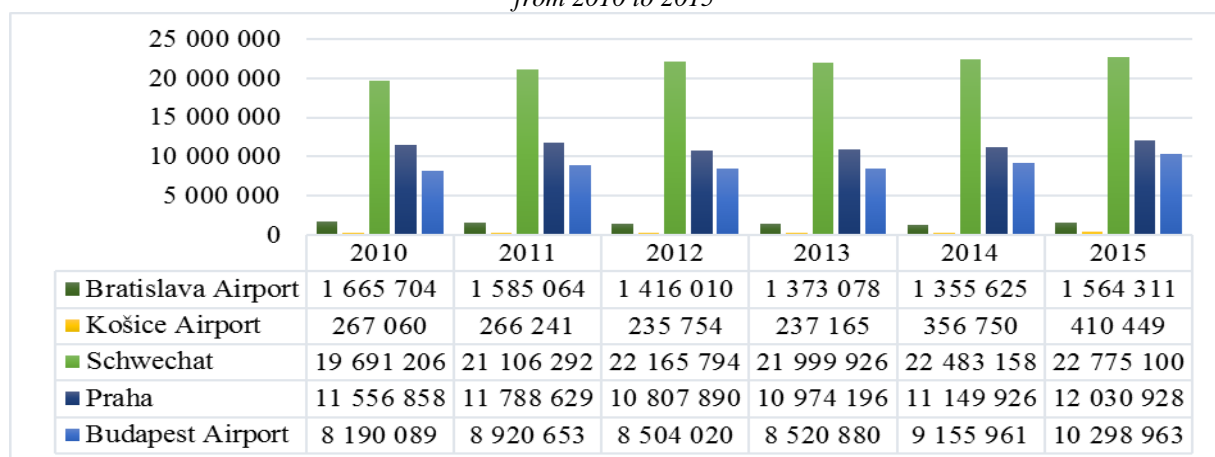
During analysed period selected enterprise didn't make a profit. Negative profitability ratios are caused, for example, with high level of debt (more than 25 %) due to building new terminal in 2012. The main reason for constructing terminal was to improve comfort for passengers and to increase capacity of airport. In spite of negative profitability ratios, we can observe positive results in the area of liquidity ratios and cash flow because of declining current liabilities and

improving solvency of subscribers. It had positive impact on net working capital (NWC) because in 2014 NWC was of more 1,5 million euro compared with (-) 3,3 million euro in 2011. The biggest problems of Bratislava Airport are dependence on two airlines and low number of passengers. The total annual capacity of Bratislava airport is almost 5 million passengers, however, from 2010 to 2015 Bratislava Airport was used by from 1,3 to 1,7 million passengers a year.

In this part of paper, we compare number of passengers at Bratislava Airport with other international airports in central Europe in given period. The primary reason for comparison is mainly show on financial problems caused with insufficient air connection leading to inadequate revenues of major business activities.

In following Figure 1 we can see development of number of passengers at selected international airports in central Europe, such as Bratislava Airport, Kosice International Airport, Vaclav Havel Airport Prague, Budapest Airport and Vienna International Airport. Based on comparison of given international airports we find out dominant position of Vienna International Airport. On the second place there is Vaclav Havel Airport Prague. It is associated with wide offer of destination and better connection to significant European cities in contrast with Bratislava Airport. In the case of Bratislava Airport number of passengers declined from 2010 to 2015, however in interannual comparison 2015/2014 Bratislava Airport recorded increase about more than 15 %. The main reason for increasing of number of passengers is connected with starting of new airport connection, for instance, to Berlin, Madrid, Athens and Moscow.

Figure 1: The development of the number of passengers at selected international airports in central Europe from 2010 to 2015



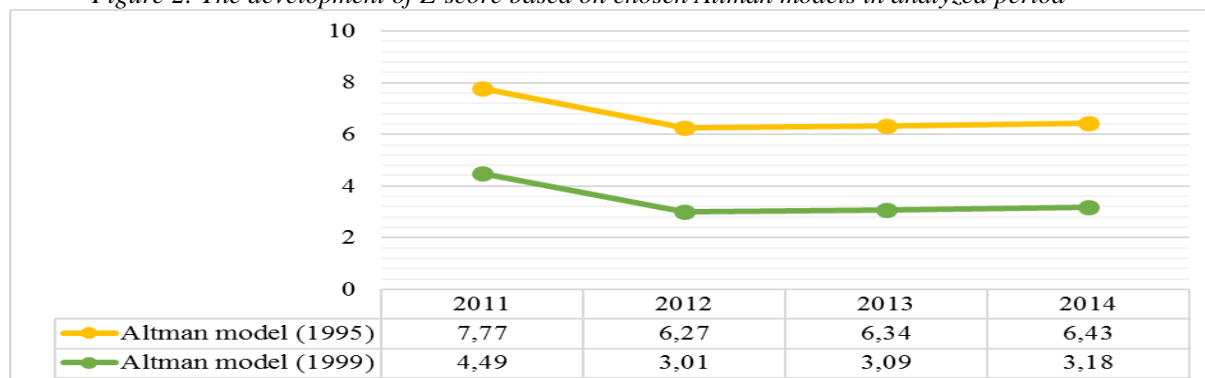
Source: author creation based on <http://slovakaviation.sk/>, <http://www.bts.aero/o-spolocnosti/profil-spolocnosti/statisticke-udaje/>, http://www.bud.hu/english/business-and-partners/aviation/facts_and_figures/traffic-statistics-2015-16896.html

Apart from low number of passengers the next problem of Bratislava Airport is dependent on two airline companies, such as Ryanair and Travel Service. For instance, in 2015 Ryanair transported more than one million of passengers, in relative terms more than 60 % of total passengers. Next important airline is Travel Service that transported more than 80 % in field of non-scheduled traffic. Resulting is high rate of dependence which can lead to serious (existential) problems.

4. The applied methods of financial analysis

In following part of paper we focus on forecasting of likelihood of bankruptcy in selected enterprise, and that Bratislava Airport in period from 2011 to 2015. We apply several prediction models in form of MDA, and that Altman model, then logit and probit models, and that Ohlson and Zmijewski model. Data for calculating of chosen prediction models are obtained from financial statements of given enterprise. Probably one of well-known bankruptcy model is Altman Z-score. In this case, we apply Altman model (1995) and Altman model (1999). In Altman model (1995) there are the most significant variables expressing ratios of net working capital to assets and ratio of equity to assets due to high coefficients compared with other ratios. Combination of unaccepted results, especially ROA of EBIT and given coefficients in model cause decrease of Z-score. In 2011 the firm achieved the second-best rating of AA (+), in the period from 2012 to 2013 firm rating was BBB (+) and in last year of analyzed period the rating was A (-). Therefore, during of all chosen period the company was in so called safe area.

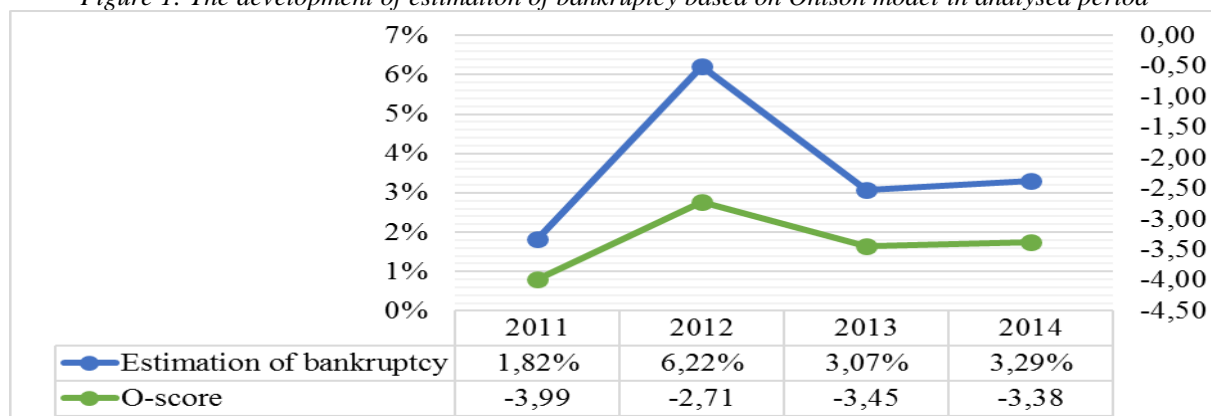
Figure 2: The development of Z-score based on chosen Altman models in analyzed period



Source: author creation based on financial statements of Bratislava Airport

In contrast to previous models that is constructed on principle of MDA, so Ohlson model is based on logistic regression. In this case, Ohlson model indicate relatively low rate of likelihood of failure, and that from 1 – 7 %. In 2014 O-score is calculating thought deflator of 2013 due to negative deflator in given year. Other ratios achieve relatively stable value, expect for current liquidity. Improvement of total liquidity is associated with decline of current liabilities in 2012 compared with previous period.

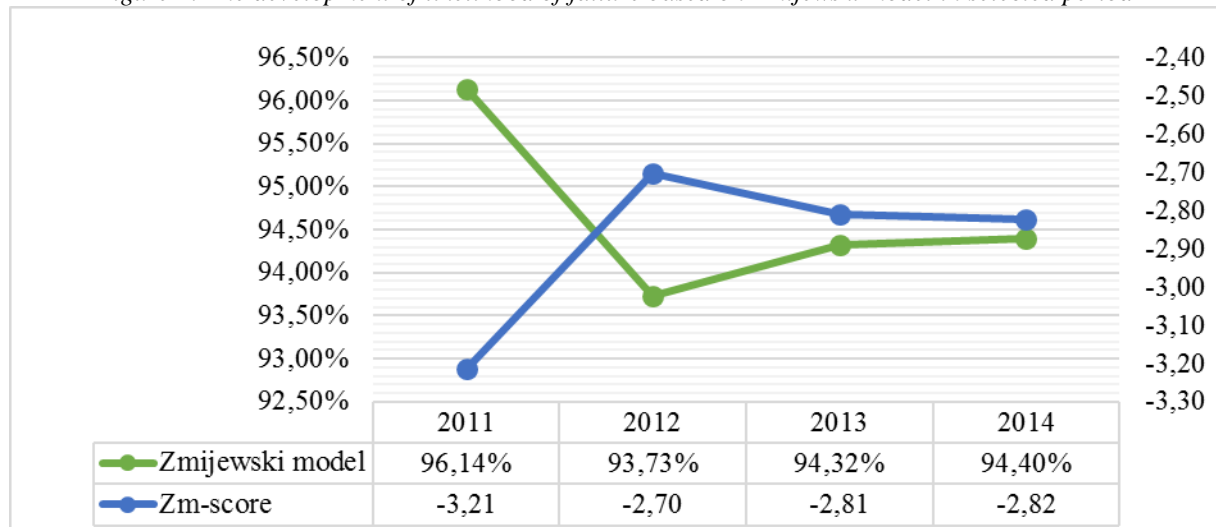
Figure 1: The development of estimation of bankruptcy based on Ohlson model in analysed period



Source: author creation based on financial statements of Bratislava Airport

The estimation of bankruptcy based on Ohlson model is relatively low in compared with following model, and that Zmijewski model. The given enterprise accomplishes high rate of estimation of bankruptcy, and that more than 90 % during whole selected period. It is caused with negative coefficient so called “Zm”. This variable depends on three variables, and that ROA of EAT, total debt and current liquidity and constant. On the “Zm” coefficient has positive first ratio, and that ROA of EAT. The primary reason is combination loss and negative coefficients of this ratio.

Figure 2: The development of likelihood of failure based on Zmijewski model in selected period



Source: author creation based on financial statements of Bratislava Airport

5. Conclusion

We conclude that Bratislava Airport has problems mainly with inefficient usage of capacity of airport and high dependence on two airlines. These aspects have negative influence to profitability ratios. Other reason is the high level of competition in region. However, the positive results are achieved in area of liquidity and cash flow. Based on the used prediction method, and that Zmijewski model, the given company can be included to risk area. However, according to Altman model and Ohlson model, the analysed firm can be placed in safe area. The main reason of negative results in given prediction methods is connected with negative profitability. Next reasons are coefficients in the bankruptcy prediction models. Combination of unfavorable results of individual ratios with coefficients can lead to non-perspective results of firm from point of view of estimating of likelihood.

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PUBLIC-PRIVATE PARTNERSHIP AS BASIS OF MODERNIZATION OF THE HOUSING SPHERE OF RUSSIA

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Abstract. Introduction and relevance. In modern Russia as in the other countries, the question of stable and accident-free functioning of all housing sphere is particularly acute. Without updating and upgrade of housing and communal services it is impossible to answer to this question. Considerable investments are required, the main investor – the state – is not able to cope with the solution of this task. It is necessary to attract private investors, and experience of other countries will be useful here. The purpose of author's search are teoretiko-methodical reasons for the organization of public-private partnership. For achievement of this purpose several tasks were solved: 1) reasons for relevance of the public-private partnership's organization and international determinations of the concepts connected with this economic relation are given; 2) an overview of the international practices and global trends in the field of public-private partnership in housing sector is given; 3) an assessment of a possibility of public-private partnership in the housing sphere is executed. Subject of researches – the global factors determining efficiency and a possibility of public-private partnership in the housing sphere, and object – the city as social and economic system and structural unit of the region. Methodologically research is based on complex and system approaches with use of international methods of the comparative, retrospective, statistical, mathematical, logical analysis, modeling and forecasting. This approach is original, possesses high degree of reliability, universality and comparability.

Keywords: international experience, public-private partnership, housing sphere, concession, upgrade

JEL Classification: R50, R58, R59

Housing services and utilities – is an essential element for human life support around the world. The update of all housing complex, starting with roofing of houses and energy-saving appliances and finishing with water and energy networks, has the strategic importance for the development of Russia and its regions. The necessity to put in order the utilities appeared a long time ago. First of all, we are talking about the reconstruction and modernization of housing services and utilities - water supply, heat supply, energy and sanitation. Also we must add to this the measures to update the housing services and utilities and urban improvement

(Belyaeva, 2009).

The reforming of housing services and utilities is realized against the backdrop of intense processes of market transformation of the Russian economy in recent years. In the first years of reforming, the housing services and utilities provided mainly social protection function of the population, but now it has become as a source of socio-economic and political tensions. The disastrous state of the fixed assets of utilities and housing services, high energy costs and the lack of a coherent technical energy saving policy, the growth of housing and utility tariffs which exceed the rate of increase in real incomes, ineffective regulation and monopoly, imperfect contractual relations of market housing and communal services, undeveloped institutions of housing self-government and many other negative factors which show the depth of the problems of the housing services and utilities of municipal economy. The solution must be found in the consistent and systematic change of management model of territorial complexes, primarily the housing services and utilities, while change of institutional provision of its functioning in the system of municipal services through the active implementation of public-private partnership. In the search of the best solving of this problem in Russia and its regions, the positive world experience of development of housing - communal sector should help us.

English experience, where the reform of housing and communal services took 15 years, is very significant and useful for Russia. England for a long time moved to creation of socially acceptable and commercially attractive conditions in the municipal sector. For example, in 1997 when there were Labour Party a ban on disconnection of water services for residential customers was introduced, but at the same time the balancing decision to include unpaid amounts consumers in the current tariff was made. The quality of communal services in the UK - is not ephemeral, it is defined by a plurality of measured parameters. In particular, the dialing up to the dispatch service is fixed- 30 seconds - and the time of performance of the application troubleshooting. Another important lesson of municipal reforms in England – the translating and combining of hundreds of municipal water utilities in the first ten regional ownership of public companies and their subsequent privatization. Before privatization, the state wrote off all the debts of public utilities, had assumed the costs of bringing the asset to a usable state, and had carried out the certification and the putting on the balance sheet. By the way, in contrast to England in most European countries, the communal infrastructure has not been transferred to private ownership, and is operated by private operators, remaining municipal, in the conditions of the concession agreement.

In Germany, there are a large number of cottages. Boiler houses, electrical heat centers, water intakes and other communal infrastructure are in work (Hyun, 2015). The most utilities companies are limited liability companies, where the share of municipality is 70%, while 30% belongs to, for example, "Ruhrgas". The company provides services with energy gas heat and water supplying from electrical heat centers, boiler houses to heating units in buildings, homes, and other services.

In the electrical heat centers a separate LLC is formed in which the communal company has its share. Own boiler enterprise is used in requirements of the electrical heat centers, which is provided through interregional scheduling and workload management. In the apartment there is thermal unit equipment building on the balance sheet (boilers, pumps and so on). The device of the account, without which it is impossible even to enter into a contract with the consumer, also belongs to it. The company install this equipment by its own money. The housing and

operational service, of course, is not a mediator between the company and the tenant. There is no winter pay for heat that is higher and summer that is lower.

The wholesale heat market works: on the heating networks, in the struggle for a better and cheaper deal maker, and a major consumer and organizations make deals for distribution by the time variable tariffs and prices at key points. In any city there are several communal companies. Some of them are 100% private company. The consumer enters into a contract with company which is profitable for him. It is not heard about cross-subsidization. The residents of apartment houses are grouped in associations, who elect the manager of the house. We can compare them to the partnership with our joint housing ownership and housing building cooperatives. The manager as a holder and dispenser of means has the right to dispose of the money, but it is responsible to the tenants. However, there is something like our managing institutions. The enterprise "National Housing" is LLC with 100% share of the municipality and engaged in capital housing construction and its infrastructure, maintenance and repair, modernization of housing and so on. These services are realized by a lot of companies with private and mixed (with the participation of the municipality) capital. Cities have long given up the monopoly of the centralized heating system. Residents or consumers, and not the municipality, make their final choice in favor of a centralized or decentralized supplying. The decisive argument is money which are necessary not only to construction but also to the maintenance, repair of networks for a long period. Tariffs are not set by politicians, but by the communal companies. As there are reflected in the contracts with the owners and companies, then no one could not increase the tariff in unilateral order. Otherwise – there will be the litigation.

Decisions about the extent of repairs cannot be made by the German housing companies based just on technical necessity and expediency - into account must be taken the financial resources of the company, as well as the situation in the rental market in the present and forecast for the near and distant future. For the preparation and making the decisions about housing upgrades and other administrative decisions it is necessary to take into account the principles of portfolio management of assets. The decisions about investments are made on the basis of an analysis of the portfolio, taking into account the views of economists and technical experts. There are not excluded cases where modernization of housing (especially indoors) made because certain groups of tenants for any reason are important for the company. When "the portfolio" analysis it is necessary to take into account the social aspects: can the tenants pay the rent after the upgrade?

In the sphere of the French municipal services a large number of problems related to the daily life of citizens, is decided by commune - a stable administrative and territorial unit. In its conducting there are questions of organization of water supply, sanitation, removal and recycling of household waste, maintenance and so on. Commune is managed by the municipal council, which is elected every six years by universal suffrage, and the mayor, who is elected by the Board. After the construction of objects of housing services and utilities, they are transferred to the municipality. Utilities are mainly municipalities. At the same time there is quite widespread experience of concessions in the utilities sector. In France, along with the nationalized gas networks and state energetics, there are private companies, as well as operating on the basis of the concession contract. They are relatively small, but their role in improving the efficiency of public supplying of utility services is significant. Firms engaged in electric, gas and water supply, sewerage, waste collection and recycling of industrial waste, work in contract with municipalities. Orders of exploitation, and construction, are distributed

through tenders, which are held by municipalities. Standards are set at the level of government on provision of the houses, for example, the water quality. And in each contract between the municipality and the operating company specific operating conditions of the system are defined: the water pressure, the diameter of the pipes, their material. In the same contract the future tariffs produced by the services are defined. The question of reform of district heating sharply appeared in the 60s of the last century, the loss reached 50%. The French had warmed the house for three years, and then price reform and the transition to local heating started. Installation of additional equipment (boiler house) when building a house requires some investment, but in the long-term plan, this scheme is not only cheaper, but also improves the quality of heat supply: the residents can regulate the temperature range for building heating.

On the way to utilities reforms there are difficulties and contradictions of economic, moral and psychological nature in all countries. The widespread growth of tariffs for housing services and utilities is the most painful for the population of Russia (Table 1).

Table 1: The changing of the values of tariffs for housing services and utilities and the living standards of the population in the Russian Federation

Average growth of tariffs (prices) for the products of natural monopolies and the housing and communal services,% to the previous year (estimated)					Indexes of living standards (rub. / person. mon.)		
Years	Electric power	Hot water +heating	Gas	Other housing services	Salary	Employment pension	The cost of human living
2005	25	15	30	32,7	8555	2394	3018
2006	23	13	1,9	17,9	10728	2770	3422
2007	12,8	14	15	15	13066	3169	3847
2008	14	18	25	17	15571	4296	4593
2009	25	18	16	18	18536	531	5323
2010	10	10	27,4	19	20815	751	6026
2010 to 2005	+271,9%	+226,9%	+309 %	+295,6	+243,3	+323,8%	+199,7%

Table 2: Changes in tariffs for the supply of gas and electricity for the 2010 - 2016 in some countries, %

Country	Electricity	Gas
Russia	21,8	26
The USA	10,5	-21
Germany	20,7	-2
France	7	12,5
Luxembourg	3	-11

In the US and EU countries, citizens have the opportunity to influence the utility tariffs to their establishment. Authorities at the public hearing must justify even a slight increase, to prove its necessity. In our country there is a very non-transparent system of pricing for utility services. Therefore, to improve the efficiency of the functioning of housing and communal services it is necessary to implement the best international experience, because problems in this sphere of services worsened in the context of the financial and economic crisis.

In recent years, in many countries there are cardinal changes in the sectors that have always been in state ownership and state control: electric power, road, rail, communal services, the main pipeline transport, ports, airports (Dominicis et al., 2013). Government transfers the objects of the gas and energy sector, water and sanitation, transport and communication systems to private ownership or that occurs more frequently - to business, reserving the right

to regulate and control their activities, for temporary long-term and medium-term possession and use. On the one hand, companies in these sectors, in the first place - the network, monopoly segments cannot be privatized because of their strategic, social and socio-political significance. But, on the other hand, in the state budget there are not enough funds to provide a simple, and even expanded reproduction. In order to resolve this contradiction, the concept of public - private partnership is used in economic practice abroad (Public-Private Partnership - PPP), which *is an alternative to the privatization of the vital strategic objects of state property.*

With regard to utilities, public-private partnerships can be defined as the delegation of public management (or municipal) of utility infrastructure systems and public services to the private sector on a contract basis for a specified period (Banno et al., 2013). Thus, *the public - private partnership – is a set of forms medium - and long-term cooperation between the state and business to solve socially significant problems in mutually beneficial conditions.* In the modern understanding the PPP – is an institutional and organizational alliance between government and business in order to implement national and international, large-scale and local, but always socially significant projects in a wide range of activity spheres: from the development of strategic industries and R & D to ensure public services. Each alliance is temporary, as it is created, usually for a specified period in order to implement a particular project, and will cease to exist after its implementation.

In reforming of the state property management mechanism on the ways of the PPP, an important task of the state is the search for forms of partnership with the business and mitigating of inevitably arising problems and contradictions, as each side seeks to get as much rights, at the same time trying to take the minimum number of obligations and risks (Begg, 1999). PPP has a wide range of different shapes or forms:

- contracts for the execution of works and the provision of public services; supply of products for state needs;контракты технической помощи;
- management contracts;
- leasing (long-term lease with the right to repurchase);
- Production Sharing Agreement (PSA);
- investment contract;
- concessions of various types;
- auctioning, equity participation of private capital in state-owned enterprises (joint companies).

The transfer of responsibility from the state to the private sector is accompanied by a corresponding transfer of risk from commercial to investment. And if the risks seem to private operator (or rather behind it to investors) as "unacceptable", he would prefer to give up the activity with which they are associated, as the risk premium (in the form of the required return on capital employed) is laid in the price, whose increase is limited by social and political factors. Summarizing the international experience, it is necessary to show the other major factors that constrain the private-sector interest to both concessions, and to participation in the management of housing - communal infrastructure in the framework of other forms of PPP:

- institutional factors (political, legal and judicial institutions, and regulatory institutions);
- economic factors (incomes, monetary policy);
- factors that increase commercial risks.

It is possible to distinguish five main institutional factors that impose severe restrictions on the choice of governance structure (i.e., specific organizational arrangements), and the functioning of these agreements. These factors are the following:

- (a) legislative and executive institutions;
- (b) judicial institutions;
- (c) administrative capacity;
- (d) customs and other accepted norms;
- (e) combating social interests (ideology, etc.).

Expected benefits of the participation of private companies in the provision of public services are often greatly reduced as a result of the constant interference in their work by the authorities. The reason is simple: such an intervention allows to transform of the income from a private company to the political rent. There are several ways of income withdrawals from private investors. The first of them – is tariff regulation and the revision of the contract terms. The regulatory authority's political dependence usually leads to the fact that the regulatory institution may refuse the request of the operator to raise the tariff in populist purposes, even if the request is caused by an objective growth of prices in the economy (and hence the cost of the private operator). Therefore, the transform of the income from a private company to the political rent, the regulatory institution, as well as the judicial system, should be independent from political influence. On the other hand, insufficient control or its lack from the regulatory institution to the change of tariff policy from the private management company can lead to a precipitous rise in prices for housing and communal services. The solution of this problem is seen in the "transparency" of the formation of tariffs for housing - communal complex. It is - the only possible variant to optimize the costs of any services.

Talking about the influence of institutions on private sector participation in the management of municipal infrastructure, it is also important to note that these institutions are interdependent, and the weakness of some may be partially offset by the power of others. Indeed, on the one hand, a strong and independent judicial system can limit the ability of public authorities to violate its obligations which are prescribed in the concession agreement (Lupton & Beamish, 2016). On the other hand, the strong political institutions can replace the weak legal and regulatory institutions.

Among the economic factors that have the greatest impact on private sector interest in participating in PPP, we distinguish:

- the absence or underdevelopment of local financial markets;
- macroeconomic policies (including monetary and fiscal);
- the acceptability of tariffs for the population.

We note that only the last factor is specific for the housing - communal services. The investment program should include sources of income of which will be repaid by capital investments. The most important source of payment is service users' payments. But due to the economic crisis, rising unemployment, there is an acute problem of affordability of tariffs. There may be difficulty in forcing the consumer to pay the price, which ensures the profitability of the project. As a result, there are concerns that the amount of defaults can be considerable. Moreover, the tariff premium for default risk only aggravates the situation. The inability of local budgets to cover the difference, obviously, will also create problems with the return on investments. Seeing these problems before the conclusion of the contract, the private operator

would prefer to give up the concession. Thus, an accurate assessment of effective demand and of the tariff level that would be acceptable for the majority of the population, being quite difficult, at the same time is extremely important for the future of the concessionaire, as an error here may be the very possibility of the successful implementation of the concession. It seems that in the future the mechanism of fixation of tariffs for housing and communal services should work for a long period.

The uncertainty of the current volume of demand and the current status and the replacement cost of fixed assets reduces significantly the accuracy of the feasibility study of the program of renovation and modernization of housing and communal services sector. It is interesting to note that these factors influence not only on investment, but also on commercial risks. The value of the accuracy of predicting of the future effective demand amplified by the high share of fixed costs in total costs of companies operating in the infrastructure sectors. Indeed, in this case, even a relatively small reduction in sales volume from the expected value can lead to a significant drop in revenue and profit. Apart from the lack of meters on the border of the operational responsibility of the utility and settlement system for them, another source of uncertainty about the current volume of demand is a situation where part of the connection is not registered at all. The use of so-called two-part tariff (different rate of pay of the population and business services) can reduce the risk of fluctuations in revenue associated with fluctuations in demand, but it does not completely solve the problem in the case of a large proportion of unregistered connections.

The uncertainty of the technical condition and the value of fixed assets does not allow to estimate the costs which are necessary to achieve the envisaged contract performance indicators with acceptable accuracy. One reason of this uncertainty and the inability to reduce it to an acceptable level is the fact that part of the network of municipal infrastructure objects is hidden under the ground, so labor and material costs to assess their current state and the replacement cost is often quite high. In most cases the concession was issued when there was significant uncertainty regarding the status and value of fixed assets (neither the state nor the candidates for the concession did not have informational advantage during the bidding). And it's not just a problem of developing countries. Even in the UK during the privatization of water and wastewater systems, authorities often do not know where and what objects are arranged, and even more did not know their conditions

Of course, if the private operator takes responsibility for the reliability and safety of the water supply system and for the achievement of certain performance indicators according to the contract with the municipality, it will try, of course, to make an estimate of the expenditure required to achieve these parameters. But what should we do if the conditions of the system will be worse than the operator supposed, the additional costs will not be covered by income, and the regulator will refuse to revise the tariff? In this case, the profitability of a project for the operator will be less than planned, or the operator will not fulfill its obligations and will give a reason for the early termination of the contract, what can only exacerbate their losses. If the operator can include the involved additional costs in the rate, this rate may be unacceptably high for the population, and as a result collection rates may be reduced. In addition, the population and the authorities will suspect that the operator is trying to deceive them, "wind" the cost of abusing its monopoly power. The situation with the Volgograd "communal" illustrates this perfectly.

The main obstacle to the arrival of investments in Russian regions is the lack of

infrastructure (roads, utilities networks, hotels, etc.) and extreme bureaucratic overregulation. But the regions, most of which today have a budget deficit, are not able to create a decent infrastructure. It is in the framework of public-private partnership, the government should make a commitment to finance the building of roads and communications, modernizing other infrastructure industries and, above all, the sector of housing services and utilities, without which the construction of major objects is unthinkable.

In recent years there has been a significant decrease of private investment in communal infrastructure. This is particularly noticeable in the sectors of water and electricity supplying. Among the factors that have determined this development of events, we should note a high level of risk and low solvency of households in a crisis economy. The study of international experience of PPP can conclude that the main factors limiting private sector interest in participating in PPP are the high institutional and commercial risks, as well as the legal and socio-economic constraints that do not allow private investors to obtain a reasonable return on their investments. The findings are applicable to the situation in the regions of Russia, with certain reservations. Although there are not the highest incomes of population, there is a high level of tariffs, is not always acceptable to the population; it is less acute problem of illegal connections, as there is no large-scale illegal housing construction; there is much less foreign exchange risks, a number of macroeconomic and political risks; the number of legislative acts taken in Russia in recent years allowed to significantly reduce regulatory risks. However, in addition to regulatory risks, in Russia the existing system of categorical benefits and subsidies to utilities companies has significant negative impact on the financial sustainability of utilities companies that provide services directly to the population.

At the same time, Russia has much in common with developing countries, including: problems related to the huge shortage of long-term debt financing, that hinders the development of concession projects, the problems of uncertainty in the input data (particularly with regard to the condition and value of fixed assets), which makes it difficult to transfer to the private sector the responsibility for the maintenance and repair of municipal infrastructure. But perhaps the most important negative feature of the Russian institutional sphere that unites us with other developing countries, is a short planning horizon and decision-making which is still prevalent in all levels of public authorities.

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THE INFLUENCE OF GLOBALIZATION ON LATVIA'S TRADE OF AGRI-FOOD COMMODITIES: GRAVITY MODEL APPROACH

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Abstract. In a period of globalisation and expansion of multinational market forces, bilateral trade flows of agricultural commodities and processed foods (hereinafter – agri-food) have consistently grown. The balance of Latvia's agri-food trade traditionally has been negative, putting pressure on foreign exchange reserves. The dependency on imports is rather high even in product groups with potentially sufficient domestic supply. On the other hand, the capability of domestic producers to compete globally has opened new markets for exporters. Gravity models have been extensively used in the analysis of bilateral trade flows due to their empirical success in determining trade potential of a country. The research aims to offer a gravity model of Latvia's agri-food trade selecting the appropriate estimator for the model, and applying the model in the evaluation of determinants of the trade flows as well as forecast further flows. The presented results of empirical analysis were based on the Panel data on agri-food trade between Latvia and its trading partners, obtained from the UN Comtrade database. The gravity model was estimated from the data collected during the period of 2002-2014.

Keywords: agri-food, globalization, gravity model, trade.

JEL Classification: F12, F19, L66, Q17; R19

1. Introduction

It is widely recognized that international trade plays an important role in economic growth, promotes competition, and helps resource allocation based on comparative advantage (Fetahi-Vehapi et al., 2015; Lim & McNelis, 2016). However, the opposite view exists (Chang et al., 2009). The rise in global supply chains is due to the transforming international trade patterns (Baldwin & Taglioni, 2011), including the decline in international trade costs, e.g., transportation costs and tariffs (Hummels, 2007; Novy, 2013). The trade liberalization process during the last two decades has increased Latvia's economic integration within the global economy. In a period of globalization and expansion of multinational market forces, bilateral trade flows of agricultural commodities and processed foods (further in text – agri-food) have consistently grown. The balance of Latvia's agri-food trade traditionally in long term was negative (Melece, 2011). Moreover, the dependency on imports is rather high even in product groups with potentially sufficient domestic supply. On the other hand, the capability of domestic producers to compete globally has opened new markets for exporters.

A standard tool in assessing bilateral trade's causes and effects is the gravity model (Anderson & van Wincoop, 2003; Baldwin & Taglioni, 2011; Gomez-Herrera, 2013; Baltagi et

al., 2016). For the first time the gravity model was applied in an analysis of international flows of commodities in the in the early 1960s (Anderson & van Wincoop, 2003). Gravity models utilize the gravitational force concept as an analogy to explain the volume of trade, capital flows, and migration among the countries of the world and establish a baseline for trade-flow volumes as determined by gross domestic product (GDP), population, and distance (Anderson & van Wincoop, 2003; Helpman et al., 2008). The gravity model of trade widely has been used as a baseline model for estimating the impact of policy issues, including regional trading groups, currency unions, political blocs, patent rights, and various trade distortions (Cheng & Tsai, 2008).

Usually GDP per capita is selected as the proper measure of the country's economic strength and trade potential (Baldwin & Tagliani, 2011). This variable along with the partner countries' is expected to be positively related to trade (Fetahi-Vehapi et al., 2015). The distance has a negative influence on trade flows (Carrere, 2006). After the initially proposed exogenous variables, such as population, GDP, GDP per capita, the gravity model has been extended by introduction of country specific dummy variables.

The aim of presented research is to develop a gravity model of Latvia's agri-food trade, selecting the appropriate estimator for the model, and apply the model in the evaluation of determinants of the trade flows as well as for forecast further trade flows.

2. Materials and methods

Generally, the gravity equation has the following log-linear form for exports data panel:

$$\ln(X_i) = A + b \ln(GDPL) + c \ln(GDP_i) + d \ln(DST_i) + \sum_{j=1}^n \alpha_j D_{ji} + \varepsilon_i \quad (1)$$

where:

X_i - exports from "base" country to country i ;

A - multiple regression intercept;

b - regression coefficient for logarithm of "base" country GDP per capita;

$GDPL$ - GDP per capita in "base" country;

c - regression coefficient for logarithm of GDP per capita in country i ;

GDP_i - GDP per capita in country i ;

d - regression coefficient for logarithm of distance between "base" country and country i ;

DST_i - distance between "base" country and country i ;

α_j - regression coefficients for dummy variables, $j=1,2,\dots,n$;

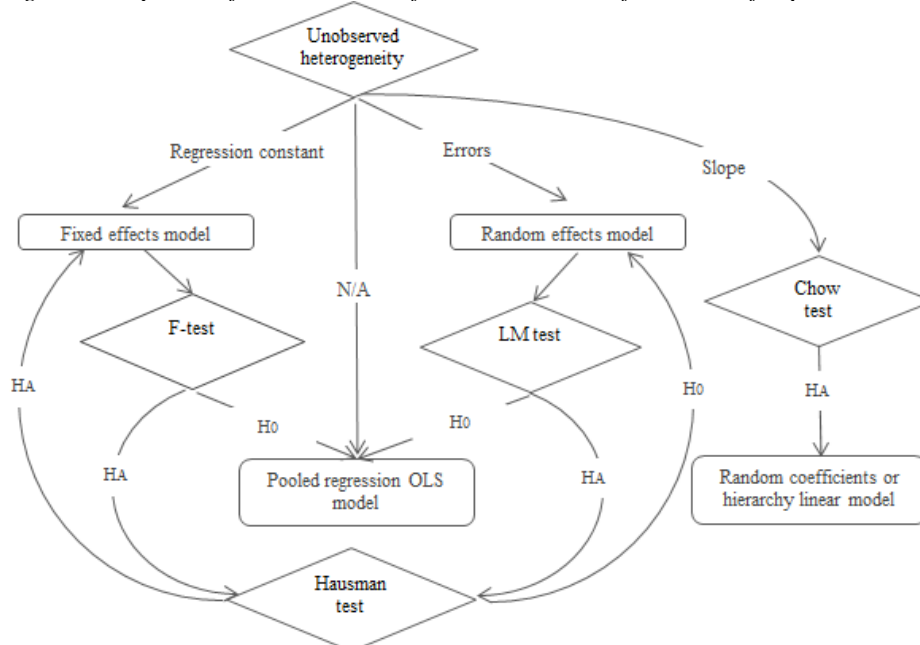
D_{ji} - dummy variables specific for country i , $j=1,2,\dots,n$;

ε_i - regression error term for country i .

Similarly, by denominating M_i for imports to "base" country from country i , the gravity equation for imports data panel can be obtained. The empirical results of previous research suggest that gravity equation can be applied in about 80% of cases. In a gravity model for bilateral trade, panel data are annual trade flow values for specified country with its trade partner countries, observed for several years. Usually data forms a short panel, meaning a large cross section of countries observed for a few time periods rather than a long panel such as a small cross section of countries observed for prolonged time periods. The advantage of panel data is increased precision of estimation as a number of observations increases by combining several years of data for each country in a pooled model. Hsiao (2007; 2014) pointed out that

the usage of panel data has following benefits: a) data availability; b) greater capacity for modelling than time series data; c) challenging methodology; d) computational feasibility; and e) multi-dimensional nature (Hsiao and Zhou, 2015). Besides, the panel data is available in both developed and developing countries (Hsiao, 2007). For valid statistical inference a control for likely correlation of regression model errors over time for a given country is necessary. The major advantage of panel data is increased precision of estimation as a number of observations increases by combining several years of data for each country in a pooled model. Thus, the standard errors can be underestimated and t-statistics can be inflated. As stated by Egger (2000), pooled model also does not allow for heterogeneity of countries. The second advantage of panel data is the possibility of consistent estimation of the fixed effects model, which allows for unobserved country heterogeneity that may be correlated with regressors. The third model is random effects model, when any unobserved individual heterogeneity is treated as being distributed independently of the regressors. The most commonly used calculation of standard errors in a pooled ordinary least-squares (OLS) regression usually overstates the precision gains (Hoechle, 2007). Compared to fixed effects model, the advantage of random effects model is the consistent estimation of all parameters. The three most common panel data models can be estimated by five common estimators - pooled OLS, between, within (fixed effects), first differences and random effects estimators. In order to determine the model for panel data, Park (2011) proposes the following sequence of statistical tests: F-test (Wald test) for the fixed effect model and Breusch-Pagan Lagrange Multiplier (LM) test. If both fixed effects and random effects are not found, data are poolable and model can be estimated by pooled OLS estimator. Principal layout of the widely adopted estimation algorithm is mapped on Figure.

Figure 1: Sequence of statistical tests for determination of the model for panel data



Source: adapted from Park (2011)

The data of Latvia's foreign trade were retrieved from UN Comtrade database (United Nations, 2015), based upon the 6-digit „HS Nomenclature“¹⁷ codes; the data of GDP - from OECD Statistical extracts database (OECD, 2015), but the distances between the countries - from CEPII database (CEPII, 2015). The data panels comprise 1426 observations for exports, and 1271 observations for imports for the years 2002-2014. The trade flows were regressed on independent basic variables – Latvia's and partner countries' GDP per capita, distance between Latvia and partner country, and dummy variables - EU member country, free trade agreements, common border, landlocked country, island country, former colony and former colonizer.

3. Results and Discussion

The annual number of exporting countries to Latvia varies from 91 to 103 over the time period from 2002 to 2014. As for the imports, the variance is even more pronounced, and the annual number of importing countries from Latvia varies from 60 to 159 over the same period. Therefore, the unbalanced data panels are used both for exports and imports, with all countries included. The gravity equation for Latvia's exports data panel has the following log-linear form:

$$\ln(X_i) = A + b \ln(GDPL) + c \ln(GDP_i) + d \ln(DST_i) + \sum_{j=1}^7 \alpha_j D_{ji} + \varepsilon_i \quad (2)$$

where:

X_i - exports from Latvia to country i ;

A - multiple regression intercept;

b - regression coefficient for logarithm of Latvia's GDP per capita;

$GDPL$ – Latvia's GDP per capita ($G1$);

c - regression coefficient for logarithm of GDP per capita in country i ;

GDP_i - GDP per capita in country i ($G2_i$);

d - regression coefficient for logarithm of distance between Latvia and country i ;

DST_i - distance between Latvia and country i (D_i);

α_1 - regression coefficient for EU membership dummy variable;

D_{1i} - EU membership dummy variable (E_i);

α_2 - regression coefficient for free trade agreement dummy variable;

D_{2i} - EU free trade agreement dummy variable (F_i);

α_3 - regression coefficient for landlocked country dummy variable;

D_{3i} - landlocked country dummy variable (D_i);

α_4 - regression coefficient for island country dummy variable;

D_{4i} - island country dummy variable (I_i);

α_5 - regression coefficient for common border dummy variable;

D_{5i} - common border dummy variable (B_i);

α_6 - regression coefficient for colony dummy variable;

D_{6i} - colony dummy variable (C_i);

α_7 - regression coefficient for colonizer dummy variable;

D_{7i} - colonizer dummy variable (R_i);

ε_i - regression error term for country i .

¹⁷ Harmonized Commodity Description and Coding System, commonly known as "HS Nomenclature", is an international multipurpose nomenclature

The gravity equation for Latvia's imports data panel takes the following log-linear form:

$$\ln(M_i) = A + b \ln(GDPL) + c \ln(GDP_i) + d \ln(DST_i) + \sum_{j=1}^7 \alpha_j D_{ji} + \varepsilon_i \quad (3)$$

Three regression methods were used - pooled (simple OLS) regression, fixed effects, and random effects. The results of the regressions for exports data panel are provided in Table 1.

Table 1: Gravity model estimation results for exports data panel

Variable	Pooled regression	Fixed Effects	Random Effects
EU membership	1.898 (8.24)***	0.555 (2.18)**	0.794 (3.29)***
Free Trade Agreements	-0.139 (-0.72)	0.150 (0.39)	0.038 (0.13)
Landlocked	-0.699 (-3.53)***	-	-0.389 (-0.78)
Island	-1.580 (-8.74)***	-	-1.596 (-3.71)***
Common Border	0.533 (1.05)	-	0.481 (0.31)
Colonized (CIS ¹⁸)	2.96 (10.13)***	-	2.805 (3.37)***
Colonizer (Russia)	5.367 (6.41)***	-	5.287 (2.04)**
Distance	-0.643 (-5.87)***	-	-1.003 (-3.96)***
Partner's GDP Per Capita	0.556 (10.26)***	0.716 (3.27)***	0.521 (4.75)***
Latvia's GDP Per Capita	0.477 (2.75)*	1.157 (5.61)***	1.202 (8.29)***
Constant	8.269 (4.72)***	-4.624 (-3.60)***	4.534 (1.90)*
Observations	1426	1426	1426
R-Squared	0.45	0.11	0.43
Adjusted R-Squared	0.45		
Goodness-of-fit test	38.91***	68.02***	
F-test		20.43***	
Breusch-Pagan (LM) test			1481.79***
Hausman test		-	

Notes: ***/**/* significant at 1%, 5%, and 10% level. All other variables are statistically insignificant; *t*-statistics are in parenthesis.

Source: authors' calculations based on data from UN Comtrade database

For the exports data panel, the p-value associated with a chi-squared value generated by the F-test is less than the generally used criterion of 0.05. Thus, the null hypothesis can be rejected. The p-value of LM test suggests the rejection of a null hypothesis that variances across entities have zero values. Therefore, the estimated correlations indicating that random effects model should be preferred to the fixed effects model. By substituting regression coefficients in equation (2) with the values from random effects model, the following gravity equation for Latvia's exports data panel is obtained:

$$\ln(X_i) = 4.53 + 1.20 \ln(G1) + 0.52 \ln(G2_i) - 1.00 \ln(D_i) + 0.79E_i - 0.04F_i - 0.39L_i - 1.60I_i + 0.48B_i + 2.81C_i + 5.29R_i \quad (4)$$

For the imports data panel, the results of the F-test support the rejection of the pooled model and acceptance of the fixed effects model. The p-value of LM test suggests that the random effects model should be preferred to pooled model. The Hausman test for the imports data panel provide statistically significant p-value. Thus, the null hypothesis that the difference in coefficients is not systematic can be rejected. By substituting regression coefficients in equation (3) with the values from random effects model, the following gravity equation for Latvia's imports data panel is obtained:

$$\ln(M_i) = 15.81 + 0.57 \ln(G1) + 0.43 \ln(G2_i) - 1.47 \ln(D_i) + 0.47E_i - 0.37F_i - 0.98L_i - 0.96I_i + 0.89B_i + 0.75C_i + 2.22R_i \quad (5)$$

¹⁸ Commonwealth of Independent States

The results of the regressions for imports data panel are provided in Table 2.

Table 2: Gravity model estimation results for imports data panel

Variable	Pooled regression	Fixed Effects	Random Effects
EU membership	1.543 (6.60)***	0.384 (2.29)**	0.473 (2.89)***
Free Trade Agreements	-0.314 (-1.54)	-0.280 (-1.18)	-0.367 (-1.64)*
Landlocked	-1.444 (-7.40)***	-	-0.979 (-1.62)
Island	-1.046 (-5.54)***	-	-0.960 (-1.68)*
Common Border	0.183 (0.37)	-	0.886 (0.49)
Colonized (CIS)	1.703 (5.55)***	-	0.749 (0.76)
Colonizer (Russia)	2.968 (3.59)***	-	2.220 (0.73)
Distance	-0.944 (-8.68)***	-	-1.465 (-4.98)***
Partner's GDP Per Capita	0.454 (8.25)***	0.455 (2.80)***	0.430 (3.86)***
Latvia's GDP Per Capita	0.244 (1.54)	0.553 (3.97)***	0.566 (5.14)***
Constant	14.894 (9.21)***	4.375 (5.45)***	15.813 (6.05)***
Observations	1271	1271	1271
R-Squared	0.44	0.19	0.42
Adjusted R-Squared	0.44		
Goodness-of-fit test	99.45***	49.08***	
F-test		49.25***	
Breusch-Pagan (LM) test			2835.90***
Hausman test		10.55**	

Notes: ***/**/* significant at 1%, 5%, and 10% level. All other variables are statistically not significant; *t*-statistics are in parenthesis.

Source: authors' calculations based on data from UN Comtrade database

Estimated results reveal that Latvia's agri-food exports and imports are positively and significantly affected by higher GDP per capita both in Latvia and in partner country. Exports are significantly higher to CIS countries. The exports to EU countries is significant, while significance of Russia is somewhat lower. As anticipated, the negative impact on distance between trading partners is highly significant. Similarly to exports, Latvia's agri-food imports are positively and significantly affected by higher GDP per capita. Imports from EU countries are highly significant. The negative impact on distance between trading partners on imports is highly significant. The determinants of Latvia's agri-food trade with their statistical significance are provided in Table 3.

Table 3: The determinants of Latvia's agri-food trade and their statistical significance

Variable	Exports	Imports
	Statistical significance and impact	
EU membership	high, positive	high, positive
Landlocked	-	low, negative
Island	high, negative	moderate, negative
Colonized (CIS)	high, positive	-
Colonizer (Russia)	moderate, positive	-
Distance	high, negative	high, negative
Partner's GDP Per Capita	high, positive	high, positive
Latvia's GDP Per Capita	high, positive	high, positive

Source: authors' findings

The predicted decline in the imports at 2% rate in 2015 is less marked than the 17% predicted decrease of exports (Table 4).

Table 4: Predicted trade flow values in 2015, million US\$

Trade flow	2014	2015*	Difference	Change, %
Exports	2483	2063	-420	-17%
Imports	2396	2340	-56	-2%
Net exports	87	-277	-364	-419%

* - regression prediction

Source: authors' calculations based on data from UN Comtrade database

The value of the trade balance (net exports) is expected to turn negative in 2015. The negative predictions largely are due to a anticipated negative GDP growth in a number of trading partner countries.

4. Conclusions

The Latvia's foreign trade in agri-food (agricultural commodities and processed foods) can be explained by gravity equation based on panels of trade flows expressed in value terms. The random effects data panel model was appropriate for the panel data estimation by within (random effects) estimator.

A fixed effects model would be a better model when estimating the flows of trade between ex ante predetermined selection of countries. The results of study confirm that the main determinants of trade flows - GDP per capita in Latvia and partner country have significant positive impact on trade. As anticipated, the negative impact on distance between trading partners is highly important; and the distance between Latvia and partner country has significant negative impact on trade. Imports from EU countries are highly significant, but exports to EU countries are moderately significant. Exports to CIS countries are highly significant. Exports to Russia are moderately significant.

The forecast of Latvia's trade balance of agri-food (agricultural commodities and processed foods) would be negative or, in other words, would decline in 2015. This trend reverses the growth in the value of net exports proven by authors' previous research.

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THE ALGEBRAIC PRESENTATION OF RESEARCH STRATEGY IN THE ACTIVITY OF TAX AUTHORITIES

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Abstract. Many national economic actors operate in different countries with significantly different economic and legal conditions for management. The tax authorities need to develop common approaches and guidelines to identify possible tax violations. These approaches must be based, on the one hand, on some general patterns and, on the other hand, they must take into account country-specific legislation. Authors consider the conceptual approach to the identification of tax violations. This is based on the author's interpretation of the concepts of "strategy" and "algebraic approach to the construction of the model". It is shown that efforts aimed to identify possible violations of tax laws can be attributed to research activities and satisfy the postulates of the routine research activities outlined in the work. Therefore, the strategy of tax violations search can be presented as a combination of six basic research strategies. This fact allows to apply the algebraic approach to the strategy construction. The authors consider that the algebraic approach comprises three components: 1) the system of basic strategies; 2) the system of standard transformations and standard combinations of strategies; 3) the approximating mechanism. The authors briefly describe examples of utilising basic research strategies for searching tax violations. The proposed algebraic approach provides a framework for solving the optimization problem of tax administration and allows to build the technological process of creating new economic and management models.

Keywords: taxes, strategy, algebraic approach, economy

JEL Classification: E62, H26, C02

1. Brief description of the article idea

The interpenetration of economies, the establishment of deeper relationship between countries in economic, technology etc. leads, on the one hand, to a certain unification of the rules of economic activities and a system of laws, on the other hand, to the necessity of taking into account the specifics of the laws and traditions of each individual country (Reuven, 2007). A significant portion of overhead for business is the tax deductions from income and property and the taxation of certain types of transactions (Fossen & Simmler, 2016). So we have the relevant task with two aspects: from side of business the system of taxes must be such that the business felt comfortable enough, without feeling the urgent desire to go into the legal field of

another state with a more lenient tax regime and, from side of the State, the system of taxes provides to obtain sufficient amounts of money to carry out the State functions (Reuven, 2007; Chu et al., 2016; & Arachi et al., 2015). In the economic scientific literature (Reuven, 2007) usually this issue is investigated without taking into account the possibility of illegal or "not quite legal" tax evasion (Lefebvre, 2015; Heinemann & Kocher, 2013). Often the last factor is considered in the plane of criminal law, ethics and morality (Lederman, 2012; Mowbray, 2016). The need to consider the complex structure of many modern large-scale economic actors, leads to the task of forming common approaches and recommendations to identify possible tax violations, on the one hand, based on some general laws, but not on the specifics of the legislation of the given country, on the other hand, taken into account this specificity, is highly relevant for public authorities (Chu et al., 2015). We affirm that the organization of the activities of tax authorities, focused on maximizing tax revenues and creating an environment that stimulates business activity, production growth and efficient use of resources, can be interpreted as a special case of project research activities. We explain the last statement and consider one of the conceptual approaches to the problem of detecting tax violations, based on the author's interpretation of the concept of "strategy" (Melnikov & Potorochina, 2008) and "algebraic approach to the construction of a model" (Melnikov et al., 2016).

2. Research and design activities from the point of view of the theory of adequacy, the concept of strategy

The performance of any activity, including tax administration, is largely determined by the quality of management. Usually, the sample of model of activity is considered as the existing algorithm. However, it is clear that if the management the search for possible violations of the tax legislation is focused only on the algorithms, then either we get a huge number of algorithms of reasonable complexity, or the acceptable number of overly complex algorithms. In each case the algorithms system will probably be not enough usable and flexible. To answer on new violations we must either to create new search algorithms and proof of violations, or to complicate the ready over-engineered algorithms. Therefore it seems more promising the creation the mechanism for development the algorithms of activity. The algorithm can be considered as one of the variants of the plan of activities (this statement with certain reservations, can be attributed to the interpretation of the algorithm such as a Turing machine or Markov normal algorithm). Obviously, each item of the plan of activities the contractor can perceives either as a reference to an algorithm, or as an indication of the purpose of the activity without fixing the method for achieve this purpose. Therefore, we should formulate a constructive definition of the purpose to construct a mechanism for the creation of a plan of activity. To do this, we use the mechanism, which we call the strategy of anticipation. Its essence is to present and analyze the situation that will has developed after the successful completion of the activity. Success in this case means that the goal has been achieved.

What are the grounds to assert that the goal is reached? To assert this, we need to compare the situation with the reference models which are the part of the goal and that should be performed in advance (for example, economic, fashion and other effects were determined) and the comparison of these models with the original purpose was performed. Therefore, at first, the degree of achievement of the purpose of the activity can be interpreted as an assessment of the adequacy of the model and, at second, the objective should include reference model of

planned outcomes. Thus the *goal should be considered as a model consisting of reference models of the result of activity*.

Search for possible violations of the tax legislation can be interpreted as a research problem. This is similar to the search of the scientist, when he tries to find a new pattern or other object.

Apparently, this is true both for the taxpayer and the tax authority. Is it appropriate here to compare with the activities of a researcher? What is the difference of the research activities from others, for example, from design? In our opinion, the most accurate answer to this question can be obtained by using the theory of adequacy, proposed by Yu. B. Melnikov (2007). Namely, the adequacy of the model is always evaluated by comparing the estimated model with some reference model. Obviously, this reference model coincides with the prototype only in the case when a prototype is an ideal object. More precisely, the comparison is performed using some function of two arguments. First of them is "the estimated model", and the second is "the reference model". It is obvious that in the case of the project activity reference model and the characteristics of adequacy are intended to evaluate reflection of essence characteristics of the prototype in the estimated model. Here, the reflection of essence is meant, firstly, closeness the values obtained by the analysis model to the reference values, and secondly, maintaining a model properties and relationships inherent in the prototype.

For example, the reference model for the result of project activities can be presented as the project specification, which includes the maximum permissible numerical values of some variables: the minimum profitability level, the maximum period of use of equipment, the minimum or maximum product weight, etc. The quality of the content of the reflection characteristics of the prototype in the model is estimated using characteristics of adequacy, in this case called *characteristics of reliability*. For research activities, the adequacy of the resulting models is assessed in a fundamentally different way: the correctness of the implementation procedures, compliance research, the rigor of the proof, the correctness of the formulations are evaluated. Formal but not substantial validity of the model is estimated using characteristics of adequacy, in this case called *characteristics of accuracy*. Simulation activities is an area of interest primarily psychologists, such as S. L. Rubinstein and L. S. Vygotsky. Modern research on economic psychology and behavior continue this subject (Kirchler, 2009; Castro & Rizzo, 2014). We consider one component of the model of activity in the form of a plan of activity. As we noted above, the contractor accepts each item of the plan either as a reference to some algorithm work, or as an indication of the purpose of the activity. In order to get the guaranteed achievement of goals the performer must apprehend all points of the plan as references to the corresponding algorithms. We name the mechanism of the formation of this plan of activity "the strategy of activity". Analysis of the various interpretations of the concept of "strategy of activity" showed that they allow an accurate interpretation in the framework of the scheme presented in Table. 1

Table 1: Strategy of activity

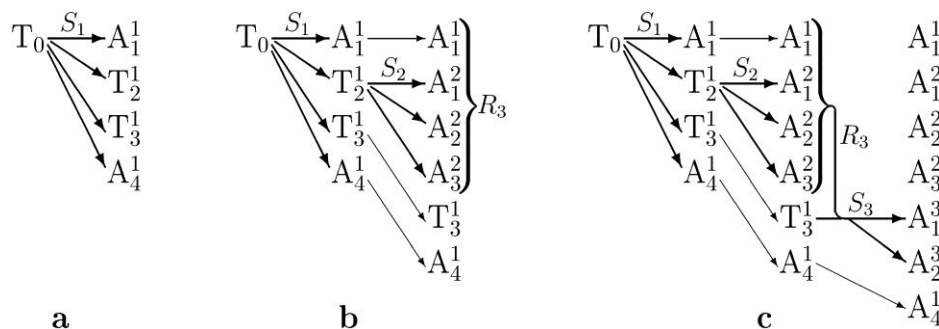
Strategy of activity	Implementation of the strategy	Plan of activities	Execution of plan
The mechanism for the creation of action plans	The application of the strategy to the creation of a business plan	The reference model activity, the result of applying the strategy	The activities for which the plan is a reference model

Now we explain the scheme presented in table 1 using the example of building a plan by a bottom-up parsing. It is illustrated by Fig. 1.

For example, the target T_0 was set. We can consider that we are dealing with the plan, which consists of a single item. Suppose that the plan consists of points $(A_1^1, T_2^1, T_3^1, A_4^1)$, appeared as a result of applying the strategy S_1 . The contractor took the items A_1^1, A_4^1 as links to algorithms, T_2^1, T_3^1 - like the reference to "secondary" objectives (see Fig. 1a.). For example, the plan was built to achieve the goal by using strategy S_2 . And the contractor took all the points of this plan as references to some algorithms. The plan $(A_1^1, A_1^2, A_2^2, A_3^2, T_3^1, A_4^1)$ was built, see Fig. 1b).

It is possible that a plan achieving the goal by using strategy S_3 will have to perform already completed part of the plan: (e.g. to solve the equation, you have to get it first). Assume that the result of executing this part of the plan is R_3 , see Fig. 1b. The plan (A_1^3, A_2^3) was obtained with strategy S_3 and the result R_3 to achieve the goal. The plan $(A_1^1, A_1^2, A_2^2, A_3^2, A_1^3, A_2^3, A_4^1)$ was built to achieve the goal of T_0 , see Fig. 1c).

Figure 1: Illustration of the concepts of "strategy" and "implementation strategy", see table 1.



This example illustrates the process of forming a final plan using the method of bottom-up analysis, which in this case consists in the gradual replacement of local goals for the algorithms to achieve them.

The research of activity of economic entities for possible tax evasion can be seen as the task of routine research activities. In our opinion the search for tax violations satisfies the postulates of routine research activities, if it is not associated with insights.

I. The Postulate of the research purpose: the goal of the study is either the construction, correction, enrichment or reduction of the model of object, the existence of which is postulated to the start of the study, or proof of the existence or nonexistence of the object. Note that in research practice, the object under study can be ideal.

II. The postulate of polymodality: any the object in question: 1) is a model, component or element of some components of some model; 2) can be described by a set of models, including significantly different, but with a certain, predetermined level of adequacy.

III. The postulate of algebraicity: object description which is presented in a typical standard form for activities in this area has the algebraic character, i.e. is founded on constructing of this object by a set of generic base objects (models) and system of typical transformations of objects.

IV. The postulate of characteristics: every class of objects of the same nature will be determined by the set of distinguishing characteristics and by the range of limited values of these characteristics.

V. The postulate of purposefulness: the leading factor of research activity is a dynamic system of purposes, emerging and developing in the research process.

A strategy of routine research activities are presented in table 2.

Table 2: Strategies of routine research activities

The strategy of building a new model	The strategy of transformation known model
The strategy of search and use of analogy	The strategy of changing roles and priorities
The strategy of priority of studying the extreme situations	The strategy of enrichment, reduction, abstracting, concretization of the model
The strategy of anticipation	The strategy of transition from the study of a single object to the study of systems of objects

The strategy of building a new model can be represented as a combination of strategies 1) *search and use analogies*; 2) *priority of studying the extreme situations*; 3) *anticipation*.

The application of *strategy of search and use of analogy* seems to be promising in some cases, for example, in the study of documentation of atypical activity for this subject (for example, accompanying a non-trivial technical, administrative or economic decisions). This strategy is useful for creation of optimum model of the state system of taxation, which is accompanied by a comparative analysis of taxation systems of different countries (with the allocation of fiscal, economic, regulatory functions), as well as comparative analysis of economic activities and the result of taxation for companies of the same profile or near profile activities in different countries (Goerke, 2014; Ernst et al., 2014). Note that the implementation of the strategy is subjective, for example, an inspector of tax police, having extensive experience in this field, has more chances of successful application of the strategy of search and the use of analogy because he has more ability to compare this situation with similar situations when checking the enterprise for various types of tax violations. Additionally, the identification of potential cases of aggressive tax planning can be attributed to the priority the study of extreme situations.

The *strategy of priority studying the extreme situations* is promising in situations such as change of owner of enterprise, change of activity, change of management, main supplier, main consumer, the achievement of extreme values of some variables, the change trends of certain financial performance and other significant changes or turning points in the activities of the taxpayer (Vetter, 2013). In addition the *priority studying of extreme situations* includes the identification of potential cases of aggressive tax planning. From this point of view we can select the most risky groups of taxpayers: large and medium business, small business, super-rich person. Strategy of *priority of studying the extreme situations* include typical goals: a) the selection of the system characteristics which are priority from the point of view of identifying possible tax violations; b) identification of situations of extreme values of the priority characteristics.

Strategy of anticipation can be illustrated by the procedure of examination of documents in the situation of typical activity of the economic entity. In this case, the inspector suggests possible violations of the tax legislation and analyzes the possible "traces" of these violations. In order to confirm or refute his "hypothesis" primarily a method of mapping a uniform

documentation can be applied, for example, a comparison of the signatures in wage reporting for different months and in the personal files of the recipients in the accounts department can be performed.

Strategy of transformation known model can be represented as a combination of strategies of 1) *changing roles and priorities*; 2) *enrichment, reduction, abstracting, concretization of the model*; 3) *the transition from studying a single object to study object systems*.

An example of using the *strategy of changing roles and priorities* is the control of economic activities on the basis of analysis of mass media, advertising, analysis, forums dedicated to evaluation of activities of various enterprises and firms: if the purpose of building the advertising campaign was to increase sales of manufactured products, the tax inspector examines the same information for compliance reporting documents.

Strategy for enrichment of known models of the inspector's activities may be used in connection with the emergence of new production technologies, collection and processing of information, new types of settlements between economic entities or the introduction of new technologies, change of the type of the relationship, of the structure of control.

The reducing the model of the inspector's activities may be applied in the implementation of information technologies in the work of the tax Inspectorate (for example, due to automatizing the collection and processing of information) or in connection with changes in tax legislation (the hard-administered taxes are replaced by taxes, the collection and interpretation of which is more "transparent").

The strategy of abstracting is applied, for example, in case of making amendments to the legislation after the detection of a unique (new) cases of violation of the tax code (there is a need of generalization, in this case).

The strategy of transition from studying a single object to the study of system of objects in relation to the strategy of activities of state bodies (including tax authorities) is used in the validation existence of cartel agreements, in consideration of the trading networks, of Federal mobile operators, etc.

Decomposition of research strategies represents an example implementation of the algebraic approach to construct a model which, from our point of view, consists in allocation of three components of the modeling process: 1) a set of basic models (in this case, basic strategies); 2) system of model transformations and combining models; 3) mechanism of approximation.

The most effective was the following mechanism of approximation.

The selection of the most promising strategies is performed as a result of the analysis of the current situation (the conditions under which this strategy may be successful, is formulated for each strategy), then attempt to apply the selected strategy is made. If the attempt is unsuccessful, we select the strategy that looks the most promising of the remaining. Until one of the attempts is not successful, the process repeats: if a plan is not yet achieve the goal, the new situation is analyzed ,the most promising strategy is selected, etc.

3. Conclusion

It is impossible to give recommendations and to write the algorithms of actions of employees of tax authorities at all situations of the tax practice. However, proficiency in strategies of design and research activities (such as finding and using analogies, priority the study of extreme situations, anticipation) gives effective and universal tool for building the necessary models to solve problems. The number of strategies is limited, and the method of their application is universal, so the solution of the considered problem will be found for a limited time. The author's approach provides a conceptual framework for solving optimization problems of tax administration. And the algebraic approach to model building allows you to create a new model on the basis of known basic models and model transformations.

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TAX SHIELD VALUATION METHODS UNDER THE GLOBAL CONDITIONS

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Abstract. Every company faces several business challenges in the current global context. As the main objective of company it was considered a profit but nowadays the main objective is the value growth of company. One of the opportunities for value growth is deemed the use of the tax shields. Tax shield can be calculated by two different approaches: as a present value of the tax saving due to interest or as a difference between the present values of two different cash flow: the present value of taxes for unlevered company and the present value of taxes for levered company and each of this cash flow has its own risk. For cash flow valuation it can be used several methods which include the value of the tax shield. The aim of this contribution is to present and compare these methods namely: the weighted average cost of capital (WACC), the free cash flow (FCF), the cash flow to equity (ECF) and the youngest method, the capital cash flow (CCF) method. However, these methods are different in cash flow valuation but they should give the same result of company total value as well as the value of the tax shield.

Keywords: tax shield, valuation, cash flow, debt

JEL Classification: G12, G31, G32, H43, F65

1. Introduction

There are a large numbers of company valuation methods. The issue is the choice of appropriate method. In connection with the calculation of the value of tax shield it is the preferred discounted cash flow methods (DCF). DCF is divided into various types depending on the nature of cash flow. In Slovakia there are many authors dealing with the issue of valuation. (Majercak & Majercakova, 2013, Kral & Janoskova, 2014, Gondzarova, 2015) There are generally three methods used in practice and which explicitly or implicitly include the value of the tax shield of debt. This contribution is dedicated to presenting and comparing these methods: the free cash flow (FCF), the cash flow to equity (ECF) and the capital cash flow (CCF). Moreover there is adjusted present value method (APV) which combines one of the above mentioned methods and the value of tax shield.

The different valuation methods give the same result of company value because these methods rely on the same assumptions and do not include any other assumptions. Fernandez (2007) argues: “This result is logical, as all the methods analyze the same reality under the same hypotheses; they differ only in the cash flows taken as a starting point for the valuation.” Therefore, if some of the methods relies on other assumptions, some inconsistency may arise.

2. Discounted cash flow: general case

DCF methods are based on computing the present value of the expected future cash flows. This is the approach that most accurately reflects the real value of an asset or company. The general formula for the calculation is shown in Equation 1

$$V_{(0)} = \sum_{t=1}^N \frac{E(CF)}{(1+r)^t} \quad (1)$$

where $V_{(0)}$ is value of asset (company) in initial time 0; $E(CF)$ is expected future cash flow; r is discount rate; N is expected life of asset (company).

According to the preceding formula value of asset (project or company) depends on three variables: the expected future cash flows and the type used cash flow (FCF, CCF and ECF); the discount rate and the expected life of the asset. (Chen et al, 2016) It means that structure of equation is different but the result of all methods is same. DCF methods rely on several assumptions:

1. capital markets are complete,
2. capital structure consist only of equity and debt,
3. the only considering tax is income tax,
4. company respects *going concern principle*; investment should be a maximum of depreciation and applies *depreciation = investment + changes in working capital*

2.1 The free cash flow method

FCF is cash flow available for providers of funds. Fernandez (2004) argues that this definition is not correct because the parameter of cash flow to shareholders and debtholders is capital cash flow (CCF). FCF calculation should be based on two earning measures: earnings after taxes (EAT) or earnings before interests and taxes (EBIT). (Buus, 2015) Based on EBIT free cash flow is computes as follows:

$$FCF = EBIT(1-T) + Depreciation - Investment + Changes in working capital \quad (2)$$

FCF method is assumed that tax is calculated from all-equity financed company, so value of tax shield is not included in FCF calculation. (Luehrman, 1997) Hence appropriate discount rate is after tax weighted cost of capital (WACC). (Kolari, Velez-Pareja, 2012) The present value of future expected free cash flow is

$$PV(FCF) = \sum_{t=1}^N \frac{E(FCF_t)}{(1+WACC_{AT,t})^t} + \frac{E(FCF_{N+1})}{WACC_{AT,N+1}} * \frac{1}{(1+WACC_{AT,N+1})^N} \quad (3)$$

$$WACC_{AT,t} = k_{d,t}(1-T) \frac{D_{t-1}}{V_{t-1}} + k_{e,t} \frac{E_{t-1}}{V_{t-1}} \quad (4)$$

where $PV(FCF)$ is present value of FCF; $E(FCF_t)$ is expected FCF; $WACC_{AT,t}$ is after-tax weighted average cost of capital; $k_{d,t}$ is cost of debt in time $t-1$; T is income tax rate; D_{t-1} is debt in time $t-1$; E_{t-1} is equity in time $t-1$; V_{t-1} is sum debt and equity in time $t-1$.

2.2 Equity cash flow

Equity cash flow measures the cash flow available to shareholders after payments to debtholders are deducted from operating cash flow. This cash flow should be easily formulating as cash inflows minus cash outflows and the difference is available to the shareholders. The payments to debtholders are called sometimes debt cash flow and it consists of interest and principle payments. Equity cash flow is equalled to the difference between capital cash flow and debt cash flow. (Fernandez, 2004) ECF should be valuing in two different ways: if company is financed only by equity, then ECF equals FCF; or company is financed both by equity and debt, then ECF is reduced by the debt cash flow. The EBIT path is measured ECF as follows:

$$ECF = EBIT(1-T) + Deprecation - Interest + Net borrowings - Capital expenditures - Changes in working capital \quad (5)$$

Or from FCF equity cash flow can be measured as

$$ECF = FCF - Interest(1-T) + Net borrowings \quad (6)$$

Debt cash flow is covered by operating earnings (EBIT) and debtholders are paid before equityholders. Hence equity cash flow is riskier than debt cash flow and it is discounted by higher rate, usually by cost of equity (k_e). The discount rate should be adjusted by capital structure effect to take into account financial risk, so it is used levered cost of equity.

$$PV(ECF) = \sum_{t=1}^N \frac{E(ECF_t)}{(1 + k_{e,t})^t} + \frac{E(ECF_{N+1})}{k_{e,N+1}} * \frac{1}{(1 + k_{e,N+1})^N} \quad (7)$$

Equity cash flow not implicitly or explicitly take into account value of tax shield because the measure expressed only cash flow for shareholders. Nevertheless it is base of another methods.

2.3 Capital cash flow

Capital cash flow measure the cash flow available to equityholders and debtholders. Ruback (2002) argues that CCF includes all cash flow paid to the fund providers and it is a measure of total cash flow generated by the assets. Therefore, tax deductibility of interest payments (value of tax shield) is included into the calculation.

$$CCF = ECF + CFd = ECF + I - \Delta D \quad (8)$$

$$CCF = EBIT(1-T) + Deprecation - Changes in working capital - Capital expenditures + after-tax asset sales \quad (9)$$

Where CFd is debt cash flow; I is interest and ΔD is changes in debt.

The appropriate discount rate is pre-tax WACC abstracts from capital structure expressed as D/V . The riskiness of the assets is relevant because cash flow measure includes all of the cash flow generated by the assets and to all providers of capital. (Ruback, 1986) WACC before tax should be modified to easier formula:

$$PV(ECF) = \sum_{t=1}^N \frac{E(ECF_t)}{(1 + k_{e,t})^t} + \frac{E(ECF_{N+1})}{k_{e,N+1}} * \frac{1}{(1 + k_{e,N+1})^N} \quad (10)$$

$$PV(CCF) = \sum_{t=1}^N \frac{E(CCF_t)}{(1 + WACC_{BT,t})^t} + \frac{E(CCF_{N+1})}{WACC_{BT,N+1}} * \frac{1}{(1 + WACC_{BT,N+1})^N} \quad (11)$$

Where r_a is cost of capital; r_f is risk-free rate; β_U is beta of unlevered company; r_p is risk premium; $PV(CCF)$ is present value of expected CCF and $WACC_{BT}$ is pre-tax WACC.

The discount rate is eventually equalled to unlevered cost of capital that's why it is depend only on the risk-free rate, beta of unlevered company and risk premium. (Sarmiento-Sabogal & Sadeghi, 2014) Hence β_U measures only operating risk and the effects of financial leverage is removed. All in all it means that discount rate does not have to be recalculating if capital structure changes. (Ruback, 1995)

2.4 Adjusted present value

Adjusted present value is the most widely used method for asset and company valuations. Term "adjusted" means sum of value of unlevered company adjusted for the side effects of financing to derive the value of levered company. (Myers, 1974) APV is based on value additivity since method splits an assets (project or company) into pieces to value each piece and sums them.

$$APV = NPV + \text{present value of financial side effects} \quad (12)$$

For valuing company APV is divided usually into two parts: the value of unlevered company (calculating as discounted FCF) and value of tax shield. (Luehrman, 1995) Formula for valuing tax shield varies according to the financial policy of the company. If company expected constant value of debt then it is usually used Modigliani-Miller (MM) formula. (Modigliani & Miller, 1963) If the future debt levels are not known with certainty and company can expected only first period debt level and another debt levels are stochastic then tax shield is valuing by Milles-Ezzell (ME) formula. ME approach has one very important assumption: debt policy must be based on constant leverage ratio during giving period. (Milles & Ezzell, 1985) Thirdly if we assume that all debt levels (also tax shields) cannot be known with certainty then it should be used Harris and Pringle formula. (Harris & Pringle, 1985) Generally the APV formula based on MM approach is computes as follows:

$$V_0 = \sum_{t=1}^N \frac{FCF_t}{(1 + k_{e,t})^t} + \frac{E(FCF_{N+1})}{k_{e,N+1}} * \frac{1}{(1 + k_{e,N+1})^N} + \sum_{t=1}^N \frac{D_{t-1}k_d T}{(1 + k_{d,t})^t} + \frac{D_N k_{d,N+1} T}{k_{d,N+1}} * \frac{1}{(1 + k_{d,N+1})^N} \quad (13)$$

3. Consistency of DCF valuation methods

As it is mentioned above all valuation methods based on the cash flow give the same result because DCF valuation methods relied on same assumptions. In the model case it will be shown another factors change the calculation of present value of company and then it mentioned ways how can be reduced the inconsistency.

Imagine a company with constant cost of debt 3,6%; unlevered cost of equity 13% and income tax rate is 22%. It is drawn up the financial plan for three years therefore the first stage lasts three years and the second stage will be infinity (going-concern principle). Assuming that the growth of EBIT for the first stage is 5% and in the second stage all financial measures will be constant, some financial measures of company is expressed in Table 1.

Table 1: Input variables in model case (in thousand €)

	Year			
	1.	2.	3.	4. (2 nd stage)
Debt	200	200	200	200
Equity	235	240	250	250
Debt+Equity	435	440	450	450
EBIT	65	68,25	71,66	71,66

Source: author

Then cash flow measures (FCF, ECF and CCF) are

Table 4 Cash flow in each year (in thousand €)

	Year			
	1.	2.	3.	4. (2 nd stage)
FCF	45,7	43,24	55,90	55,90
ECF	40,08	37,62	50,28	50,28
CCF	47,28	44,82	57,48	57,48

Source: author

To calculate discounted cash flow it is necessary to compute an appropriate discount rate. It is after-tax WACC based on the constant capital structure of D / V 40% for FCF and $WACC_{AT}=11,86\%$. The discount rate for ECF is leveraged cost of equity equalled 17.89% and pre-tax WACC equalled 12.17% is the appropriate discount rate for CCF. These discount rates are valid for all periods. Adjusted present value (APV) consists of two cash flows: discounted FCF of unlevered company (discounted at unlevered cost of equity) and value of tax shield discounted at cost of debt. Present value of cash flows of each year and gross and net value of company is expressed in Table 3.

Table 5 Present value of cash flows, gross and net value (in thousand €)

	Year				Sum	Net value
	1.	2.	3.	4. (2 nd stage)		
PV(FCF)	40,86	34,56	39,94	336,88	452,23	252,23
PV(ECF)	34,00	27,07	30,69	171,57	263,33	263,33
PV(CCF)	42,15	35,62	40,72	334,56	453,05	253,05
PV(APV)	41,97	35,34	40,16	337,56	455,04	255,04

Source: author

The present value of FCF, CCF and APV is the gross value e.g. the value of debt and equity. Debt value has to be deducted from the gross value to obtain the net value. Then all DCF method should give same result, but it is not. (Velez-Pareja & Perez, 2010) Among other things, this is caused by the difference between the assumed financial policy and real financial policy in the company. The issue called the Circularity Problem and it means that discount rate used to value cash flows depends on the value of cash flow themselves. It has been addressed in many ways: by ignoring it and assuming a constant cost of capital, assuming that taxes do not exist and discounting the cash flows with the cost of capital before taxes; iterating manually assuming a target leverage or iterating automatically using the iteration feature of spreadsheets. (Mejia-Pelaez & Velez-Pareja, 2011)

4. Conclusion

The DCF valuation method are the one of the most used methods for valuation assets, projects and companies. There are many problems with valuation for example inconsistency called the Circularity problem. Another problem is determining the appropriate discount rate for tax shield. Fernandez (2004) creates new formula for value of cash shield but Cooper & Nyborg (2006) claim that the standard valuation methods are still valid. There are many approaches for calculating value of tax shields, but there are also many gaps. (Tse & Rodgers, 2011) All in all Fernandez (2001) mentioned most common errors in valuation for example: calculating WACC using book values instead market value; calculating the market premium and beta from historic data; assuming that the debt value matches the nominal value when this is not the case or incorrect calculation of the FCF and ECF.

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WEB-BASED IDEA MANAGEMENT SYSTEMS AS A TOOL TO SOLVE GLOBALIZATION CHALLENGES LOCALY

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Abstract. Based on the authors' previous researches there is gap in the literature – no researches that explore possibilities to solve globalization challenges by idea management systems (IMS). Purpose of the research is on the basis of 40 web-based IMS evaluation and review of literature about globalization challenges identify if IMS could be applied to solve globalization challenges locally through generation, evaluation and development of ideas through further idea management. Research bridges this research gap theoretically exploring: (1) the main globalization challenges by literature review in scientific database Web of Science; (2) the main IMS users and application characteristics by evaluation of 40 most popular IMS; (3) could IMS be applied to solve 5 most often mentioned globalization challenges. In the end of the research authors try to find practical evidence of web-based IMS application to solve globalization challenges locally by case studies of IMS *Academy of Ideas* application and discussing possible implications, limitations and future research directions. The results of the research revealed that theoretically web-based IMS could be used to solve different kind of challenges and create different kind of idea management networks for different sector representatives. Also case studies proved that these tools could be applied to solve globalization challenges locally. Authors have developed suggestions for possible future research directions that show that this topic has scientific perspective.

Keywords: Idea Management Systems, Web-based Idea Management Systems, Globalization, Challenges

JEL Classification: L86, D89, D79, M15

1. Introduction

Globalization in the last decades has driven global development in an unprecedented way, including technological progress. Both globalization and technological progress creates challenges and opportunities. But this paper has focused aim to explore if technology of web-based idea management systems (IMS) could be applied to solve globalization challenges. Based on the authors' previous researches there is a gap in the literature – no researches that explore possibilities to solve globalization challenges by applying IMS. The aim of the research is to fill this gap and on the basis of 40 web-based IMS evaluation and review of literature about globalization problems identify if IMS could be applied to solve globalization challenges locally through generation, evaluation and development of ideas through further idea management.

1.1 Theoretical aspects of idea management systems and globalization

In this paper a definition of the term previously developed by the authors is applied 'idea management systems' - tool, tool kit or complex system which provides systematic, manageable process of idea generation, evaluation and development through further generation and evaluation of ideas (Miķelsone & Lielā, 2015). This paper focuses on web-based IMS that are available on the internet.

Globalization has a number of definitions depending on the context and it "can refer to anything from the Internet to a hamburger (Strange, 1996)". It demonstrates that globalisation is a complex phenomenon that consists of a large variety of economic, social, technological, etc. factors. But there are common characteristics of globalization - compression of time and space, aspects of social relations that involves the acceleration of time and the reduction of spatial constraints, both of which have distinct consequences for all layers of society (Embong, 2000). In the context of this paper political, social and economic challenges caused by globalisation are researched.

1.2 Research methodology

Research bridges the research gap theoretically exploring by 3 Phase approach: (1) exploring the main globalization challenges by literature review in scientific database Web of Science; (2) conduct web-based IMS application research by – (2.1.) evaluation of 40 most popular IMS to explore main users and application characteristics; (2.2.) case studies of IMS *Academy of Ideas* application (selected from companies case study archive and used the first case in the list after applied topic filter) to explore how IMS could be applied to solve 5 most often mentioned globalization challenges; (3) conclusions and discussion on possible implications, limitations and future research directions. Phase 1 - literature review is divided in 4 research stages: (1) to research literature about globalization problems (passed 106 literature sources); (2) to select literature directly about these problems (passed 72 sources); (3) to analyse selected papers; (4) to select 5 most frequent mentioned globalization challenges. Main limitations: (1) focus only on web-based commercially available IMS; (2) case studies only about one IMS *Academy of Ideas* and only external idea management of the organisations, because internal idea management data are sensitive for organisations; (3) global challenges are gathered and selected based only on literature analysis from one scientific database *Web of Science*.

2. Globalization challenges

Based on the conducted literature research authors have gathered more than 20 specific globalization problem that includes political, economic and social problems. In the literature different challenges are researched but the main question is how states, regions, enterprises, individuals etc., are going to develop their capacity to confront increasing globalisation and its requirements. The most frequent researched variables that faces globalization challenges are enterprises, market and trade, education, national policy, social integration, labour and migration and overall development. These results are consistent with conclusions in previous research - globalization is most frequently discussed in economic terms, but it has also been researched as a development process, a socio-cultural process, a political process or as an

ideology (Goodhart, 2001). Most frequent mentioned characteristics of globalization challenges see in Table 1.

Table 1: Most frequent mentioned globalization challenges in Web of Science database

Variables	Challenges	Variable researchers
<i>Enterprises and Trade</i>	Increasingly interconnected global market means that enterprises need to adapt and compete with the best from around the world both in domestic and foreign markets. Markets and enterprises need to adapt to global requirements.	(Koelliker, 2012); (Schwenninger, 2009); (Belova & Mickiene, 2008)
<i>Education</i>	Educational institutions and national policy makers encounter both with ever increasing range of theories, ideas and trends about education that are needed to be evaluated and adjusted to local specifics, as well as face strong competition in global market and need to attract new students all around the world by understanding global demand.	(Samier, 2015); (Cheng, 2015); (Zhao & Chu, 2013)
<i>National Policy</i>	Governments need to adapt to rapidly changing global landscape, create globally competitive legal frameworks, innovate and successfully adapt best practices from all around the world.	(Scalone, 2015); (Spiridonova, 2013); (Jahn, 2006)
<i>Social integration</i>	Global inequality side-lines various groups of people and it is up to municipal, national and super-national institutions to create necessary legal frameworks and conditions to successfully integrate these groups back into economy and society by providing access to decent means of living and adequate work opportunities.	(Beyer, 2013); (Tomaskinova et al., 2013)
<i>Labour/ Migration</i>	Labour market and migration are becoming ever more connected as people leave regions with inadequate opportunities.	(Perez, 2016); (Connell, 2007)
<i>Development</i>	Development policies on various levels (private sector, municipal and national) need to successfully adopt best practices from all around the world and be able to achieve high competitiveness.	(Ferrer, 1996)
<i>Globalization (overall)</i>	Globalization creates many global challenges (global inequality, global warming etc.) that need to be solved locally and globally.	(Majtan & Nemeckova, 2013)
<i>Diffusion of technology</i>	Growing role of technology requires new skills and knowledge.	(Hodge, 2013)
<i>Psychological adaptation to globalization</i>	Many people find hard adopting to new global landscape feeling threatened either by growing inequality, loss of identity and traditions, degradation of established ideological and religious frameworks etc.	(Dikaya, 2007)
<i>Environmental problems</i>	Environmental challenges are facing world population both globally (global warming) and locally (industrial and urban pollution, degradation of soil, destruction of ecosystems through extraction of resources etc.).	(Yearley, 2005)
<i>Urbanization</i>	Rapidly growing urbanization (especially in developing countries) is producing serious challenges such as overpopulation, inadequate sanitation, inequality etc.	(Harrison, 2001)
<i>Problems of adapting global phenomena locally</i>	Adaptation capacity of new theories and practices is often limited on privet, national and/or municipal level.	(Frambach et al., 2012)
<i>Youth and children</i>	Youth and children need to develop new skills and	(Bignell, 2011)

	knowledge that help them to adapt, collaborate and compete.	
*5 most frequent researched variables of globalization challenges		

3. Web-based IMS application

Analysis of 40 most popular web-based IMS according to 2 main criteria – (1) product characteristics (application patterns, potential idea sources, potential issues to solve); (2) clients (by sectors). According to research web-based IMS are used by clients from different sectors, some of web-based IMS developers are specialized in certain sector representatives as clients. See in Table 2 web-based IMS and their clients in different sectors.

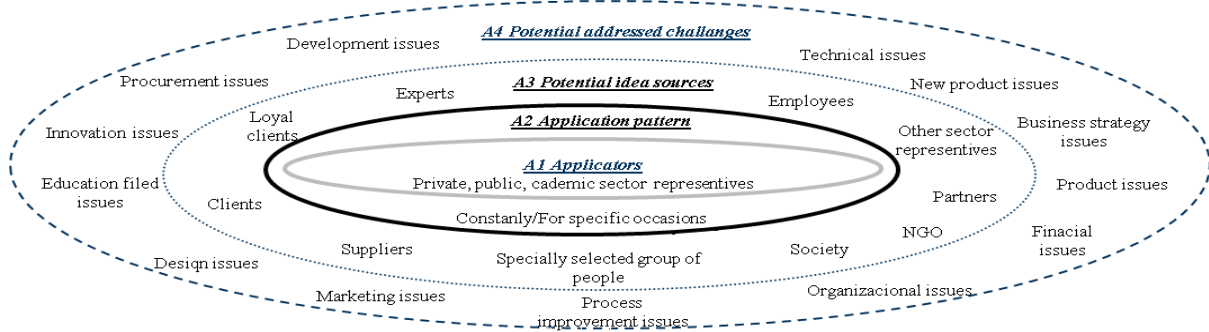
Table 2: Web-based IMS users

	Users	Web-based IMS
Private sector	<i>McAfee, AT&T, BMW of North America, Chrysler, IBM, Intel, Pfizer, Qualcomm, Quest Software, Raytheon, SAP, Schwab Learning, Sylvan Learning, Time, Inc, Unisys/TSA, Nestle, PremiumTV, Orange, Nationwide News, Roche, Gestamp, Zurick, Oi, Shell, Adobe, Bosch, Cisco, Emerson, Airbus, Lufthansa, Systems, Daimler, Bosch, Trucks, Bombardier, Deutsche Bahn, Continental, Huf Group, Mahle, Borbet, Pierburg, Knorr-Bremse, Casa Pellas, Procter & Gamble, General Mills, Clorox, Reckitt Benckiser, WD-40, Head, Oriflame, Belcorp, Siemens, General Electric, Osram, Vadafone, Heineken, Etsy, Panasonic, Sony, Fujitsu, Electrolux, Volvo</i>	<i>Accept360, WebBoard, Easycrit, Idea Market, IDEALYST, IdeaLink, WebStorm, Idea Management Software, HYPE, Innovation Cast, PIT, Kindling, Academy of Ideas, MangoApp, SpigitEngage, Nosco, Idea Management Software-Qmarkets, Teepin, Vetter, Idea Spotlight, Suggestion System, MindGenius, Jenni, Organised Feedback, Flagpole, Innocentive@Work, InnovBook, Eureka, Idea Glow, IdeaStation, IdeaMarkets, IdeaMatic, IdeasCount, Id-Force, Bright Sparks, IdeaJam, Coras Works, CrowdLogic, e-tipi</i>
Public sector	<i>Center for Disease Control, Department of Defense, Cleveland Clinic, NASA, Globalgiving, European Commission</i>	<i>WebBoard, Innocentive@Work, Academy of Ideas, Idea Management Software-Qmarkets, Stakeholders, InnovBook, IdeaLink, WebStorm, BrightSparks, Coras Works, IdeaStation, Id-Force, Organised Feedback, Teepin, Vetter, Idea Spotlight</i>
Academic sector	<i>Duke University, Illinois State University, Kellogg School of Management, Tufts, University of California, Berkeley, University of California, San Francisco, Virginia Tech University</i>	<i>WebBoard, InnovBook, Idea Management Software-Qmarkets, IdeaLink, WebStorm, Coras Works, IdeaStation, Id-Force, Organised Feedback, Academy of Ideas</i>

Sources: authors developed table based on web-based IMS provider webpage information about their clients

Based on assessment of 40 web-based IMS authors have developed web-based IMS potential application field depiction. Authors esteem that this depiction will help to explore the fundamental bases of web-based IMS potential application that could be useful for current and potential users as well it could be apposite for web-based IMS developers to create comprehensive informative materials about wide application field of web-based IMS. Web-based IMS potential application field consists of 4 parts (every section describes relevant aspect of web-based IMS application): A1- web-based IMS applicators; A2- application pattern (incidence of application); A3-potential idea sources (idea generators/evaluators); A4-potential addressed issues. Web-based IMS potential application field depiction is shown in Figure 1.

Figure 1: Web-based IMS potential application field depiction



4. Evidence of web-based IMS application to solve globalization challenges locally

As described in the Section 3 it was concluded that web-based IMS could be universally applied by different sector representatives to solve wide range of challenges. In the end of the research authors try to find practical evidence of web-based IMS application to solve globalization challenges locally by case studies of IMS *Academy of Ideas* application and discussing possible implications and future research directions. Case studies were selected from *Academy of Ideas* case study internal database and used the first case in the list after topic filter was applied to explore how IMS could be applied to solve 5 most often mentioned globalization challenges actualized in this paper. In the Table 3 See selected case studies.

Table 3: Case studies of Academy of Ideas

Challenge variables	Case No.	Case challenges	User	User abbreviation	Sector	Application pattern	Idea source	Count of ideas
Enterprises	1	Virtual internship	Ltd. 'Prakse.lv'	Prakse.lv	Private	For specific occasion	Public	311
Education	2	New competences for entrepreneurs	Zemgale Region Human Resource and Competences Development Centre	ZRKAC	Public			229
National Policy	3	Regional development	Ministry of Environmental Protection and Regional Development of the Republic of Latvia	VARAM	Public			230
Social integration	4	Local civic participation						174
Migration	5	Remigration						345

Source: authors developed table based on 'Academy of Ideas' provided case studies

First case study shows that web-based IMS could be applied to solve specific problem of entrepreneurship as well to education – internship. It should be noticed that this case proves that these systems could be applied to solve complex issues related to globalization locally, as globalization leads to the need to use newest technologies and virtual environment that allows to issue opportunities provided by them. As in this case to get experience in different countries locally. After 4 days of external idea management (crowdsourcing) 311 ideas were generated and evaluated. According to the *Academy of Ideas* representatives several of these ideas were implemented in the Prakse.lv project of virtual internship.

Second case of *ZRKAC* shows that this tool could be applied to create new education programs for entrepreneurs that could help to develop competencies that are important for contemporary entrepreneurs in age of globalization. For the issue of what kind of training and knowledge should contemporary entrepreneur have, 229 ideas were generated and evaluated after 5 days of external idea management. More than 5% of all generated ideas were directly included in the new education programs, but 15% of all ideas were developed in the further idea management process and implemented as well.

Third to fifth case studies prove that these tools could be also applied by national government institutions. *VARAM* has applied web-based IMS to solve different challenges. For example, to solve national policy problems as shows case Nr.3. In 5 days *VARAM* got 230 ideas on how local governments could support entrepreneurs. *VARAM* have applied this tool to get ideas also for specific regional development issues, for example, ideas for film sceneries about development of Latgale region, about its challenges and perspectives (211 were managed). Fourth case revealed that web-based IMS could be applied to solve social integration problems. For the issue on how local government could improve local citizen cooperation 174 ideas were managed in 5 days. Fifth case proves that these tools could be applied to solve migration problems. *VARAM* applied web-based IMS and got 345 ideas from citizens for remigration plan and all ideas were discussed and some of them implemented.

Possible managerial implications - results shows that these tools could be applied to solve globalization challenges for enterprises, education, national policy, social integration and migration by different sector representatives. Authors consider that according the universal nature of web-based IMS these tools could be applied also to solve other globalization challenges. It should be noted that application of these tools could provide ideas, but implementation of them depends on organisation. Authors believe that this research will provide additional information about web-based IMS potential and existing applicators and motivate wider application of web-based IMS. Limitations - more detailed information on effectiveness of application could provide superior insight but there are limitations: (1) organisations do not have data; (2) organisations sees these data as sensitive. Additional research limitations - case studies do not shows how academic sector representatives solve globalization challenges, but it is because of case study selection methodology and case studies represents only external idea management with public involvement, because internal idea management data and focused external idea management data are not available for publication. Future research directions - case studies proved that these tools could be applied to solve globalization challenges locally but do not shows how effective. In future researches should research effectivity of these tools not only application potential. Future researches could research how effective these tools could be applied to solve globalization challenges globally, because there are some wide known examples, for example, *International Olympic Comity* have applied web-based IMS *IdealinkOpen* for 14 months to solve expense issues and problems with Olympic cities with the potential with managed ideas to save 1,9 billion USA dollars. It would be advisable to research web-based IMS application effectiveness and influencing factors in globalization context.

5. Conclusion

The results of the research revealed that theoretically web-based IMS could be used to solve different kind of challenges and create different kind of idea management networks. Also

case studies proved that these tools could be applied to solve globalization challenges locally. Authors have developed possible future research directions that shows that this topic has scientific perspective, for example: (1) to research web-based IMS application effectiveness and influencing factors in globalization context; (2) to research web-based IMS application to solve globalization challenges globally.

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ECONOMIC AND INSTITUTIONAL INTERESTS IN THE GLOBAL ECONOMY

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Abstract. Indivisible economic, informational, and institutional space is formed in the course of globalization. Inefficiency of globalization's institutions leads to the increase in transaction expenses and contradictions in the global economy. Realization of economic interests in the process of globalization is connected with formation of economic and informational space, which provides income maximization to participants of the international economic relations. Realization consists in formation of institutions which guarantee such maximization. The order in the world was created mostly in accordance with interests of the members of the Organization for European Economic Cooperation and the Group of 7 Industrialized Nations. Formation of such organizations as BRICS by frontier countries is a demonstration of institutional interest in order to change the world institutional order. Transition to a format of the Group of Twenty Finance Ministers and Central Bank Governors is also connected with institutional interests in the global economy. Contradictions between interstate associations (in particular in the EU because of migrant policy) arise owing to existence of institutions which conflict with economic interests of the members. Integration of the CIS countries fails due to aspiration to consolidate economic interests, while it needs the creation of institutions of united area. Research of interaction and contradictions of economic and institutional interests is an important aspect of formation of the global economy.

Keywords: economic interests, institutional interests, globalization, economic institutions, global space

JEL Classification: F50, F53, F60

1. Introduction

The contradictions of globalization, the negative attitude towards it, the discontent of the globalization institutions is largely explained by the fact that the formation of these institutions does not take into account the economic and institutional interests. In the economic literature, there is a little research on the system of the institutional relations and interests and their role in the functioning of economic institutions, in particular in the context of globalization.

The system of the economic relations includes the economic and institutional relations. Accordingly, it is necessary to distinguish between the economic and institutional interests. The economic interests of the participants of globalization are contradictory. The competition for revenues in the context of globalization must take place within a certain restrictive framework,

which are the institutions of globalization. The absence and the ineffectiveness of these institutions lead to the increase of transaction costs and the contradictions in the global economic system. Some countries and their groups, different social groups and other participants of globalization are interested in the institutions of globalization which conformed to their economic interests. There are attitudes and interests on the formation and functioning of the institutions –the institutional relations and interests. The institutional interests of the participants in the global economy are dual. On the one hand, everyone has their own institutional interests in the institutions, which would provide income maximization. On the otherhand, on the basis of consensus it is necessary to create the institutions conformed to the interests of all participants of globalization, i.e. the system of institutions which express the overall global institutional interest. must be, building.

The purpose of this article is to examine the interaction of the economic and institutional interests in the context of globalization, their role in the formation of a single world global space that determines the setting of the following tasks:

- to review the process of globalization from the point of the conflict of the economic and institutional interests of their members;
- to disclose the content of the institutional interests; to show the contradiction between the general and private institutional interests in the context of globalization;
- to explain a number of contradictions in the system of the institutions of the global economy from the standpoint of the differences in the economic and institutional interests.

2. Results and references

The development of the modern international relations and interests takes place under the influence of globalization. There are many definitions of globalization, which reflect the various aspects of this process and can be applied on the basis of the objectives and methodological orientations of globalization studies (Zhdanova, 2012), (Borzykh, 2013).

Most researchers examines globalization in the aspects of its manifestations, contradictions, impacts, impact on the economic development (Carp, 2013), (Arkhipova, 2016) and the economic growth (Marginean, 2015); (Adamanova, 2015); (Dobrescu, 2013), impact on the international trade (Surugiu, 2015), on the economic interdependence between the countries (Carp, 2013) and integration processes (Shirokanov, 2013); (Dobrescu, 2013).

Globalization is associated with the transition to the knowledge economy (Mohagheh, 2016); (Dobrescu, 2013), innovative processes (Mihaela, 2013), the role of the transnational corporations in the global economy (Medvedev&Badileanu, 2013).

The important aspects of the study of globalization are: the institutional reforms (Starodubrovskaya, 2015), the role of law in the formation of economic institutions (Deakin et al., 2016), the role of the institutional and organizational environment in the development of business (Sibirskaya et al., 2015), the relationship between the institutions and macroeconomic indicators (Vildrim & Gokalp, 2016), the impact of institutional reforms on the world income distribution (Junior, 2012).

The challenges of globalization in the aspect of the formation of the institutional relations, institutional conflicts of interests were not considered in previous studies. Definitely, the role of institutions in the process of globalization, in the organization of economic behavior is

studied in the works of institutionalists investigate (Almaeida, 2015); (Leustean, 2015). At the same time outside of their work there are relations on the formation, functioning and changes in the institutions –the institutional relations and their interaction with the economic relations. The exception is the work of representatives of the new economic history, especially the book of D. Nort, "Institutions, Institutional Change and Economic Performance", (Nort, 1990), but the evolution of the institutions, rather than the system of the institutional relations is studied in it.

The institutional relations in the process of globalization form the framework of the international economic relations. These are norms, rules of conduct, order, procedures, based on the international agreements, treaties, legislation, followed by participants in the international economic relations. The purpose of the international institutional relations is not receipt of income, and the organization of the global economic relations.

The direction of the action of the global economic relations of subjects to receive income - economic interests. The institutional interests are the course of action of the participants in globalization towards the formation and functioning of the institutions of globalization. The most important function of the institutional interests is the creation of a global economic, informational and institutional space, the formation of the institutional environment for the functioning of the international economic relations.

Economic and institutional interests of the states in the international arena are determined by whose interests the state serves. When the activity of the state aims at the implementation of the national interest, its objective is to increase in the foreign economic activity indicators of national output in absolute volume and per capita, followed by the distribution for the benefit of the entire population. The institutional interest of the country in such case is the international institutions that provide the most favorable conditions for foreign trade.

The function of the institutions is to reduce transaction costs. In this case, the activity of the international economic institutions is effective. Transaction costs of the international economic relations are increasing when the international institutions represent the interests of particular countries or groups. The institutional interests in the context of globalization have a dual nature. On the one hand, the common institutional interest is to establish the institutional order that ensures maximizing income to all members of the international community. On the other hand, private institutional selfish interests of certain states may be directed to the creation and support of the international economic institutions, allowing to earn income as a result of infringement of the economic interests of other members of the international community, getting more income from other countries.

The complexity of the challenges of globalization is that its institutions were formed by all the leaders of the international economy - members of the Organization for Economic Cooperation and Development (OECD) and largely still serve their interests. In these countries, no more than 10% of the entire population of the Earth live, but they dominate the world economy, the banking system, the capital market, the technology. Globalization has not solved the problem of the contradictions of the economic and institutional interests of developed and developing countries (the so-called opposition to the North - South). This state of the institutions of globalization is unsatisfactory and is leading to inconsistencies and increase of transaction costs, discontent of the globalization institutions.

The formation of the developing countries of such organizations as the BRICS is a manifestation of the institutional interest in changing in the global institutional order. The change-over to the form of G20 is also associated with the tendency to change the institutions of globalization, taking into account the interests of the majority of the world community.

Conflicts of interest of the members of the international community are objectively due to the uneven distribution of production factors in the world economy. One of the tasks of the state is to create the conditions for the most complete attraction in the country of production factors and to resist of the outflow of inputs from the country. Carrying out this task, there is a competition between the countries for the limited material, human, intellectual and other resources. There is a struggle for raw materials and sales markets. In the global economy, there are always new challenges. In our opinion, the most important ones, which are long-term in nature and consist of the following.

Firstly, it is a problem of technology and capital exchange of developed countries on labor and natural resources of developing countries. The gap in the distribution of these factors of production is huge. Up to three quarters of banking assets, four-fifths of the stock market capitalization, debt, two-thirds of the money supply in the world is concentrated in developed countries. It is the same for knowledge and modern technologies. In developing countries, there is a population explosion, there is surplus working population, which aim to the developed world. At the same time ageing of population is gaining momentum rapidly in developed economies. Another point is the wealth of natural resources, especially fuel and energy. There is a clear imbalance in favor of developing countries. A striking example of the contradictions in the distribution of this factor is the oil market.

The second important issue is related to the existence of an imbalance in the development of world trade. The capacity of the national market for many developing countries is clearly insufficient to achieve sustainable development in the future. To give impetus to such development must yield to international markets. The entrance to the international market should be the starting point of this development. But it is quite difficult to implement, due to the competition, both on the part of developed countries and other developing countries. The leading institution, which should contribute to the expansion of world trade, is the mechanism of the World Trade Organization (WTO). At the same time, trade liberalization does not always meet the interests of developing countries in the competition with the developed countries. This leads to protectionist tendencies. Many states extremely slowly bring their legislation into the line with WTO requirements. As a result, it decreases the possibility of the development of international trade and the expansion of exports.

The third problem, which causes contradictions of economic and institutional interests in the context of globalization, is an international movement of capital, the creation of institutional conditions for the increase of foreign investments. There is an extremely uneven distribution of transnational capital in the world economy. The system of institutions governing the movement of capital in the conditions of globalization needs to be improved. The experience of the EU has great importance in solving of this problem, where there are institutional mechanisms that take into account the investment climate in the EU at the national and supranational levels. Competition for foreign investment in international markets, striving to attract modern technologies leads to liberalize of national economies in the recipient countries. First of all, this is manifested in the unification, that is to be aligned with international standards and the requirements of international investors, national institutions (the formation of a global legal

environment in the field of property rights, the functioning of the market, the banking sector). In practice, there are serious problems in the formation of institutions responsible economic and institutional interests of the countries - owners of capital. Unification of institutions leads to a reduction of transaction costs. At the same time the economy of nation states may fall into economic dependence, losing competitive advantage. Hence there is the tendency of national states to carry out the independent policy from the owners of capital. Thus, there are contradictions in the interests, in many countries, enhanced anti-globalism.

Negative aspects associated with the unification create the problems for the multilateral liberalization of foreign investment. There is a commitment to bilateral agreements. Quite often, foreign investors are the countries similar in culture, language, historical development. The Chinese investment in Hong Kong and Singapore, the Spanish in banking sector of Latin America can be an example. In Russia the size of foreign investments depends essentially on the Russian capital, which was previously exported from the country.

Fourth, an important issue is related to the functioning of the institutions of globalization. The fact that the globalization of institutions with supranational character, do not always meet the economic interests of the states within the interstate unions and do not reflect the interests of the population of these states. In recent years, it is evident in the EU (in particular in the matters of migration policy). Results of the referendum in the UK also suggest that the EU institutions do not meet the interests of medium and small businesses, the population in the British province. Unified system of the institutions in interstate associations of countries with different socio-economic level of development requires restrictions in highly developed countries, the socio-economic programs, the opening of the labor market for immigrants from less developed countries. This leads to the emergence of anti-globalization sentiment in developed countries, with seemingly the benefits of globalization. The latter manifests itself in the course of the election campaign of 2016 in the United States, where anti-globalization statements of D. Trump are supported by the population. One of the reasons for inefficient functioning of the institutions of globalization is due to the fact that in the process of integration (in particular in the CIS) it is not created a single economic and institutional space but there is an attempt to combine economic interests.

The main way to resolve these and other problems of globalization, in our opinion, is to create an institutional environment for the effective functioning of the global economic space, which would contribute to the implementation of the interests of the majority of states and the world's population. This environment should reflect a common institutional interest and requires long-term coordination and effective cooperation within the international community. The private interests of certain countries and of their population cannot always coincide with the common institutional interest, but it is necessary to have commitment to global institutions in order to long-term benefits of mutual cooperation exceed the short-term interests.

3. Conclusion

The formation of a common economic, in formational and institutional space is the global trend of the world economy. Only in this way all the members of international economic relations have the opportunity to fully implement their economic interests. It is objectively caused by the necessity of the social division of labor in the uneven distribution of production

factors. The common institutional interest is the leading force capable of resolving the contradictions of globalization. The implementation of this interest will make it possible to implement the economic and institutional interests of all or at least most of the participants in the process of globalization.

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GLOBAL PERCEPTION OF ECO-PRODUCTS AND ECOLOGICAL MARKETING ACTIVITIES BY CONSUMERS

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Abstract. Firstly we may wrongly assume that environmental protection and marketing are in great contradiction. But the opposite is true. As Exupéry once said the human society should make a global effort to protect the environment for future generations. Producers and sellers of eco-friendly products have noticed that tendency. From a global perspective, green marketing has started playing a crucial role in companies' marketing strategies. More and more consumers are switching from a sceptic approach to eco-friendly products to a more responsible attitude towards the environment and a healthy lifestyle. The paper deals with the results we obtained from the detailed research into a selected company which belongs among the principal retail businesses in Slovakia. We did research into an international company which, among its core retail business, pays attention to environmental protection and incorporates this attitude into its marketing activities. As a result, the company is known for the most sophisticated green marketing mix from all the businesses operating in Slovakia. At first we are going to analyse the tools of marketing mix the company is using to promote its eco-friendly products. Secondly we are going to present the results from the research we carried out to analyse consumers' awareness of eco-friendliness and ecological marketing activities.

Keywords: environment, green marketing, eco-friendly products, marketing mix, consumer

JEL Classification: M31, O31, Q50

1. Introduction

In today's highly competitive environment global perception of eco-friendly products and ecological marketing strategies by consumers play a crucial role. Therefore a lot of businesses are facing a challenge of continuous saturation of marketing activities, have to adapt to constantly-changing consumer behaviour, creation of new markets or even IT development. As a result, businesses are made to implement new innovations in relation to purchasing behaviour or effectiveness of marketing activities (Khatoun, 2015; Kumar & Ghodeswar, 2015).

The issue of environmental protection has long been discussed. Not only national but also multinational bodies are analysing influence of the whole society on the environment and are passing various regulations or directives on how society should behave. Not only in relation to environmental pollution, but also waste management, energy savings, toxic materials and many others (Majerova, 2015; Nadanyiova et al., 2015). Analysing consumer behaviour with regards

to environmental protection is essential as consumers play a key role in the whole purchasing process. The higher demand on a product quality and the better eco-awareness of people, the more flexible consumer behaviour. In Slovakia bioproducts and „green“ products have also gained popularity in retail chains. Surveys of Slovak agencies and retail chains show that there is great potential and high demand on bioproducts on the Slovak market. Surveys also indicate that twice as many women regularly buy bioproducts than men. They seem to be more health-conscious and more demanding consumers. They require a higher quality, prefer natural products and read product labels. The respondents stated health as the main reason for purchasing green products (Rypakova et al., 2015). Environmental protection came second. The surveys also showed five main criteria consumers take into consideration when shopping for food: a price, experience, a Slovak origin, appearance and a brand. The surveys also interviewed consumers on their awareness of bio labelling. As showed more than 80% of respondents are aware of eco labelling. (Zaušková, 2013).

However, the main problem consumers face when going green is a high price of bioproducts and their limited product range as not all the supermarkets offer the same product lines. Availability of different kinds of products is seen as another disadvantage.

The company Boston Consulting Group (hereinafter referred to as „BCG“) carried out international research with the aim to analyse eco-awareness and purchasing behaviour. The research was done on a sample of 9,000 respondents aged 18 to 65 from nine countries (Canada, France, Germany, Italy, Japan, Spain, Great Britain, USA and China). As we could see, when buying eco-friendly products, the respondents felt confused what the term „ecological“ really refers to and whether it really defines eco-friendly products. They also stated that they did not consider producers and sellers a reliable source of information about eco-friendly products. They tend to believe independent and objective organisations. Another fact to be worth mentioning is that preference for eco-friendly products goes hand in hand with better and more ethical communication of eco-friendliness from part of the companies – either producers or distributors.

2. Green consumer

Environmental protection has created a completely new consumer segment – a so-called green consumer that is in constant growth. As stated by Paco and Rapas (2008) the segment is defined by ignoring the products which damage health, contribute to environmental pollution in production, use or liquidation or generate excessive amounts of waste, etc.

Other authors state the facts influencing purchasing behaviour of green consumers or defining a green consumer himself/herself, e.g. a price, output product features, social norms, environmental education, i.e. perceived effectivity (a rate of conviction that an individual is able to contribute to solving environmental problems), perceived control of behaviour (to what extent a consumer believes he/she can influence environmental protection), ecological awareness, subjective norms, voluntary activities, a will to pay for green products, scepticism toward environmental marketing communication and many others. (Rybanský - Málíková, 2015)

There are a lot of companies on the market with a lot of products to be sold and services to be offered which compete with one other. Customers themselves have various wants and needs. The authors actively analysing the current topic have divided them into several green

categories. As stated by Kotler and Keller (2007) it is impossible to define only one „type of a green customer“. Therefore the market has to be split into different segments.

NMI (Natural Management Institute) defines customers by the rate of their „green philosophy“. It characterises the basic category, a so-called LOHAS – a term coming from an English expression „Lifestyles of Health and Sustainability (Ottman, 2011). It refers to those consumers who are trying to live healthy, are actively involved in environmental protection and ask for sustainable production methods. This category consists of the most devoted and the most active promoters of a sustainable and healthy lifestyle. It is one of the five segments which NMI describes to make a right selection of a target group:

Consumers of the „LOHAS“ Group – derived from the English word Lifestyle of Health and Sustainability – simply a lifestyle promoting health and sustainability. Represented by 19% of American inhabitants, mainly women aged 30-50. They are the least price-sensitive. These consumers are the most active in terms of environmental friendliness and awareness. The most targeted group for green marketing.

- Naturalists – about 34 mil. of consumers. There are less active than LOHAS but they are interested in ecological issues. They are trying to search for alternative products to protect the environment and keep their children healthy.
- Fluctuants – represent 25% of inhabitants in the US. This group is considerably influenced by current trends. Their values, however, are not stable – they are only trying to be „in“.
- Traditionalists – represented by 53 mil. of people, mainly men who have gone green from practical reasons – in order to save money. As they are active in energy savings, their financial burden is lower.
- The indifferent – 17% of consumers who have a rather indifferent approach to environmental protection. Mainly represented by men with low income and basic education. (Ottman, 2011)

Every business should know its target segments in order to adapt its green marketing strategy accordingly.

Consumers are willing to change their buying behaviour once they are able to differentiate green products from other types of products. Here comes a need for special labelling of those products. Product labelling is an important tool of communication with a customer buying a particular product range. As a tool of marketing communication product labelling is a simple and reliable way of informing a customer on social and environmental aspects of a particular product. (Bartáková, Gubíniová, 2012)

Green product labelling sets the standards of a product quality and informs a consumer on reaching that quality standard. It is a non-obligatory tool of an environmental policy. Its main goal is to reduce negative impact of consumption and production on the environment, health, climate or natural resources by promoting and preferring environmentally-friendly products and services.

The products with green features are mostly marked with a particular label. In the Slovak Republic green labelling is governed by the Act № 469/2002 Coll. on environmental product labelling (<http://www.minzp.sk>, 2016). It sets forth conditions for awarding and using environmental labels, such as:

- labelling of an environmentally-friendly product (i.e. Slovak national environmental labelling);
- environmental labelling of the European Union – environmental labelling of the European Community (since 1992).

3. An environmentally-friendly product

The label of an environmentally-friendly product (i.e. the Slovak national environmental label) is defined under the Act № 469/2002 Coll. on environmental products: „*The national environmental labelling consists of two centred circles, of which an inner circle is cut in its lower part and ends with a tilde. Inside the circles there is a styled picture of three hills with three triangles and two bending lines which refer to the element of environment and engagement of authorities, industries and businesses in relation to environmental protection. In the upper part of the two circles there is an inscription „Environmentally-friendly product“; in the lower part there is an identification number of a group of products, sub-groups of products and specific conditions for environmental labelling to be awarded.*“ (<http://www.sazp.sk>, 2016). The labelling, which is valid for the period of two years, can be only awarded to those products meeting the highest standards and complying with the above mentioned statutes. (Sujová, 2013)

4. European Union environmental labelling

It refers to environmental labelling of the European Community that has been awarded since 1992. It was originally referred to as „European flower“ but nowadays, as amended by the Regulation of the European Parliament and European Council № 66/2010, the denomination has been changed to „Environmental labelling of the European Union“ (<http://www.minzp.sk/dokumenty/evp-emas/evp>, 2016).

It represents the official labelling of the European Union of a specifically controlled product with emphasis on its whole life cycle – from raw materials exploitation used in course of a production process up to product liquidation at the end of its life cycle.

As stated by Pajtinková Bartáková and Gubíniová (2012), labelling schemes are divided into the following categories:

- labelling on a national level;
- labelling linked to particular fields, products, production procedures or means of transport;
- labelling linked to business activities.

5. The analysis of a selected company

In the framework of one of the partial goals of the project VEGA 1/0640/15 named: „Phygital Concept and Its Use in Sustainable Integrated Environmental Management of Businesses“, we were analysing selected retail stores and retails chains in Slovakia while focusing on the analysis of marketing mix. We carried out the research into awareness of eco-friendly products and ecological marketing activities by consumers of specific retail chains.

The retail chain mentioned in the paper belongs among the most important retail chains in Slovakia. It pays attention to environmental protection as we can see from its marketing strategy. Thanks to its approach, Lidl Slovensko has the most sophisticated green marketing mix from all the companies operating in Slovakia.

The company, a part of the Swarcz Group, entered the Slovak market in 2004. They specialise in retail sale of food and consumer goods through their own retail stores. The company ranks Top Ten among retail chains (Lid Slovensko, 2016).

5.1 The analysis of marketing mix of LIDL

In its product portfolio Lidl offers the products of everyday use, e.g. food, bakery products, fruit and vegetables as well as cosmetics, pharmacy products, electronic appliances, clothes, textile, furniture and even DIY goods and hobby products of its own brands. Its range of products is complemented with bioproducts and green products of various brands. However, it mainly focuses on its own brands, e.g. Dulano – meat and smoked-meat products, Pikok – smoked-meat products, Bluedino – cheese, Fruit Jumbo – dairy products, Pilos – dairy products, Combino – pasta, J.D. Gross – chocolate, Fin Carré – chocolate, Freeway – lemonades, Saguaro – mineral water, Vitafit – fruit juice, Linessa – healthy products, W5 – detergents and cleaning products, Parkside – manual tools, Powefix – hobby products, Esmara – clothes and many others. All the above mentioned products are produced in line with sustainability and ecology standards, e.g. BIOTREND - products with certified BIO labelling and produced in ecological farming, UTZ CERTIFIED - a global programme of sustainable production of cocoa, coffee and tea, SAFE – tuna fishing is safe for dolphins thanks to the Earth Island Institute, MSC – environmentally-friendly fishing, ECOLABEL – an ecological symbol of a daisy can be found on detergents of a W5 line Eco., PEFC and FSC – wood products and the Charter of Sustainable Development – detergents and cleaning products offered by Lidl are produced in line with the Charter.

As far as a price strategy is concerned, Lidl promotes a price policy typical of discount retail chains. Apart from fixed prices, it offers various special prices and offers concerning all types of products. In the field of the price policy of green products the company is a bit behind other retail chains as it does not pay enough attention hereto and does not even offer any special discounts.

Besides a careful selection procedure of suppliers, Lidl takes care of socially responsible and environmentally-friendly behaviour in its own distribution network, e.g. by building an ecological logistics centre, using retrodistribution, LED lighting or environmentally-friendly cleaning products, etc.

The company is using a set of communication mix tools, e.g.: advertising (TV, radio, print media, Internet), sale promotion, PR and green marketing activities. It mainly relies on its Lidl leaflet to communicate various topic-related weeks (a company specialty). Green products are not particularly communicated to the public, they are merely advertised with other less ecological products. More attention is paid to green marketing activities of the company including: Saguaro – Water for Trees; EcoGame – Think Ecologically, Benches from plastic caps and Sting The Playground.

5.2 Results of the research into perception of eco-friendly products and ecological marketing activities by consumers of LIDL

The survey was carried out in March 2016 by way of a questionnaire on a random sample of respondents – company customers. Our aim was to define general awareness of respondents in relation to green products and product eco-labelling. Secondly we were trying to define consumers' perception of green marketing activities of a selected company. The questionnaire consisted of 34 questions divided into two parts. In the first one, we focused on demographic data of a respondent, his/her overall green awareness, whether he/she buys green products (if so, where and how often) or if a person understands ecological labelling of products. The questions in the second part aimed at finding out how the respondents perceive green product marketing and green marketing activities of Lidl as well as ecological labelling of its products. In the paper I only refer to partial results of the research which are in interaction with its content.

With regards to differentiation of the respondents by their gender, we can assume that 75.8% of women and 24.2% of man participated in the research, aged 25 to 40 with stable financial background and a healthy lifestyle. The results of the research indicated that the respondents are interested in environmental protection and green products. It is worth mentioning that 70% of the questioned are interested in green products. The respondents mainly buy eco-friendly food (50%), cleaning products (40%) and electronic appliances (35%).

The customers questioned in the survey expressed their dissatisfaction with placement and quantity of information available on product packaging. In relation to bioproducts they felt put off by high prices and unavailability. Some respondents even expressed mistrust toward green products, which could be explained by low informability and insufficient communication from the part of companies. Ecological marketing communication should provide reliable and objective information on green products.

The results indicate that the respondents demonstrate rather good knowledge of product labelling. The majority understand BIO labelling (78.8%), almost a half (47%) know the definition of „an environmentally-friendly product“, a third can describe an ecological logo of the European Union (33.3%) while only 12.1% have ever seen the European flower.

When interviewing knowledge of respondents in relation to environmental brands, some interesting facts are worth being looked at. As defined by customers, the most ecological brands of Lidl are considered to be Biotrend (43.9%), EU – Ecolabel (34.8%) and UTZ Certified (33.3%). Less than a third of respondents know the brands PEFC, FSC or Trust to textile (25.8%). A lot fewer customers have ever seen the brand Dolphin save and Vyclafill (12.1%), MSC or the Charter of Sustainability (6.1%). The results show that the respondents know eco-friendly products visually but up to three-quarters of them do not understand green labelling of Lidl. Here we can see certain gaps in a company communication strategy as the respondents are not sufficiently informed about existence of green labelling in Lidl stores. Therefore the company should focus its communication on improving awareness, promoting its green products and thus increase customers' loyalty.

The research indicates that the consumers prefer buying bio food (66.7%) whereas they only rarely buy detergents and cleaning products (22.7%), electronic appliances (4.5%) and textile (16.7%). We also asked what factors influence the respondents in their purchasing behaviour. They mostly consider a quality (39.4%), taste (37.9%), health benefits and

environmental friendliness (31.8% each) or an ecological origin (25.8%). Less than 20% are influenced by design (10.6%) or a lifestyle (15.2%). From possible drawbacks they stated a high price (81.8%), insufficient availability (42.4%) or informability (39.4%) while a product line does not meet the needs of 28.8% of the respondents. The results can be influenced by the overall living standards of inhabitants.

We also analysed informability of consumers about environmental products of Lidl. When asked about a source of information, more than a half of respondents stated a company leaflet (66.7%). TV and radio commercials, print advertising and Internet recorded less impact (34%). Mostly the respondents obtain information from packaging, price tags or billboards (30%). The majority of respondents (98.5%) are aware of the Saguaro activity – Water for Trees and 89.4% of them know The Sting – Playground for Children. As far as a communication policy is concerned, more than a half of respondents did not perceived any communication at all and almost a half of them did not consider such communication as crucial for their buying decision either way.

Several drawbacks have arisen out of the analysis and the survey. Firstly, we see room for improvement in expanding a green product line. Such expansion should concern availability of new green products and bioproducts on shelves, which will certainly influence consumers' buying behaviour. Communication and informability policies about green products lack effectiveness and originality. Therefore the company should focus on improving the whole communication strategy in relation to green products and at the same time increase informability and awareness among its customers. An appropriate marketing strategy is able to enhance customers' trust towards green products and eco-labelling. It is advisable to focus on education and promotion of its own product lines including green products as well. The company is sending a signal to its customers it cares about the society and simultaneously it is trying to generate positive influence towards perception of green products as such while increasing shopping frequency.

6. Conclusion

Due to degradation of our environment and destruction of renewable resources there has been mounting pressure on rationalising economic processes. As a result, a lot of businesses are bound to implement the strategy of ecological marketing.

As there has been an increase in consumers' demand on a product quality along with enhanced environmental awareness, buying habits are undergoing changes as well. Fortunately bioproducts and environmentally-friendly goods have found their place in retail chains in Slovakia. Various surveys of Slovak agencies and retail chains have shown that there was huge potential and growing demand on bioproducts in Slovakia. Therefore it is important to emphasise both offline and online communication of retail chains in order to enhance consumers' awareness of ecological products, their labelling and advantages for both consumers and the environment.

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THE IMPACT OF GLOBALIZATION AND POPULATION AGING ON THE CHANGES OF CZECH EMPLOYMENT POLICY

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Abstract. Demographic ageing of the population, which in different extents affects all countries of the world, has become one of the most discussed issues of the recent years. According to the prediction of the Czech Statistical Office of 2013, the population of the Czech Republic will be ageing considerably during the 1st half of this century. To face this challenge the Government Council for Older Persons and Population Ageing was established on March 22, 2006 by Government resolution No. 1482 on implementation of the National Programme of Preparation for Ageing for the period 2003 - 2007.

The population ageing concerns all areas of the life of a society and is reflected in a broad spectrum of political measures. One of these measures is aimed to strengthen the position of old people on the labour market and keep them on the market. As the rest of the policies, responding to ageing of the population it may only be effective if it is based on a comprehensive approach, coordination of all adopted measures and shall be compliant with the long-term outlook for the maximum use of the potential of older workers and seniors. The article deals with the current state of the employment policies focusing on the improvement of the attitudes of older workers to stay on the labour market and compare it with the whole employment policy aimed at older workers.

Keywords: aging, labour force, employment policies, pension system

JEL Classification: J62, J68, K31

1. Introduction

‘Active ageing is about helping older people to stay in work and share their experience. It is about them continuing to play an active role in society and living as healthy, independent and fulfilling lives as possible.’¹⁹

Population aging is a fact (Mikulik et al., 2014) every state must respond to as it brings many challenges not only to the state budget through bigger pressure on the state pension system (Cutler et al., 1990) but also it has impact on the available labour force (European Commission, 2014), where the impact is even bigger as it comes hand in hand with a very low birth rate. There exist many ways how to cope with this challenge varying from inviting immigrants to changes in the pension age and improving attitudes of workers to stay on the

¹⁹ László Andor, EU Commissioner for Employment, Social Affairs and Inclusion, at the opening conference of the European Year for Active Ageing and Solidarity between Generations, Copenhagen, 18 January 2012

labour market even after their retirement age (Rasticova, Kolarova, 2015) and there are many combinations in between. Both of the above mentioned tools cannot be done for an undefined period of time so the reasonable combination should be found. Even though there exists the so called free movement of workers in the European Union, the setting of the employment policies and pension policies remains in the hand of the member states (Smismans, 2004). But it is also EU which sets its own goals (Bérešová, 2015) that should be reached by the measures adopted by states themselves. The main harmonising instrument to do so is the Europe 2020 Strategy²⁰ and the subsequent guidelines²¹ (Bérešová, 2015).

This article focus on one part of the coordinated activities of the employment policy of the Czech Republic which are the passive and active tools of employment policy towards older workers. It is mainly the Ministry of Labour and Social Affairs (MLSA) that is responsible for carrying out and implementing active and passive tools of employment policy in the Czech Republic together with the social partners (Eurofound, 2012) and the whole government when it comes to the decisions on the changes of the pension system.

2. Aging strategy of the Czech Republic

The aging strategy of the Czech Republic doesn't cover only employment and labour force actions but it covers the issues of aging workforce from all aspects. The main strategic instrument is The National Programme for Support to Active Ageing for the years 2013-2017 (MPSV, 2012). This document is based on a holistic approach to ageing and refers to the idea of positive ageing as a lifelong process including all generations. It stresses the need to pay attention to the specific characteristics of people in different phases of their life (life-course approach) (Rasticova, et al., 2015). The document defines the participation of older people in the labour market, life-long learning and stresses the importance of prioritising the processes of improving one's health and quality of life. This strategic document was prepared by the governmental advisory body, the Government Council for Senior Citizens and Population Ageing that gathered together representatives of different ministries, members of trade unions, NGOs and employers are appointed as Council members. The Council's main aim is to:

- promote both healthy and active ageing and anti-discriminatory policies;
- increase older people's employability and their involvement in society; and
- improve the condition of older people's health.

The National Programme points out the heterogeneity of the senior population, especially with respect to the impact of gender and health condition on the life-experience and inequalities in old age. Participation of older people in the labour market is defined as one of

²⁰EUROPE 2020 STRATEGY, [Online] Available at <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>

²¹ COUNCIL DECISION (EU) 2015/1848 of 5 October 2015 on guidelines for the employment policies of the Member States for 2015. [Online] Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2015_268_R_0005²¹EUROPE 2020 STRATEGY, [Online] Available at <http://ec.europa.eu/eu2020/pdf/COMPLET%20EN%20BARROSO%20%20%20007%20-%20Europe%202020%20-%20EN%20version.pdf>

²¹ COUNCIL DECISION (EU) 2015/1848 of 5 October 2015 on guidelines for the employment policies of the Member States for 2015. [Online] Available at http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:JOL_2015_268_R_0005

the main priorities of the programme together with promoting age management strategies in companies.

3. Employment policy of the Czech Republic

The employment policy in the Czech Republic can be divided in the two types of policies, a passive and an active, that use different tools to achieve its goals. There also exist tools that in strict sense don't belong to the employment policy but that have effect on the willingness of older people to work or that keep them on the labour market nevertheless their attitudes which is mostly the pension policy.

The main starting-point for the employment policy in the year 2016 was the Europe 2020 Strategy and the related strategy on national level the National Reform Programme of the Czech Republic 2016 (Urad vlady, 2016). The goal of the national strategies responding to EU 2020 Strategy is to increase the employment rate in 2020 in the age group 20-64 years to 75 %, of which:

- women aged 20-64 years to 65%,
- older workers aged 55-64 years to 55%,
- reduce unemployment among young people aged 15-24 years of age by one third compared to 2010,
- reduce the unemployment rate of people with low skills by a quarter compared to 2010.

In order to ensure the fulfilment of the above mentioned objectives the MLSA adopted Strategy for employment policy 2020 (MPSV, 2014, B), which was approved by the Czech Government Resolution no. 835 of 15 October 2014. The implementation document for this strategy is the Activation measures to address the adverse situation on the labour market, which was approved by the Government Resolution no. 891 of 3 November 2014.

3.1 Passive employment policy

A passive employment policy²² measure provides a temporary material support for persons who have lost their jobs. The aim of this support is not only to provide the unemployed person with funding to keep the standard of living but also to help the person in returning to work. The basic period of support for anyone under the age of 50 years is up to five months. Between 50 and 55 it is eight months and 56+ it is eleven months. These differences correspond to the different positions of the above mentioned age cohorts on the labour market, where the workers above the age of 50 are seen by the Czech government as the group more vulnerable to structural shocks and thus endangered by unemployment (Buchtova, 2015; MPSV, 2014, B). It is important to mention that according to the Act no. 435/2004 Coll., On Employment, § 39 a person who is retired is not entitled to receive unemployment benefits. During the period the client is provided service from the state which focuses on requalification and work placement services. The amount of support depends on applicant's previous salary and the stated reason for leaving the previous job. The maximum amount of unemployment benefit is 0.58 times the average wage, ie. EUR 540 (for 2015). The maximum amount of of

²² OECD definition: Passive or income maintenance programmes in the context of labour market programmes consist of unemployment compensation programmes and programmes for early retirement for labour market reasons., OECD (2008), p. 397

unemployment benefit in the case of retraining is 0.65 times average wage, ie. EUR 604 (for 2015). The normal rate of support is 65% of applicant's previous net salary for the first two months of unemployment, 50% for the two months after that, and 45% for any further period. If the applicant submitted notice himself, then he is entitled to the reduced rate of 45% for the period of his claim.

3.2 Active employment policy

According to the OECD (2008) the active labour market policy (referred as the programmes) *“includes all social expenditure (other than education) which is aimed at the improvement of the beneficiaries' prospect of finding gainful employment or to otherwise increase their earnings capacity. This category includes spending on public employment services and administration, labour market training, special programmes for youth when in transition from school to work, labour market programmes to provide or promote employment for unemployed and other persons (excluding young and disabled persons) and special programmes for the disabled.”*

The active employment policy is a set of measures designed to ensure the maximum possible level of employment. Active employment policy organized by the Ministry and the Labour Office, according to the situation on the labour market, cooperate with other entities.

According to the Act no. 435/2004 Coll., On Employment, § 104 - § 120, the tools used by the active employment policy are retraining, where the § 40 of the above mention Act regulates the employment benefits during retraining only to those who are not retired and receiving state pension; investment incentives, public works, socially useful jobs, bridging allowance, contribution towards recruitment, contribution in the transition to a new business program. The current state of the active employment policy is facing criticism for its inadequate budget and not targeted measures (MPSV, 2014, B). The Strategy ((MPSV, 2014, B) binds the Ministry and the whole government to work with the social partners to find more effective model and tools. According to the Strategy it should be given emphasis on continuous support to intergenerational exchange, including the implementation of in-house management tools and human resources development and also sufficient flexibility in the labour market (Gregar, A., Pejšřová, I., Klíimek, P., 2015). According to the studies of Kališ (2015), Kocianová (2015) and Gregar and Pejšřová (2014) the promotion of employability of older workers should focused on the psychological characteristics of these workers, which are loyalty, reliability and self-control.

3.3 Pension system

In order not to weaken the adequacy of pensions compared to the average wage²³ in the coming years, the Czech Republic prepared some reform changes. The first change is the introduction of a maximum retirement age, where the maximum age retirement age was set to 65 years (Kopecký, 2016). At the same time lead to the establishment of a regular review procedure retirement age based on the development of life expectancy and on the recommendations of the EU Council for the year 2014. The retirement age is the same for both men and women.

²³ In 2015 the adequacy level was slightly above 40%.

4. Conclusion

The aging strategy of the Czech Republic is reflecting the current and future demographic changes that modern democracies are facing. The employment policy can be seen as a tool to reach part of the goals of this strategy. But the whole approach must be holistic, it means it must not only solve problem of employing older workers, but also actions must be taken in respect of their working conditions, different health conditions and also different family needs and it should aim at the business environment to change the attitudes of employers towards older employees by using examples of good practices (Jánošová, L., Buchtová, B., 2015) . The changes of the working habits of 60 + population might be seen on the Fig. 1. The increase of economically active in the age group 60 and over which can be seen in the Fig. 1 is related both to the decline in population in this age group, and also with increasing age of retirement. The number of economically inactive persons aged 65 and over increased by 41.2 thousand but the increase was lower than the increase in total population in this age which corresponds to an increase in employment of people of this age (MPSV, 2015). The amount of available workforce will rise substantially with the increasing age of retirement and it will be more dramatical for women, which corresponds the situation in most EU countries (Klimko, R., Rievajová, E., 2015), that still have different conditions for retirement, but this situation will change soon.

Figure 1: The 60+ labour force out of all 60+ population



Source: ČSU, *The age of population according to its economic activity*, available at: <https://www.czso.cz/csu/czso/102r-k-vek-populace-dle-ekonomického-postaveni-esydyby5xdv>

The Figure 2 shows the level of employment of the labour force older than 60 years. High levels of employment of this age cohort is understandable because those that lose their job enjoys the possibility to move out from the labour market and become retired.

Figure 2: Employment level of the 60+ labour force



Source: ČSU, *The age of population according to its economic activity*, available at: <https://www.czso.cz/csu/czso/102r-k-vek-populace-dle-ekonomickeho-postaveni-esydb5xdv>

This will change together with the change of the retirement age and the levels of employment will possibly drop down. It will be a big task for the government and its employment policy to keep the levels of employment on the adequate levels.

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DEVELOPMENT OF THE GLOBAL SLOVAK- AUSTRIAN RELATIONS

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Abstract. Since 1993 Slovakia has been one of the most popular investment destinations in the region, because, as one of the most developing markets it offers to investors various reasons why to invest in the country. Austria belongs to the most important foreign and international investors together with Germany. It is necessary to mention some of the most popular Austrian investors as Strabag, Porr Projekt, Hochbau AG, Alpine, Billa, BKS Bank AG, Erste Group, OMV, Raiffeisen, Uniqa and others. Austria that provides approximately 15% of all foreign investments in Slovakia, builds upon the real facts that are safe business environment, favorable geographic position in the heart of Europe with the big export potential to other markets, it occupies the ninth position in the world in the area of adaptation of new technologies and high innovation potential. According to Austrian investors, Slovakia as the location for making a business is favored because of its membership in EU, official currency euro, its accessibility and quality of the local suppliers, it also has as one of the few countries in Central Europe efficient workforce of relatively low costs. Regarding the geographical proximity and attractive location many Austrian companies, mainly from neighbouring federal countries, perceive Slovakia as their enlarged domestic market. The successful cooperation shows also the fact that in the last 5 years the Austrian direct investments to Slovakia increased from 4.354 mld. EUR to 5.644 mld. EUR. The Cross-Border Cooperation Programme Slovakia-Austria is also important.

Keywords: Austrian economy, Austrian investments, business cooperation, Slovak economy

JEL Classification: E20, E60, F21

1. Introduction

Slovenská republika a Rakúska republika dlhodobo buduje bilaterálne vzťahy na medzinárodnej úrovni. Tieto vzťahy sú nielen politické, kultúrne a sociálne, ale aj obchodné a investičné a ich rozvoj má základ na bohatej spoločnej historickej interakcii. Slovensko ako súčasť bývalej habsburskej monarchie spájala s Rakúskom hospodárska, menová a colná únia už pred rokom 1918 a spolupráci nezabránil ani 2. svetová vojna a tzv. železná opona. Unikátnou geografickou zvláštnosťou v rámci celej Európskej únie je teritoriálna vzdialenosť hlavných miest Bratislavy a Viedne, ktorá predstavuje iba približne 60 km. Medzi týmito mestami pravidelne premávala aj električka a v súčasnosti je rozsiahlo vybudovaná železničná a cestná doprava, ktorá je dôležitým predpokladom pre globálnu hospodársku interakciu.

Od roku 1989 zaznamenala rakúsko-slovenská spolupráca pozitívny vývoj a stúpajúcu intenzitu, čo potvrdzujú aj bilaterálne zmluvy. Prechod Slovenskej republiky na trhové hospodárstvo priniesol nové nároky na riadenie jej makroekonomickej pozície. Vývoj hospodárstva SR v období po prechode z centrálne riadeného hospodárstva na model malej otvorenej ekonomiky bol náročný, avšak aj základná interakcia ekonomického prostredia SR väzieb a záväzkov, ktoré vyplývajú z pristúpenia k Maastrichtskej zmluve a vstupu do EU a EMU, boli v podmienkach Slovenska zvládnuté (Stoličná, 2012). Po vzniku Slovenskej republiky v roku 1993 sa obchodné vzťahy ešte viac prehĺbili a na konci deväťdesiatych rokov bolo Rakúsko hneď po Nemecku a Českej Republike tretím najväčším odberateľom slovenských produktov, pričom Slovensko exportovalo stroje, dopravné prostriedky a hotové výrobky (napr. nábytok, odevy a obuv). V tomto období začali z Rakúska plynúť značné priame zahraničné investície (PZI), išlo o investície najmä do bankového a priemyselného sektora, ale aj priemyslu a služieb. Zahraničných investorov na Slovensko dlhodobo láka pomerne lacná a pritom kvalifikovaná pracovná sila a výhodné daňové podmienky (Olšavský & Treľová, 2016). Ale predovšetkým fakt, že Slovenská republika chráni zahraničné investície na základe medzinárodných dohôd o ochrane a podpore investícií, k takým patrí i Zmluva o bilaterálnych investíciách. Význam týchto zmlúv spočíva v garantovaní voľného pohybu kapitálu, zisku, úrokov, dividend, platieb a kompenzácií pre prípad znárodnenia (vyvlastnenia) investícií alebo kvôli vzniknutým stratám (Nováčková, Paškrtová a Saxunová, 2015). Po vstupe Slovenskej republiky do Európskej únie atraktivita našej krajiny stúpla, čo potvrdzuje aj prílev PZI. Tieto však nie sú v rámci SR rovnomerne rozložené. Podľa údajov NBS smerovalo na západ Slovenska až 84% PZI. Zvyšných 16% skončilo v regiónoch stredného a východného Slovenska, pričom výrazne dominuje Bratislavský kraj. Výrazne najnižší stav PZI vykazuje počas celého sledovaného obdobia Prešovský kraj. (Sochuľáková, 2015). Súčasná slovensko-rakúska spolupráca sa rozvíja v oblasti hospodárstva, politiky a kultúry. Zámerom nášho skúmania je identifikovať konkrétne formy spolupráce a poukázať na význam rozvoja týchto vzťahov, ktoré majú vplyv na hospodársky rast.

2. Všeobecné informácie

Rakúska republika je stredoeurópsky štát, ktorý je administratívne členený na 9 spolkových krajín, pričom jeho hlavné mesto a zároveň aj najbohatšia a najproduktívnejšia spolková krajina, centrum obchodu a podnikania je Viedeň situovaná blízko strategickej hranice so Slovenskom. Rakúsko je štátom, ktorý je v medzinárodnom meradle jedným z najvyspelejších a najbohatších na svete. Svedčí o tom aj HDP na hlavu vo výške 43 438,9 EUR (údaj Svetovej banky, 2015), čím sa Rakúsko dostalo medzi najvyspelejšie štáty na svete. Rozhodujúcim národohospodárskym sektorom sú služby (podiel na HDP 69,3%) a priemyselná výroba (podiel na HDP 22,3%), pričom ekonomická štruktúra je postavená na sociálnom trhovom hospodárstve s pomerne vysokými daňami a štátnymi výdavkami (MZV, 2014).

Nosným pilierom rakúskeho priemyslu sú malé a stredné podniky, pričom najviac zamestnancov pracuje v strojárskom a kovospracujúcom priemysle. Malé a stredné podniky sú v poslednom období vystavené pôsobeniu ekonomických a politických pnutí, ktoré vytvárajú nevhodné a neznesiteľné prostredie pre výkon a motiváciu týchto subjektov (Kajanová, 2012). Pre rakúsky priemysel je charakteristická silná prepojenosť s exportom, pričom najväčší podiel exportovanej výroby na objeme domácej produkcie tvorí strojársky a automobilový priemysel. Rakúska republika exportuje predovšetkým do Spolkovej republiky

Nemecko a to v miere 30%. Hlavným vývozným artiklom sú subdodávky pre automobilový priemysel. Zahraničný obchod má pre Rakúsko rozhodujúci význam, pričom podiel exportu tovarov a služieb na HDP má stúpajúcu tendenciu (napr. v r. 2013 dosiahla miera exportu až 57%). Diverzifikácia rakúskeho exportu mu do značnej miery zaručuje menšiu náchylnosť na ekonomické krízy.

V oblasti rakúskeho **poľnohospodárstva** dominuje rodinné podnikanie prevažne malých rodinných fariem, pre ktoré je charakteristická ekologická forma hospodárenia. Rodinné podnikanie hrá v rakúskom hospodárstve nenahraditeľnú úlohu. Na Slovensku takáto forma podnikania oficiálne neexistuje (Strážovská, 2015). Rakúsko môže byť v tomto smere veľkou inšpiráciou pre slovenských podnikateľov, nakoľko aj naša krajina má veľký potenciál v podnikaní najmä v oblasti turistického ruchu, ktorý je pre rodinné podnikanie vhodnou formou. Podnikanie malých fariem sa často spája aj s pojmom agroturizma. Je to špecifický druh vidieckeho turizmu, ktorý predstavuje prevažne doplnkovú činnosť hlavnej poľnohospodárskej výroby a môže byť doplnkovým zdrojom príjmov farmy alebo poľnohospodárskeho podniku. Prináša existenčnú istotu, výrazne finalizuje produkciu podnikateľských subjektov tým, že môžu výhodnejšie speňažiť vlastné výrobky a ubytovacie kapacity a celé prostredie a okolie farmy. Veľkou výhodou agroturizmu je aj fakt, že mnohí farmári môžu hospodáriť aj na menej výnosných či dokonca ohrozených farmách a podnikoch, pričom sa vytvára dodatočný odbyt poľnohospodárskych produktov, čo je stimulom pre rozšírenie výroby (Królová, 2011).

Terciárny sektor predstavujú **služby**, ktorých podiel na HDP dosiahol 70,3% (Statistik Austria, 2016). Služby tvoria dominantu rakúskej ekonomiky a vyznačujú sa mimoriadnou konkurencieschopnosťou. Krajina sa zapája do inovatívnych projektov služieb a projektov v oblasti výskumu. Sektor služieb vykazoval v r. 2012 hodnotu 193,12 mld. EUR. V uvedenom sektore pôsobia spoločnosti zamerané na poskytovanie finančných služieb, v oblasti spravovania nehnuteľností, verejných služieb a obchodu (prevažne malé a stredné podniky).

Dôležité postavenie v rakúskom hospodárstve má cestovný ruch, ktorý významným spôsobom prispieva k tvorbe HDP, zamestnanosti a regionálnemu rozvoju. Cestovný ruch je úzko spätý s regionálnou politikou a pre mnohé regióny má rozvoj cestovného ruchu veľký význam. V regiónoch s vhodným potenciálom cestovného ruchu sa môže stať ekonomicky udržateľnou aktivitou, ktorá má zásadný vplyv na ich rozvoj (Studnička, 2011). Napríklad v r. 2011 vytvoril v Rakúsku cestovný ruch pridanú hodnotu vo výške 16,46 mld. EUR (MZV, 2014).

3. Slovensko-rakúske obchodné a investičné vzťahy

Integrácia a vzájomná prepojenosť globálnej ekonomiky je determinovaná zahraničným obchodom a investíciami. Pri otvorených hospodárstvach pozorujeme rýchlejšie rastúci trend ako pri uzatvorených hospodárstvach. Európska únia je voči priamym zahraničným investíciám otvorená, čo spôsobuje jej väčšiu konkurencieschopnosť. Wamboye & Mookerjee (2014) zistili, že priame zahraničné investície sú ťahúňom rozvoja finančného sektora, čo predstavuje jeden z pozitívnych aspektov globalizácie. Podľa výskumu Wongpiyabovorna (2016) existuje z dlhodobého hľadiska pozitívna korelácia rozvoja vo finančnom sektore a ekonomického rozvoja krajiny. Investície investora prispievajú nielen ekonomicky hostujúcemu štátu

investora, ale aj domácemu štátu investora. V zásade prílev zahraničných investícií podporuje ekonomický rast krajiny, kde je investícia investovaná, čím sa zvyšujú aj príjmy verejných financií a zamestnanosť. Investície majú teda multiplikačný efekt (Nováčková, 2007). Je potrebné kriticky analyzovať všetky investičné projekty, nakoľko globalizácia je proces, ktorý vytvára paralelne oboje príležitosti (podpora veľkým investorom) i bariéry pre udržateľný rozvoj hospodárstva štátu - niekedy deštrukcia malých a stredných podnikateľov, domácich podnikov (Saxunová, 2015).

Hospodárske vzťahy medzi Rakúskom a Slovenskom sú pozitívne a ich rozvoj je intenzívny. Rakúsko patrí medzi najdôležitejších obchodných a investičných partnerov Slovenskej republiky. V súčasnosti u nás pôsobí cca. 2 000 rakúskych obchodných spoločností (väčšinou malých a stredných) - medzi najväčšie patrí napr. OMV a Strabag. Dôležitá je aj oblasť služieb, do ktorej možno zaradiť rakúske banky, poisťovne a finančné inštitúcie, ktoré sa podieľali na reštrukturalizácii slovenského poisťovacieho a bankového sektoru, čo malo za následok príchod ďalších zahraničných investorov do iných hospodárskych sektorov. Ako príklad uvádzame spoločnosť Vienna Insurance Group s mimoriadne silným postavením na slovenskom poisťovnom trhu; z bankovníctva je to Die Erste Bank a Raiffeisen, ktoré vlastní Tatrabanku a Slovenskú sporiteľňu.

Ekonomiky oboch krajín spája ich orientácia na export. Objem vzájomného obchodu dosiahol historické maximum v roku 2012 – sumou 5,8 mld. EUR, čím sa Rakúsko po Nemecku, Českej republike, Poľsku a Maďarsku zaraďuje ako piaty hlavný slovenský obchodný partner (Benč et al., 2013).

4. Bilaterálna obchodná výmena

V modernom medzinárodnom obchode a rovnako v modernej pozitívnej teórii medzinárodného obchodu dochádza k mnohým premenám, ktoré je potrebné určitým spôsobom usporiadať a pomenovať (Frank, 2010). Slovenská republika sa najmä po roku 1989 stala významným rakúskym obchodným partnerom a v súčasnosti je popri Spolkovej republike Nemecko, Taliansku, Švajčiarsku, Francúzsku a Holandsku jedenástym najdôležitejším obchodným partnerom Rakúskej republiky. Naopak Rakúska republika je pre Slovensko piatym najdôležitejším obchodným partnerom. Dôležitým faktorom je už spomenutá geografická poloha nielen oboch štátov, ale aj ich hlavných miest, pričom vnútroštátna produkcia sa koncentruje prevažne vo Viedni a Bratislave. Ekonomická spolupráca sa môže rozvíjať aj vďaka nižšej cene práce na Slovensku v porovnaní s Rakúskom, stabilite pracovného trhu a technologickej zručnosti pracovníkov, v oboch štátoch. Prienik nadnárodných spoločností do menej rozvinutých krajín so sebou prináša využívanie lacnej pracovnej sily (Šoltés & Štofko, 2015).

Na Slovensku pôsobia rakúske obchodné spoločnosti najmä v oblasti bankovníctva (Erste Group), stavebníctva (Strabag), strojárstva, spracovania kovov a informačných technológií, ktorých počet dynamicky narastá. Aj napriek dôsledkom hospodárskej a finančnej krízy si slovensko-rakúske obchodné vzťahy zachovali pozitívnu dynamiku. V r. 2012 bol objem obchodnej výmeny vyše 5,8 mld. EUR a aj v priebehu ostatných rokov má rastúcu tendenciu.

Rakúsko exportuje na Slovensko najmä komponenty pre automobilový a strojársky priemysel, ďalej liečivá, výrobky rafinérie Schwechat, oceľ, železo a ich produkty. Dôležitou vývoznou položkou sú aj chemikálie, nerastné palivá a elektrina. Infraštruktúra, automobilový

priemysel, drevospracujúci priemysel pre stavebníctvo, manažment pracovných síl a služby poskytované podnikateľom predstavujú veľký potenciál pre rozvoj ďalšej spolupráce v budúcnosti. V dôsledku nárastu zákazníkov, ktorí uprednostňujú kvalitu pred cenou a biopotraviny, sa na slovenskom trhu otvárajú možnosti pre rakúskych producentov kvalitných vysokohodnotných potravín, ktorí svojou konkurencieschopnosťou uspokojia potreby týchto konzumentov.

Z hľadiska objemu sú najvýznamnejšími slovenskými vývozcami na rakúsky trh nadnárodné korporácie s výraznou výrobnou základňou v Slovenskej republike. Nadnárodné korporácie sú veľmi rozšíreným zamestnávateľom aj pre tzv. globalizovanú generáciu Y, ktorá sa narodila v rokoch 1977-2000 (Mitková & Mariak, 2015). Jej výhodou je, že okrem odbornej kvalifikácie ovláda cudzie jazyky a má tak vysoké šance uplatniť sa na trhu práce. Medzi nadnárodné spoločnosti pôsobiace na Slovensku zaraďujeme železiarne US Steel Košice, automobilky VW Slovakia, Kia Slovensko, Peugeot Slovakia, ďalej elektro-technologické spoločnosti Samsung Slovakia a Sony Slovakia. Slovenskými exportérmi do Rakúska sú aj Slovnaft, ABC Klima, Plastika Nitra a celý rad menších slovenských obchodných spoločností, ktoré obchodujú s hotovými spotrebiteľskými výrobkami. Slovenská republika disponuje výrobným potenciálom, kapacitami v oblasti strojárstva, obrábania, tvarovania, povrchovej úpravy a spracovania kovov a ľahkého priemyslu (o. i. textil, odevy, obuv, spracovanie dreva, polygrafia), ktoré môžu v budúcnosti tvoriť základ pre rozvoj ďalšej kooperácie s rakúskymi obchodnými partnermi.

Slovensko exportuje na rakúsky trh aj oceliarske produkty, najmä kovové plechy, oceľové drôty, plechy a zvitky valcované za studena a povrchovo upravované výrobky z kovu. Strojárstvo je ďalšou oblasťou, ktorá predstavuje potenciál pre slovenských exportérov do Rakúska (napr. poľnohospodárske, obrábacie a textilné stroje, jednoduchá mechanika a malé mechanizmy, prepravné zariadenia, zdravotnícka technika, osobné automobily, koľajové vozidlá a návesy).

Doposiaľ nie naplno využitou oblasťou slovensko-rakúskej obchodnej spolupráce je cestovný ruch, ktorý sa stal globálnym fenoménom. Absolútna väčšina štátov a ich vládne orgány sa zaujímajú o vplyv cestovného ruchu na ich ekonomiku a ekonomický rozvoj. Cestovný ruch je regionálnou záležitosťou a je naviazaný na jedinečnosť územia a na historické, kultúrne a prírodné pamiatky v danom regióne či lokalite (Petříčková, 2011). Od vzniku Slovenskej republiky v r. 1993 zaznamenali obe krajiny síce nárast vzájomnej kooperácie a výrazné zvýšenie počtu rakúskych a slovenských turistov, avšak potenciál tohto sektora je obrovský. Rozvoj cestovného ruchu je pre Slovensko dôležitou otázkou, nakoľko mnoho našich regiónov má veľký potenciál na poskytovanie služieb v tomto sektore.

Návštevnosť slovenských turistov, ktorí nocujú v Rakúsku, je v porovnaní s počtom prenocovaní nemeckých, českých, maďarských alebo poľských turistov pomerne nízky: v roku 2012 prenocovali slovenskí turisti v Rakúsku iba 525-tisíckrát. Nemeckí turisti pritom nocovali 49,6-miliónkrát, českí 2,1-miliónkrát, maďarskí 1,6-miliónkrát a poľskí 1,4-miliónkrát. V štatistických údajoch však neboli zohľadnení jednodňoví turisti, ktorí v Rakúsku nenocovali (Statistik Austria, 2016). Zaujímavý je aj pomer zahraničných a domácich turistov, ktorý je v Rakúsku v porovnaní so Slovenskom zreteľne odlišný. Kým v Rakúsku je domácich turistov 30% a zahraničných 70%, na Slovensku predstavuje podiel domácich obyvateľov na prenocovaniach naopak 60% ku 40%, takže presne naopak. Možno konštatovať, že Rakúšania viac dovolenkujú za hranicami domácej krajiny ako Slováci.

V porovnaní so záujmom slovenských dovolenkárov o Rakúsko trend záujmu rakúskych turistov navštíviť Slovensko nie je až tak pozitívny. Podľa údajov z r. 2012 pricestovalo na Slovensko cca. 65,5 tisíc rakúskych turistov, ktorí tu prenocovali 136-tisíckrát. Je na mieste podotknúť, že úroveň slovenských služieb je neporovnateľná s Rakúskom, čo môže spôsobiť kratší pobyt rakúskych turistov na Slovensku, ktorí sú zvyknutí na vyšší štandard. Cestovný ruch si vyžaduje aj komplexnejšie služby a na Slovensku tvorí veľký potenciál na zlepšenie. V oblasti vybudovania kvalitnejšej turistickej infraštruktúry má Slovensko šancu na kooperáciu s Rakúskom, ktoré v tejto oblasti môže investovať. Rakúske podnikateľské subjekty disponujú komplexnejším a dlhoročnou tradíciou vyvinutejším know-how, ktoré môže byť prospešné aj v slovenských turistických regiónoch. Slovensko zaznamenalo spoluprácu aj v oblasti marketingu, pričom Rakúsko investovalo do hotelierstva. Ako uvádza Olšavský, aj zástupcovia slovenských územných samospráv vnímajú cestovný ruch ako kľúčový pre rozvoj slovenských regiónov (Olšavský, 2014). Tento fakt otvára dvere rakúskym investorom pri realizovaní svojich zámerov na Slovensku.

5. Bilaterálne investície

Rakúska republika je pre Slovenskú republiku druhým najvýznamnejším zahraničným investorom. Celkovo sa Rakúsko podieľa na zahraničných investíciách mierou 15%. Na Slovensku sa úspešne etablovalo mnoho rakúskych dcérskych obchodných spoločností (cca. 2 000), ktoré sú predpokladom pre prílev priamych zahraničných investícií na Slovensko. Ako už bolo spomenuté, jedná sa väčšinou o malé a stredné firmy, ktoré podnikajú v rôznych oblastiach. Medzi tieto spoločnosti patria o.i. Schmid Industrieholding, Berndorf Bäderbau, Brandner, AVE, Umdasch Group, Neumann Aluminium, Tuber, Miba, Wertheim, Magna a.i. Celkovo možno konštatovať, že malé a stredné podniky sú dôležitým prvkom rozvoja cezhraničných regiónov (a tým aj Slovenska a Rakúska), pretože prispievajú nielen k riešeniu problémov zamestnanosti, ale sú aj dôležitým činiteľom globalizovaného hospodárstva a technického rozvoja. Svetový trend smeruje k zvyšovaniu podielu malých podnikov, pretože sú oveľa pružnejšie a dokážu rýchlejšie zareagovať na zmeny na trhu (Chobotová, 2009).

Za ostatné roky je markantná orientácia rakúskych obchodných spoločností na oblasť získavania energie z obnoviteľných zdrojov, kam zaradujeme napr. spracovanie biomasy, výstavbu menších vodných elektrární, geotermálnu energiu a veternú energiu, ktorá je pre Rakúsko charakteristická. Úspešne sa realizovali a pokračujú rakúsko-slovenské projekty so zameraním na energetickú efektivitu, znižovanie spotreby energie budov, regeneráciu výrobných prevádzok a v neposlednom rade aj obnovu miest a mestských častí.

V súvislosti s privatizáciou je dôležitá rakúska spoločnosť Julius Meinl, ktorá kúpila slovenské Baliane Bratislava a od r. 2008 podniká pod obchodným menom Julius Meinl Coffee Intl., a.s. Dôležitými privatizačnými projektmi bol predaj finančných inštitúcií, a to Tatrabanky (Raiffeisen), Slovenskej sporiteľne (Die Erste Bank), Istrobanky (BAWAG) a Banky Slovakia (Julius Meinl Bank). Z hľadiska objemu investícií do slovenského bankovníctva je Rakúsko na prvom mieste: spoločnosti Erste a Raiffeisen a ich dcérske spoločnosti Slovenská sporiteľňa a Tatrabanka sa na slovenskom bankovom trhu nachádzajú na prvom a treťom mieste (Benč et al., 2013). V oblasti poisťovníctva vedie Vienna Insurance Group (ďalej VIG), ktorej dcérskymi spoločnosťami sú Kooperatíva poisťovňa, a.s. (členom VIG sa stala ako prvá už v r. 1990), Komunálna poisťovňa, a.s. (člen VIG od r. 2001)

a Poist'ovňa Slovenskej sporiteľne (člen VIG od r. 2008). VIG má podiel na trhu vo výške 34,5%, na Slovensku má približne 500 pobočiek a 1550 zamestnancov (VIG, 2016).

Po vzniku Slovenskej republiky investovalo Rakúsko aj v oblasti nehnuteľností a realít, pričom z investícií do výstavby nových bytových a nebytových priestorov profitovalo predovšetkým hlavné mesto Bratislava. Po Holandsku je Rakúska republika druhým najväčším investorom, pričom podiel priamych zahraničných investícií (PZI) smerujúcich na Slovensko sa pohybuje vo výške 15%. Do roku 2012 investovalo Rakúsko v SR celkovo 6,668 mld. EUR, zatiaľ čo PZI Slovenska v Rakúsku boli v objeme cca. 205 mil. EUR (MZV, 2014).

6. Conclusion

Hospodárska spolupráca Slovenska a Rakúska je viditeľná aj vo viacerých projektoch v oblasti dopravy a infraštruktúry. Ako príklad uvádzame diaľnicu medzi hlavnými mestami Viedeň a Bratislava, ktorá bola úspešne dokončená a spustená do prevádzky v novembri 2007. Prioritu má aj vysokorýchlostné železničné prepojenie Viedne, Bratislavy a Budapešti, elektrifikácia železnice medzi Bratislavou a Viedňou, prepojenie bratislavského letiska Ivánka pri Dunaji s rakúskym Schwechatom a vybudovanie širokorozchodnej železničnej trate. Jedným z úspešne dokončených projektov bolo aj vybudovanie cyklomostu Slobody medzi bratislavskou mestskou časťou Devínska Nová Ves a rakúskou obcou Schlosshof (september 2012), ktorý má predovšetkým historický a kultúrny význam. V budúcnosti sa plánuje aj výstavba cestného mostu medzi obcami Záhorská Nová Ves a Angern, ktorá má byť spolufinancovaná v rámci Programu cezhraničnej spolupráce (Interreg Slovakia-Austria). Celková alokácia Programu cezhraničnej spolupráce Slovenská republika – Rakúsko je 73,4 mil. EUR, pričom z verejných zdrojov zo štátneho rozpočtu vláda vyčlenila 3,2 mil. EUR (Dobrovodský, 2010).

V rámci podpory obchodných a hospodárskych vzťahov medzi podnikateľskými subjektmi Slovenska a Rakúska má dôležité postavenie aj Slovensko-rakúska obchodná komora so sídlom v Bratislave, ktorá je nezávislým združením fyzických a právnických osôb. Na Slovensku pôsobí táto organizácia už 20 rokov.

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GLOBALLY VALUED, LOCALLY IRRELEVANT? GENDER EQUALITY IN THE MULTINATIONAL COMPANIES OPERATING IN SLOVAKIA

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Abstract. The aim of this paper is to explore how the involvement in the processes of economic globalisation and internationalisation impacts the state and perception of gender equality in the Slovak business environment. Increasing presence of multinational companies with strongly internationalised organisational cultures and advanced diversity policies was expected to contribute to the change in the Slovak business environment and make it more sensitive towards different forms of diversity. This paper investigates whether the strong commitment to gender equality that many of these companies declare on the international level translates into the specific actions in their operations in Slovakia. To answer this question the paper analyses the sample of multinational companies selected from the Trend Top Ranking of 200 largest non-financial companies in Slovakia. Using the data from the publicly available sources such as companies' websites (both Slovak and international), Slovak Companies Register or recruitments ads, the paper evaluates their performance according to the set of criteria related to the gender equality. The preliminary outcomes show that while the multinationals tend to be leaders in areas such as introduction of work/family reconciliation measures, they do not perform considerably better in other areas such as representation of women in decision making bodies.

Keywords gender equality, representation of women in decision making, multinational companies

JEL Classification: M12, J16, M51

1. Introduction

Processes of economic globalisation and internationalisation have a significant impact on how gender relations are (re)organised in the labour market and society. One of the key actors contributing to this re-organisations are multinational companies with their ability to transfer HR practices across borders and encourage changes in national host systems. Their presence might have both positive and negative effect. On one hand, multinational companies with strongly internationalised organisational cultures and advanced diversity policies might contribute to the positive changes in the host countries with less developed equality policies. On the other, examples of companies benefiting from the disadvantaged position of women in the host countries are not rare in the academic literature. Several decades of empirical research

on this issue show that picture is indeed complicated and the effect that multinational companies have on the gender equality in the particular host country depends on the interplay of number of factors and actors. This paper tries to contribute to this research with the case study from Slovakia – one of the most open economies in Europe where the presence of international firms is substantial and understanding of their relationships with domestic environment therefore especially important.

2. Literature review

Two broad fields of management studies provide the theoretical background for this paper. First focuses on gender equality in international management and organisations. Second deals with the transfer of HR practices through the activities of international and multinational companies.

Substantial part of research on women and international business organisations deals with the female expat managers. Earlier studies showed that share of female expat managers in international companies is considerably lower than the share of female managers among the local staff which could mostly be contributed to the mobility obstacles which tend to be higher for women than men. Only in last decade this trend reversed and share of women among international managers increased (Hutchings & Michailova, 2014). On the other hand female managers from the host countries can benefit from the presence of the intentional organisations. Bozkurt (2012), using the example of Japan, argues that multinational companies provide critical relief routes for women workers' progress in managerial careers in national contexts where their career paths with domestic employers remain blocked by traditional and institutional practices. Similarly study by Tang and Zhang (2016) finds out that foreign firms whose home countries culture are more favourable for women are more likely to appoint female managers and employ proportionately more women. They also generate cultural spillover to the host countries domestic norms.

Impact of the multinationals presence is more controversial with regard to the semi-skilled factory employment. While some studies show positive effects on the female workforce employed by multinationals in others these companies are held up to intense scrutiny for taking advantage of the manual labour of female workforces in low-wage areas of the world (Braunstein, 2006). E. g. case study of Malgrota Maciejewska (2012) from one of the Special Economic Zones located in Poland provides an example of how semi-skilled women workers lives are affected by the presence of international employers in the post-communist Central European countries.

The mixed evidence provided by the empirical studies suggests that whether and how the international companies impact the state of the gender equality in the host countries employment depends on number of factors and their interaction. The large body of management literature dealing with the transfer of human resource policies across borders offers us several different perspectives on this factors.

The 'market-based' approach (Edwards et al., 2007) assumes that it is the pressures from product, financial and labour markets that drive management into particular courses of action. E. g provided that firms with more female directors have better market performance in countries with greater gender parity/equality as suggested by Post & Byron (2015) firms would be motivated to ensure sufficient representation of women in management in these countries.

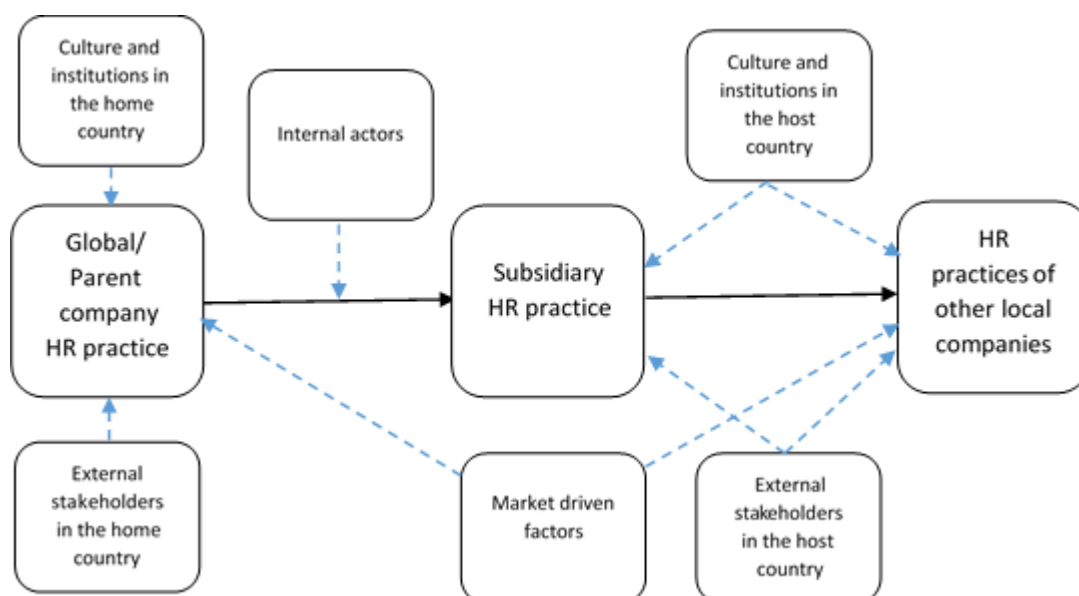
The role of the specific sector also needs to be taken into account in this regard. The investors are concentrated in highly competitive traded sectors might focus on increasing female employment as source of the cheap labour force but not strive for the gender gaps reduction.

The cultural perspective focuses on how certain aspects of national cultures determine the practice of specific HR strategies. E. g. Carrasco et al. (2012) concludes that firms scoring higher at “power distance” and “masculinity” (dimensions as defined by Hofstede) tend to have a lesser proportion of women represented on their corporate boards. The cultural aspect is also the part of the institutional theory which discusses the importance of interaction of the organisational practices with the larger social, legal and political context and focuses on how home and host country institutions shape the adoption of certain HR policies. The company’s strategy might be different in the country with the established institutional setup than in the country without such institutional framework (Aycan, 2005). Besides institutions the position of the stakeholders and how they are organised in the society is crucial. Key groups of stakeholders are external groups with the outwards direction of influence (Slabá et al. 2014).

Micropolitical or power/interest perspective (Ferner et al., 2004; Edwards, 2007) focuses on how policies transfer is shaped by the interests of various groups of actors within the international companies and by struggles between these groups. The ability of actors within to mobilise specific power resources allows them to resist the full implementation of corporate policy, leading to a range of compromise accommodations.

All above mentioned factors and their interrelations are summarised in the following scheme.

Figure 1: Transfer of HR practices within the international company and towards the host country labour market



Source: by authors

3. Gender equality in the multinational companies operating in Slovakia: the case study

Accelerated processes of internationalisation and economic integration at the turn of the nineties and two thousand year came with the promise of the improvement in the position of women in the Slovak labour market that was heavily hit by the post-communist economic transformation. Integration into the European Union and other international structures was associated with the normative pressure to improve the state of equality but also the pragmatic goal to increase the potential of economic growth through the better use of the skills of women (Milošovičová & Urbanová, 2013). The EU antidiscrimination legislative framework was gradually transposed into the Slovak legislation and number of different measures focusing on gender equality was financed by the pre-accession and structural funds of the EU. However as the effect of pre- accession conditionality faded, it became obvious that existence of the formal framework will not be translated into the substantial improvement in the state of the gender equality in the labour market. The term “window dressing” has been mentioned in this context (Bego 2015). On the macro level, the effect of integration and globalisation processes on the improvement of gender equality in Slovakia remained limited. The impact seems to be more visible on the micro-level with international companies transferring progressive equality and diversity policies into the Slovak business environment. However, even in this case the picture is note solely positive.

3.1 Methodology

The paper provides a case study of how the processes of globalisation represented by the presence of the international and foreign companies impacted gender equality in the employment in Slovakia. The case study deals with two partial questions. First, it explores whether these companies demonstrate better results with regard to the representation of women in decision making and other quantitative aspects of gender equality. Second it focuses on how these companies contribute to the qualitative change through introducing policies and measures promoting gender equality. In order to answer the first question we analysed data from the Trend top 200 list of the largest non-financial companies in Slovakia from the financial year 2015. Data on the members of statutory bodies and supervisory bodies were obtained from the Business Register of Slovakia (Ministry of Justice of the SR, 2016), and the data about the ownership were obtained from the web pages or annual reports of the selected companies. Simple descriptive analysis of data was carried out. Data from Statistical Office of Slovak Republic were also used in this part. To answer the second question we collected qualitative data from different sources such as existing case studies from individual companies, data on the results of the national award “Employer supportive to family, gender equality and equal opportunities” and websites of the international companies.

3.2 Gender gaps remain unchallenged

The international and foreign companies employ approximately 35% of men and 28 % of women in the Slovak economy. Women constitute approximately 42% of workers in these companies which is the share comparable to the domestic companies in private sector (ŠUSR, 2016b). Both males and females earn higher wages in the foreign and international companies than in the domestic private sector companies but while the gender pay gap is slightly lower for

the international companies (21% compared to 22% in the whole private sector), it is even higher for the foreign companies (28%)²⁴ (ŠUSR, 2016a).

Foreign companies in the analysed sample also did not perform better when it comes to the representation of women in the companies' boards (statutory and supervisory bodies). However in this case distinction between the companies with the ownership background in different geographic regions is necessary to provide the more accurate picture. Representation of women on the boards of companies with Slovak ownership background was 11.74%. Companies from the region of Central Europe and region of Western Europe showed similar representations of women with the share of 12.55% and 10,06% respectively. On the other hand not a single women was represented on the boards of the 20 companies coming from Southeast Asia included in the sample.

Table 1: Share of women in the corporate bodies of companies clustered according to the ownership background

Region	Frequency ²⁵	Number of women on the position of top executive	Share of women in statutory and supervisory bodies
America*	15	1	7,41%
Asia**	20	-	0,00%
Slovakia	40	2	11,74%
Central – East Europe***	16	2	17,98%
Central Europe****	54	4	12,55%
Western Europe *****	38	2	10,06%

Source: by authors, based on data from Trend (2015) and Business Register of Slovakia (2016)

* - includes USA, Canada and Brazil, ** - includes South Korea, China, Taiwan and Japan, *** - includes Czech Republic, Hungary, Poland and Latvia, **** includes Austria, Germany, Switzerland and Italy, ***** - includes France, Finland, Luxembourg, Netherland, Norway, Spain, Sweden and UK

Based in this, international and foreign companies in our sample do not tend to practically demonstrate their support to the higher participation in women in the top decision making posts. The number could be more positive if the middle management positions would be taken into the account. E. g. several international companies awarded the national award “Employer supportive to family, gender equality and equal opportunities” declare the share of women on the middle management position close to the parity (Mitková 2011). However further research would be necessary to explore how women are represented on this level in both Slovak and international companies.

3.3 “Family friendly” employers

International companies are in the forefront of promoting the HR practices that could lead to more gender equality. This is illustrated e. g. by the fact that for the long years these companies dominated in the national award for the companies with the best gender equality

²⁴ Calculation based on the gross monthly wages.

²⁵ Companies for which the ownership background could not be identified by the simple internet desktop research were and companies from the regions with the frequency smaller than 5 were excluded.

policies (Ministry of Labour 2016). However the scope and character of these practices differs considerably from one international company to another with only few offering the broad spectrum of support measures. Providing “family friendly” environment for their employees becomes increasingly popular among companies. The measures introduced to create such environment range from the organisation of corporate events for families, through flexible working time arrangements to the financial contributions and provision of child care services for the employees children. The shift from providing the support to mothers to enabling the flexibility and better possibilities for the reconciliation of private and working life for both parents is interesting but still mostly limited to the very few multinational companies.

While the “family friendly” policies became not only integral part of the HR policies in many companies but also a part of their promotional strategy as good employers, much less attention is being paid to the practices that could enable more women to achieve top managerial positions. Such activities remain the domain of the several companies with the US cultural background (companies such as e. g. Accenture, Dell, IBM). Very sporadic occurrence of such programmes might reflect the broader societal view: while the Slovak public is strongly in favour of providing support to working mothers, the active support of women to achieve management position is not perceived as necessary. But even in the case of the most “progressive firms” offering the full portfolio of supporting measures the gap between the formal strategy (which might be identical as a global one) and its practical implementation exists. Two case studies focusing on the gender equality measures in the Slovak branches of multinational companies show that introduction of such services might be hindered by the lack of awareness and limited support of the local management and low level of institutionalisation of such policies compared to the global level (Lenhartová, 2015; Mitková, 2015).

It is also necessary to point out that mostly the highly qualified workers in the service jobs can benefit from the measures described above. For the majority of employees with manual semi-qualified production line jobs in the automotive suppliers and electronics industry or in retail such possibilities are not available.

4. Conclusion

Number of good practice examples of policies promoting gender equality in the international companies in Slovakia is publicly known. Especially the measures supporting the reconciliation of family and working life seem to be not only the integral part of their HR toolbox but also an important element of their public image as good and attractive employers. This contributed to the better visibility of such measures in the Slovak labour market and whether and how these practices are transferred towards the Slovak employers would be an interesting question for the further research. On the other hand international and foreign companies do not perform better with regard to the reducing the gender pay gap or increasing the share of women in top decision making bodies. This is also reflected in the lack of the practical measures addressing this issues. Besides that it is hardly possible to view all international companies as a homogenous group with regard to the promotion of gender equality. Performance in this area is strongly influenced by factors such as cultural background or sectoral affiliation of the company. And while the majority of attention is paid to the western companies offering service jobs for highly qualified workers, the future research should also focus the position of women and gender equality in the sectors such as electronics industry or retail.

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IMPACT OF GLOBALIZATION ON MARKETING COMMUNICATIONS AND ITS TRADITIONAL AND PROGRESSIVE TOOLS

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Abstract. The article deals with the issue of the application of marketing communications using progressive communication tools service enterprises in the globalized world. It tries not only the theoretical definition has little effect communication tools, but also emphasize the need for a proper understanding of marketing communications in the globalization process in order to increase customer value. This is one of the requirements as to approach the parameters of developed foreign countries. The article further explains the current state of marketing communications services enterprises in Slovak, but also includes the findings of market research focused on marketing communications using new communication tools. The article familiarize the reader with the above issues and stimulate his interest in this matter not only in research but also in practical life. Globalization process and various marketing innovations provide the end user access to an increasing choice of services created to meet the growing needs of the knowledge society. In connection with the continued development of the market and customer needs leads to greater effort businesses increase efficiency of marketing communications using its integrity and the process of globalization. The merits of the issues presented accentuated by the fact that the effectiveness of traditional and progressive marketing communication tools are among the most actual problems of marketing today. Examination of this issue, we have come to a finding that marketing communication in the globalization process can be so creative and original that could affect the consumers so that they can obtain their loyalty.

Keywords: globalization, customer behaviour, marketing of services, traditional and progressive tools of communication mix

JEL Classification: F60, M30, M31, M37

1. Introduction

Marketing communications in the process of globalization has become an integral part of our everyday life. In particular, marketing communication with customers is part of our everyday life and becoming ever more weary of it and we are against it immune. Traditional communication tools used by the vast majority of enterprises are less efficient and leads to adverse effects in the form of customer resistance to them. For enterprises, however, is not internal marketing communication and no communication with the customer insignificant investment, and present their forces to the realization of new, creative marketing activities (Majerová & Zvaríková, 2014).

The said activities may include progressive forms of marketing communication, which is characterized by originality and imagination, they are very effective as part of an integrated marketing communication. The right mix of traditional and advanced communication tools enable companies to the end customer not only ease of reference in the market, but also provide it with the necessary information about the enterprise, it stimulates him to buy the product, respectively service and gain his favour and attention (Čorejová & Al Kassir, 2015).

And here is the place to highlight the fact that modern marketing tools are compared with classic not only effective, but also relatively inexpensive (Szusztorová, 2013).

2. Current trends in marketing communication

Marketing of the 21st century calls for much more than just the development and production of quality products, respectively. offer services, attractive prices determining whether the disclosure of the potential market segment. An undertaking to carry out act of selling their products or services, it needs to provide its current and potential end-consumers with basic information about the product, its origin, characteristics, price and location, where you can buy the product. Therein lies the importance of marketing communications as the last, but the most visible marketing tool.

Similar to today's marketing communications are changing the two main factors. The first is that the marketers following the fragmentation of mass markets move away from mass marketing. Increasingly prepared narrowly focused marketing programs designed to build closer relationships with customers. The second factor is the fact that huge advances in information technology are accelerating the transition to targeted marketing. In view of this new communications environment marketers need to rethink the role of different media and communication mix tools in the globalization process (Kotler et al., 2007).

Finally, there is also a new generation, known as Generation Y, which teaches us to communicate in a different way. In a way which is not bound by a distance, interact with the person on the other side of the world is only slightly more expensive than communicate with a neighbour across the hall.

2.1 The role of new forms of marketing communication, called murketing in the context of globalization

Due to the very rapid technological advances and the globalization process, the authors Batraga & Dmitrijev (2011) point out that from a marketing perspective it is increasingly urgent to systematize aspects of marketing communications and new communication marketing methods, since the use of traditional marketing communication tools is not sufficient and the public they start to browse .It is necessary to involve the communication mix new respectively non-traditional forms of marketing communication, often extending the term murketing.

Murketing a specific advertising strategy that is used to support the brand ways which often appear non-conventional or even somewhat meaningless. Murketing presents form of new tools of marketing communications because is realized with specific and especial ways. Classical forms of advertising marketing campaign, which promotes a particular product and its direct use, while marketing campaign is based on the idea of creating buzz around the product, presenting the brand identity undetermined, while also providing plenty of room for maneuver

in the future. Marketing campaigns are not so clear-cut and can take various forms. The enterprises that specialize in marketing, focus on new forms of marketing communication in internet media, through videos, audio recordings, chats, creating blogs that are called "viral" effect. The aim is to slowly and thoroughly penetrate the desired market and focus instead on creating the image of a product than for the actual brand recognition (Olšiaková et al., 2015).

As a result of the development of information and communication technologies, the growing importance of marketing communications in the Internet environment, which offers a variety of communication tools, which include banner or text ads, websites, e-mails, newsletters and so on. It is also necessary to properly sort through large amounts of information. As states and Nadanyiová & Ližbetinová (2011), information is among the most important sources in the company in addition to material, financial and human. Proper handling of information in the communication process is a key element of modern business. In this context, they have become frequently used terms such as social networking and social media.

Social networks are an appropriate means of disseminating and sharing viral videos or ads as a method of guerilla marketing. Sharing viral advertising is standard behaviour in social networking culture. Viral advertising refer to consumers through paintings, cultural models and social representations (Yavuz, 2012). Bao & Chang (2016) state that companies must first select the correct multipliers to implement viral marketing campaign that mass media were effectively disseminated in the online space.

Social media used to collect and develop social interactions. Their main advantage is that their content can be created, modified or annotated each registered user. User interaction is a kind of added value of social media (Zaušková et al., 2015). According Majerová et al. (2013), social media offer great opportunities for creativity and ideas of any undertaking. Moreover, video marketing is one of the most powerful tools of companies and their online marketing campaigns, how good video can make content understandable reportable as an ordinary article on the website.

On the other hand, is constantly growing market for luxury goods, where most applied one of the new trends in marketing - guerilla marketing (Matúš, 2011), characterized by J. C. Levinson in 1984 in the book *Guerilla Marketing*. This enhanced communication tool, as shown in Bigat (2012) implies a guerilla marketing, guerilla advertising or guerilla art and, along with other forms, such as viral, event, ambient marketing or product placement, can effectively take the eye a customer, provoke strong experience or emotions, and consequently to give rise to communication between people themselves. Guerilla marketing, which consists of the above instruments can be used by businesses easily and at low cost, therefore, the very companies should learn and use it in order to be successful in this competitive market (Iosip & Funari, 2011). Of that issue is addressed in various publications and other authors (Isoraite, 2010), (Zaviscic & Medic, 2006), (Scheibe, 2013).

The above-mentioned trends, respectively, progressive marketing tools don't represent any change in the marketing communication in Slovak enterprises and the perception of Slovak consumers. Their choice was not linked to the goal of our research, ie. assess the extent to which the said communication tools progressively reflected in the marketing communications enterprises operating in the Slovak Republic.

2.1.1 Generation Y position in new forms of marketing communication

According to Kotler (2007), Generation Y is represented consumers born between the second half of 1970 and first half of 1992. It is also known as "Millennials" (Kotler, 2013). Today is Generation Y young people brought up in a world of unlimited shopping opportunities, jobs and leisure activities (Grešková & Kusa, 2015).

Van den Bergh & Behrer (2012) argue that Generation Y has grown up in an atmosphere of commercial media, global brands, the Internet and mobile phones.

It follows that it is the new forms of marketing communication are attractive for the said generation as these communication tools carry a controversy, originality, imagination and teetered on the edge of legality. Plus, a large amount of television advertising can lead to aversion to this type of news, and that's true for online advertising. This is evident especially for Generation Y who spend more and more time in the virtual world. Therefore, enterprises need to resort to innovative forms of marketing communication (Koszembar-Wiklik, 2014).

3. The impact of the globalization process on the level of use of marketing communication companies in Slovak republic

Globalization (whether positive or negative impact) creates significantly altered the conditions for operation of enterprises. To ensure that businesses have been able to respond to these changes and be as successful in terms of globalization, it is essential to introduce new methods, tools and techniques, set ambitious goals, emphasis on sustainable performance, follow a comprehensive set of performance criteria, to seek strategic innovation, to create a dynamic and flexible organizational structure management and continuously improve core competencies (Jacková, 2015).

For the identification level of use of new forms of marketing communication in the globalization process in the Slovak Republic, we implemented a marketing survey, which was conducted in the months from January to February 2016, not only in Slovak enterprises, but also among Slovak consumers. The sample was made up of 80 enterprises and 110 consumers. The survey was conducted through questionnaires classic, and their filling was divided into two parts: the part of the questionnaire was distributed electronically with using the social network Facebook, in the second part, we used the personal interview. Sample of enterprises operating in the Slovak Republic we describe in terms of legal forms and sizes, with a sample of consumers we describe in terms of social status.

3.1 Marketing research aimed at businesses operating in the Slovak conditions

In terms of legal forms of business enterprises Slovak survey results were as follows: Company Limited (59%), joint stock company (23%), sole proprietorship (10%) and team (3%). In terms of size of Slovak enterprises, respectively. the number of employees was the percentage of the following: enterprises employing 1-9 (26%), 10-49 employees (22%), 50 to 249 employees (20%), 250 employees or more (18%), entrepreneurs (6%).

In addition to that we are marketing research focused not only on the actual status of marketing communications in the marketing mix, but also that of the forms of marketing

communication (traditional vs. progressive) prevailing in Slovak enterprises. In addition to that, we considered the use of advanced communication tools.

The results of marketing research in terms of the importance of marketing tools are as follows: the most important tool is considered to be the product (39%), followed by price (28%), third place went marketing communications (23%), distribution (10%).

In terms of use of traditional and advanced communication tools examined in Slovak companies, we found that mostly use traditional communication tools (61%), ie.: advertising (39%), personal sales (15%), sales promotion, public relations and direct marketing It ranged from 10% - 5%.

Can not forget the importance of marketing communication is via the Internet, where the results of marketing research shows that Slovak enterprises most used corporate websites (32%), direct marketing (19%), banner advertising (13%) and sponsorship or affiliate marketing (5 %). Besides these forms of Internet communication, Slovak enterprises use social networks (48%), mainly Facebook, Instagram, Twitter or LinkedIn. These social networks are used not only as forums or evaluation sites, but also to share, post videos, photos or guideline to consumers.

As for the advanced communication tools, among which we included viral, buzz, guerrilla, mobile marketing, WoM and product placement, the results of market research we can say that Slovak companies most used product placement (17%), viral marketing (13%) , mobile marketing (11%) and guerilla marketing (8%).

3.2 Marketing research aimed on Slovak consumers

The questionnaire was completed by 110 respondents. Of the respondents, only 53 people have social status - in the workforce (47%), after followed by a group of students to the number of 23 (21%), a group of labour inactive in the number of 13 (12%), the number of respondents on maternity / parental leave is 11 (10%) and among a small group of temporary workers include the number 6 (6%) and people of retirement age with the number 4 (4%).

Marketing survey on Slovak consumers concerned mainly the findings awareness of advanced communication tools and their adoption in the enterprise communications portfolio Slovak consumers.

Question: "Based on the clarification of terms, have you ever witnessed any of the progressive forms of marketing communication in the Slovak Republic?" Was preceded by an explanation of the concept. In percentage terms, the results are as follows: 48% of respondents said "yes," 45% said "no" and the remaining 7% said "don't know".

The last question: "Would you accept if Slovak companies use progressive forms of marketing communication?", 58 respondents (51%) expressed a "yes" and 55 respondents (49%) "no."

4. Conclusion

From an overall assessment of the results of the marketing survey on the level of use of progressive forms of marketing communications, we can conclude that a number of Slovak enterprises are not considered as marketing communications critical to the marketing mix, even

though its importance in today's world is increasing due to the globalization process. It displays that only marketing communication does not fulfil original function, namely to inform customers about products and services and branding. Today, especially high-quality and original marketing communication can be a source of competitive advantage of the enterprise.

Marketing research has also shown that the communications portfolio of enterprises operating in the Slovak Republic is composed predominantly of traditional communication tools, as progressive forms of marketing communication enterprises are undervalued and unreliable due to lack of knowledge and experience in this field. To remove this disadvantage can be better publicized and more successful marketing communications campaigns executed Slovak enterprises, including "Ružoví kukláči" - insurance Union marketing campaign or a marketing campaign of company of Dell, called "CTRL ALT DELL, RESTART YOUR CAREER."

Given the lack of gradually eliminating the globalization process itself, which involves the marketing communication goes through evolutionary development, which resulted, as stated Olšiaková & Miklenčičová (2011) is:

- promoting the concept of integrated marketing communication,
- expansion of the elements of the marketing communication mix (especially for direct marketing and event marketing),
- emphasis on the use of marketing databases and application of the concept of building a customer relationship management (CRM),
- emphasis on the effectiveness of marketing communication and its perception as an investment which should bring profits,
- the use of new media and communication technologies (eg. Internet, email, mobile phone, digital TV...),
- application of non-traditional forms and practices in marketing communications (eg. guerilla marketing, viral marketing, buzzmarketing, etc.).

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OUTPLACEMENT USE AS A TOOL OF CORPORATE SOCIAL RESPONSIBILITY AT THE INTERNATIONAL LEVEL

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Abstract. Increasing globalization and related economic changes affect the functioning or even the survival of organizations and also fundamentally affects many areas of contemporary work world. Outplacement as a professional service has evolved and develops in response to this changing labour market environment. The specialization in a certain field meant for a man a job security, but currently job security rests in the flexibility and the ability to adapt to change. Outplacement means a support and help to human in a situation of the loss of job, and this assistance involves personnel, psychological and career counselling. Corporate social responsibility is an approach of organizations which are not only interested in profit and economic results. These companies are also aware of how their activities affect their surroundings, social and environmental surroundings. The main point of CSR and outplacement resides in accordance social and economic aspects of business activities of the organization. Quality outplacement program, when the company trying to ensure dismissed workers a psychological support, retraining and further implementation, is an important manifestation of corporate social responsibility in its internal and external dimensions. Article explains the concept of outplacement, its objectives, the forms, the process of implementation and points out how to use outplacement companies in the world on the basis of completed surveys. Methods that are used in the article: analysis, synthesis, comparison.

Keywords: outplacement, company, corporate social responsibility

JEL Classification: M31, M14, M12, F60

1. Outplacement

According to Prajzler (2006) it is not easy to find the beginnings of outplacement. This term originated in British English and its use relate to help citizens of Great Britain in the early 20th century. The American staff agencies brought this program to Europe to help integrate veterans into civilian life after World War 2. Outplacement larger expansion occurred in the seventies of the last century, when this aid started to be routinely offered to workers of middle and lower management. (Gowan & Nassar-McMillan, 2001) Expanding of outplacement always was related to the economic crisis. Outplacement is targeted, systematic and professional assistance, which aim is reducing or eliminating the negative impacts of the release for all concerned - for the organization, redundant employees and also employees who are not touched of layoffs. (Kilcrease, 2013) The purpose of outplacement is to teach released employee through advice and training on how to start a new career. Pickman (1994) defines

outplacement as the process of assistance to redundant employees or employees their place was cancelled. It helps them to face the loss of a job with renewed self-confidence, to learn strategies for effective job search and to have a successful campaign of finding a job. Brief definition of outplacement according to Armstrong (2005) reads: "Outplacement is the process of helping to the redundant workers in finding another job, and the launching of a new career. It may include consultation, which may be provided by companies that are specializing in this field." Morin and Yorks (1982) defines outplacement counselling as a systematic process in which is provided to the redundant man training and advice in the field of self-evaluation and obtain a new job that corresponds to their needs and talent. The broader concept understands outplacement as a comprehensive tool to help the organization, which layoffs employees, further to help for redundant workers and also for employees who remain in the organization. (Andrica, 2001) The broader concept of outplacement includes for example the identification of excess reserves of human resources, strategy design of staff release and prepare a communication plan, training internal staff to collaborate in the program outplacement, communication with the labour offices and departments, identifying of employees needs covered by the plan, social and psychological support to the released employees, the program targeted financial support to outgoing workers, outplacement program implementation and feedback of the outplacement success. (Doherty et al., 1993) Closer concept understands outplacement as the active support of employers to redundant employees, support is provided through outplacement companies, namely through training consultants or in case of an internal outplacement through professionally trained interviewer. (Wanberg &Hough, 1996) Therefore it focuses only on the relationship consultant - client. The role of the consultant is not to find new job for redundant worker, but to help him navigate in the labour market, to acquire the skills necessary to find a job. (Bettache, 2013) Outplacement consultant is not looking for work instead of the employee, but he teach him how to sell himself on the labour market. (Wagnerova, 2011)

The final form of outplacement depends on the current capacity of the human resources department, the financial possibilities of the organization and the number of redundant employees. (Masarova et al., 2015) In terms of form, a distinction (Pickman, 1994):

- individual outplacement is a detailed look at all aspects of the job search, so the client has the opportunity to obtain valuable information on the individual steps of the job search process, (Wagnerova, 2011)
- group outplacement focuses on advising to group redundant employees, (Kieselbach & Mader, 2002)
- short-term outplacement is a several hours or several days seminar. It is mostly intended for employees in lower positions, (Doherty, 1998)
- long-term outplacement is a program in the form of consultations, diagnostics and training that allows a more personal approach to the client and is provided to customers in managerial positions,
- internal outplacement is provided within the internal consultancy by specially trained HR personnel, (Majerova, 2015)
- the advantage of external outplacement is consultants expertise and knowledge in the field of assistance to redundant employees and organizations. (Westaby, 2004)

2. Corporate Social Responsibility and Outplacement

The main point of CSR and outplacement is based on harmony of economic and social point of commercial activities of the organization. (Tokarcikova & Ponisciakova, 2014) Trnková (2006) states that "quality outplacement program, when the company trying to ensure psychological support to dismissed workers, retraining and further application, is an important manifestation of corporate social responsibility in its internal and external dimension." Company is able to handle this situation.

Quality outplacement in terms of CSR is (Trnkova, 2006):

- maintaining the good reputation of the company in the place of business,
- maintaining the morale of existing employees, (Martins et al., 2008)
- maintaining the attractiveness of the company for potential future employees, (Martins et al., 2008)
- verifiability company's ability to deal with the situation,
- verifiability the company's ability to reconcile social and economic aspects of their business. (Aquilanti & Leroux, 1999)

According to Foot and Hook main benefits of outplacement for the organization are (Trnkova, 2006):

- improving morale among remaining employees, (Gerards, 2014)
- key employees will want to remain members of the organization, if they know that the organization behaves well towards their employees even if redundancies,
- public relations in the local community will be less affected by the dismissal, unless this situation will be handled with care, (Klimczuk-Kochanska & Klimczuk, 2013)
- there will be fewer problems or objections from the union if the services are related to redundancies well provided. (Klimczuk, 2015)

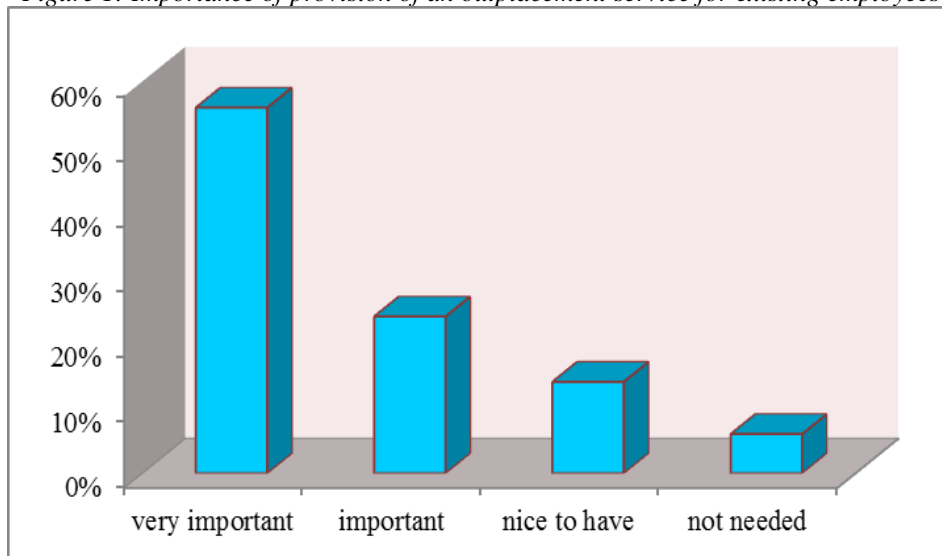
3. Outplacement at the international level

To help better prepare for the likelihood of both single terminations and larger-scale reductions in force, many employers have proactively identified outplacement solutions—services aimed at helping former employees transition into new jobs—so that these solutions are ready to deploy immediately in the case of a termination event. Organizations generally see real value in offering more than a pat on the back and well wishes on the way out the door when they do have to let someone go, helping to cushion the often painful blow of a termination. (Bachanova et al., 2009) It's no surprise, therefore, that a number of organizations rely on outplacement services in these difficult situations.

Insala company (Insala, 2010) realized in 2010 a worldwide survey focused on an overview of recent perspectives on outplacement and career transition service offerings for service providers and current or potential service clients. The survey covered 118 C-level executives (65%) and 63 HR executives (35%). 64% of corporate client representatives working in a company with less than 100 employees, 10% work in the company with 101-500 employees, 12% with 501 to 2,500 employees, 7% with 2501 - 5000 employees and 7% with more than 10,000 employees. According to this survey the vast majority of executive respondents (93%) express that career transition services bring value to employees and organizations. 56% of respondents indicate that such services are "very important" and another 24% indicate that

they are “important.” The majority of respondents thus view the existence of career transition services as a benchmark for healthy organizations with strong employer brands. 74% of executive respondents indicate that their company provides career transition services to exiting employees as part of its policy, reflecting the perceived importance of the services and mirroring a high level of interest in these services.

Figure 1: Importance of provision of an outplacement service for existing employees



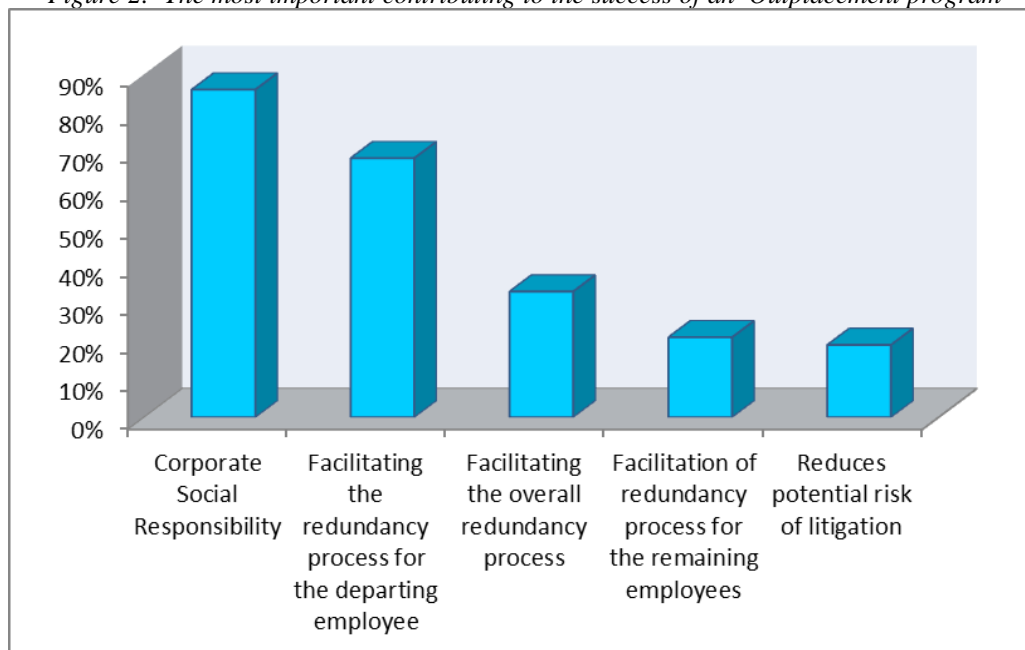
Source: Insala (2010)

A small fraction of respondents (15%) indicate that they do not provide career transition services. Executives reveal that they generally fall into 1 of 2 categories - either they believe that the service is too expensive (31%), or that their employees do not need it (44%). In explanation, one respondent indicates that their company is simply too small to necessitate service provision. The survey also shows 88% of respondent’s state that their organizations provide transition services for all employees and 6% provide them for executives only.

Randstad Hellas Company (Randstad. 2014) conducts in Greece the annual Outplacement survey in an effort to examine the views and improvement suggestions as well as general feedback from those who utilized the service. The survey 2014 was conducted online between May & June 2014 with a final sample of 325 professionals. All professionals were employed in companies within the Greek market coming from various sectors. Their positions were mostly related to senior HR positions, General & Financial Management all directly related with the final decision of sponsoring a service such as Outplacement. Survey results indicate that approximately 9 out of 10 respondents are familiar with Outplacement. Mainly, awareness about Outplacement comes from presentations by consulting companies (71%), while a significant percentage of respondents is informed through the internet (28%). 13% of respondents is familiar with the service as a recommendation of another company/colleague who used it while 9% of respondents is aware of it through a friend or acquaintance who participated in a similar program. A smaller percentage is familiar with Outplacement from the media as well as from being an Outplacement participant themselves in the past (4,5%). 67% of the companies offered Outplacement to all departing employees and 33% selected employees according to specific criteria. The main factor that affected the selection of employees, who were offered Outplacement, was the seniority of the position (67%). Significant percentages were indicated to factors such as the long-term collaboration with the

company and the individual's difficulty in finding a new job (33%). The age of the employee (17%) had less affect in the final decision to offer outplacement. The most important benefit for the company offering Outplacement is related to the Company's Social Responsibility (86%) and second comes the facilitation of the redundancy process to its departing employees (68.5%). Far less attention seems to be given to the reduction of potential litigation (19%).

Figure 2: The most important contributing to the success of an Outplacement program

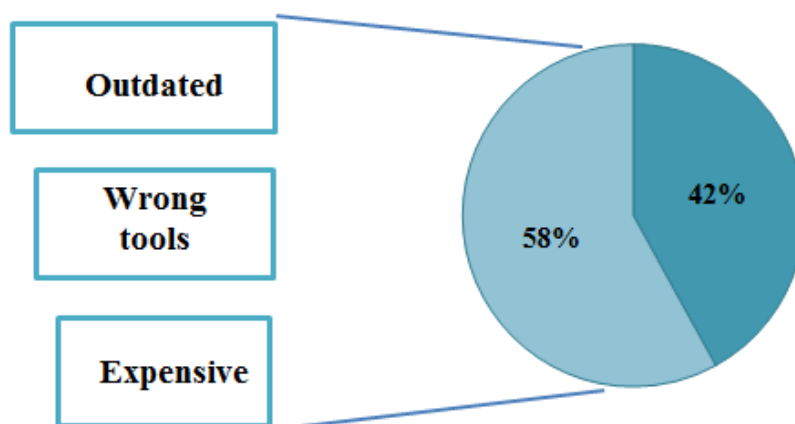


Source: Randstad Hellas (2014)

The most important benefit for the departing employees participating in Outplacement is the access provided to job opportunities (66%) and then follows the job search exercises (63%). Emotional support is the third identified benefit (31%) whereas lower importance is given to participant's self-assessment and goal setting (33.5%). Self-assessment and goal setting as well as the information provided on the current labor market come last with a percentage of 21% and 14% accordingly. 43% of participants was positive about future use of Outplacement and 53% would possibly use it in the future. Only 4% would not use Outplacement programs in the future. The majority of respondents has indicated the cost of the service (61%) as the most important factor taken into account in deciding upon Outplacement programs in the future. Other factors that may influence the decision for future use, but of much lower importance are the effectiveness of the service & the specialization of the consultants (8.5%), the number of redundancies (7%) and the cause of redundancies (6%). Another important factor is the Outplacement methodology (5%) and the current market conditions (4%).

DirectEmployers Associa@on and CareerBeam (CareerArc, 2013) conducted the Outplacement survey in February 2013, which involved 294 HR professionals from around the world. According to this survey a majority of employers (58%) are frustrated with the outplacement services offered by their provider which are often viewed as outdated.

Figure 3: The biggest employer frustrations with services provided by outplacement provider



Source: CareerArc (2013)

Based on the results of each survey we can conclude the majority of surveyed companies have a positive relationship to the outplacement and they consider it important for employees and for organizations. The main reason for non-use of this tool is that it is too expensive. Most companies focus on outplacement for all employees, only a few companies divided employees according to specific criteria.

4. Conclusion

Prevailing negative feelings, stress, fear of reduction in living standards, threat of environmental standard - these are the most common symptoms that accompany a person in the event of dismissal. Outplacement is a tool that can mitigate difficult moments of dismissal. Outplacement is the company activity by which companies are trying to reduce the negative impact of the dismissal and seek to assist them in finding a new job. According to the results of surveys conducted globally, outplacement is important for employees and organizations. Most companies provide an outplacement program, which is aimed at all employees. There are two reasons why companies do not use this program - it is expensive and staffs do not need one. Outplacement in Slovakia is not as widespread as the market would require, mainly due to finance.

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INNOVATIVE MECHANISMS TO IMPROVE BUSINESS CLIMATE IN THE REGIONS OF THE RUSSIAN FEDERATION AS PRECONDITION FOR INTERNATIONAL BUSINESS DEVELOPMENT

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Abstract. The article deals with the issues of improving the business climate at the regional level; pointing out that Russia needs not only economic growth, but the growth of certain quality, connected with the development of small businesses. However, the increase in the tax burden, reducing availability of borrowed funds, outflow of capital, lack of preferences and business benefits in a large part of the sectors of the economy, combined with the fall in world oil prices and the rise in prices on domestic market, reduces business interests and moves private business in the area of critical risks. It was determined that there should be a series of measures to reduce social, economic and administrative barriers to the creation of favorable business environment and to ensure the improvement of business climate as a factor of social stability and sustainable economic growth of territories. Regional experience to improve the business climate is considered. Conducting comprehensive study of existing methods, techniques, training and exchange of experience, including interactive ones, has helped to develop a mechanism aimed at information support of business start-ups with innovative solutions. It is proved that positive experience in the creation of the portal to improve business climate in the region is appropriate to extend to all Russia, which will not only increase the level of business confidence, but also implement measures to support the business, demanded the real sectors of the economy at the regional level.

Keywords: Business climate, small business internet portal, entrepreneurship, innovation

JEL Classification: F63, O30, R10

1. Introduction

The current stage of development of the Russian economy leads to an ever-increasing role of the regions in international business development. Development of export relations with other countries enables enterprises to maintain or increase production capacity, inactive because of low solvency of consumers in the domestic market, due to marketing development. Therefore, successful solution of the problem of increasing capacity of the international business is an essential component of regional development. However, business can operate effectively in terms of reliable forecasts of business activity and related consumer sentiment, both in the region and in the country as a whole.

The most common understanding of business environment is a set of factors determining the opportunities and incentives for business organizations to strengthen and expand the scale of operations, through the implementation of productive investment, employment creation, active participation in the global competition, and it is characterized by a group of indices. The most important is IFO World Economic Climate Index, which reflects the current state of the global economic cycle and its prospects for the next six months. Business Climate Index is calculated and published regularly in Europe and America for various sectors of the economy. Currently, Russia takes the 120th ranking place in terms of business climate, and its growth up 20 place in the ranking will ensure further economic growth by 2.5% per year. Due to sanctions against Russia (87 trade defense measures have been imposed on high-tech competitive Russian products) business activity in the region fell to 47.6 points, which significantly affected the international business presence in the region. Business climate is close to the concept of business activity; it is usually studied at macro level, territorial, sector and product section and at micro level of individual enterprises.

Effect of business climate improvement for growth is proved by authors of World bank study (Doing Business, 2016). Experts analyzed the process of economic growth in 135 countries. As a result, it was found that the improvement of business environment in the countries, included in 25% of the worst ones, up to the level of 25% of the best ones, gives economic growth for 2.3% per year. And improved position in the ranking for only 20 points increases growth by 0.5%. In the face of global economic uncertainty, connected with economic slowdown of America, China, India and, especially, crisis events in the euro region and, accordingly, appearing unpredictability of the current situation in the world commodity markets, export-oriented Russian enterprises continue to be low-level ones. Issues of improvement of business climate of regions are widely discussed by scientists of the European countries (Anca Dodescu et al., 2014). Considerable interest in the improvement of the business climate of regions are shown by Asian countries (Tysun Chan et al., 2016.). Infrastructure of the business climate of a country is one of the most important resources of its social and economic development. In developed countries systems infrastructure assessment ratings are created (Jose Manuel Diaz-Sarachaga et al., 2016).

It is known that infrastructure support of regions and all the territory of the country largely determines the rates of economic growth, quality of life, efficiency of public administration, law enforcement and national security.

However, when assessing the business climate in the regions of Russia, the condition and development of infrastructure for the region's business climate is not considered (Popkova E.G. et al., 2013). Due to the increased relevance and notable innovations of business regulation, it is necessary to analyze the state of business climate in the regions and sectors of the Russian economy, taking into account the development of infrastructure maintenance as a key factor for business development, including international one.

2. Assessment of the business climate of the regions of Russia and its determining factors

In the Russian Federation regularly monitoring of changes in business activity of business and regional business climate of regions is not held. Therefore, this work is to some extent experimental. The most of indices developed in the Russian Federation, used to define the

dynamics of change in business activity at the level of the national economy, - quality indicators, such as index of business activity by Kommersant, business confidence index, index of business expectations.

Business confidence index is based on a survey of managers on forecast of manufactured products, residues and demand for it to characterize the economic activities of organizations with specific activities. Index of business activity by Kommersant is calculated on the basis of 26 macroeconomic indicators of the Federal State Statistics Service and 17 estimated figures obtained by the survey of leading Russian companies.

Business expectations index is calculated on the basis of indicators: the ratio of the share of entrepreneurs, expecting that product prices will rise, and the proportion of employers expecting that prices for resources will increase, based on a survey of industrial enterprises. In our opinion, business environment index most accurately defines business environment, which is based on 6 partial indices: institutional conditions; business development; development of social responsibility; cohesion of business community; trust in government; social well-being.

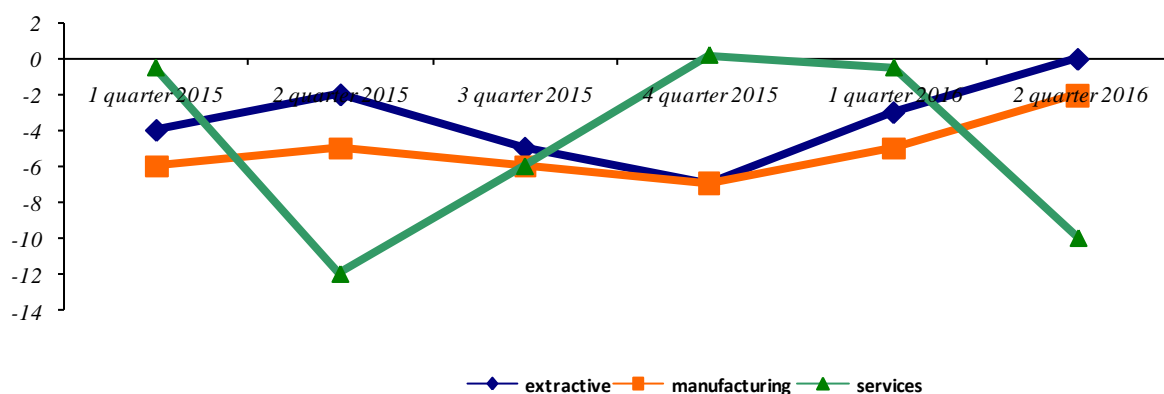
Priority method to collect primary information on the business climate in Russia is standardized personal interview with the respondent, who is familiar with the subject of study.

Many of the above-mentioned methods in determining business activity used, expert estimates, in addition to statistical data, that in our opinion are subjective and can distort the facts. In the research, along with the methods of interview, we have used the survey data of statistical reports of regions. Importance of separate factors for the development of the business climate in the region was ranked to obtain more reliable estimates .

During the desk research we have studied the experience and forms of support for business activity, assessed the infrastructure of maintenance of the business climate in the region. All-Russian outcome of the assessment of the business climate was formed from the results of development of separate regions and industries. Calculation of Index of business confidence revealed that it is greatly depended on the business size (small, medium, large) and the seasonal nature of production.

According to the survey of heads of organizations of mining and manufacturing industries conducted by the Federal State Statistics Service, Index of business confidence reflecting generalized state of entrepreneurial behavior, in July 2016, compared to December 2015, increased in the extractive industries from (-5%) to (2%), in manufacturing - from (-11%) to (-3%), decreased - in the production and distribution of electricity, gas and water - from (2%) to (-4%).

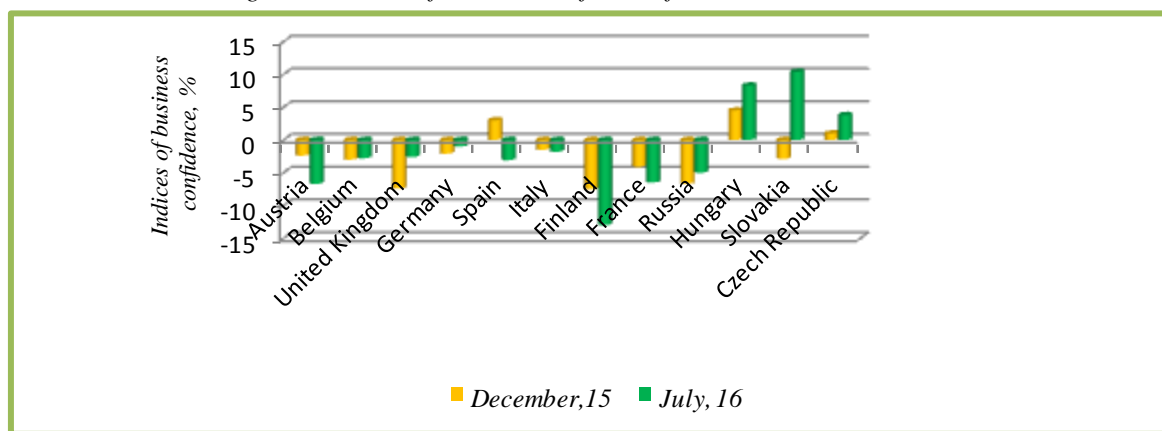
Figure 1: Indices of business confidence in Russian companies, %



Source: the Federal State Statistics Service of Russia
http://www.gks.ru/wps/wcm/connect/rosstat_main/rosstat/ru/materials/news

At the same time the economic situation in their organization in mining is considered to be favorable (10%) and satisfactory (71%) by the managers; in the manufacturing sector - 7% and 76% of respondents, respectively. At the same time, the number of pessimistic respondents in the assessment of the current economic situation exceeds the number of optimistic by 5 percentage points in mining and by 10 percentage points - in the manufacturing sector.

Figure 2: Indices of business confidence for individual countries, %



Source: the Federal State Statistics Service of Russia
http://www.gks.ru/bgd/free/B04_03/IssWWW.exe/Stg/d01/171.htm

It should be noted that according to the Organization for Economic Cooperation and Development (OECD), the index of business confidence of enterprises had a decrease in 2016 in a number of countries in Western Europe, but Eastern European countries show growth of business confidence (Hungary, Slovakia and the Czech Republic).

It is obvious that individual regions and countries form uneven business conditions. According to the results of the survey of business executives, by expert estimates method, it is established that the priority factors that determine business climate in the region are financial factors (access to credit, tax incentives, the price of local raw materials, logistics costs), as well as infrastructure development in the region. These factors have the greatest weight - 0.42 and 0.15 (Table 1).

Table 1: Priority factors determining business climate in the region

Variable	Name of factor	Importance of factor
Financial factors determining business activity in the region		
X ₁	Availability of tax benefits and preferences	0.4215
X ₈	Interest rates for attracting loans	0.2318
X ₁₂	Price stability in the markets of goods and services, low inflation	0.1611
X ₅	Availability of credit resources	0.27391
Infrastructural factors determining business activity in the region		
X ₆	Availability of infrastructure for innovation and business support	0.2654
X ₁₆	Presence of specialized Internet resources, information web sites for interaction between business, society and government	0.3517

Source: By author

The main determining factors of business climate in the region, according to a survey of employers are: high level of taxes (52%); 40% of business representatives designated low availability of financial resources; 12% - unfair competition on the market of the final product; 10% - underdeveloped business support infrastructure (Busarina, 2014).

Thus, the main barriers to business development in the Russian regions are high taxes, lack of information on business support, including international one, and low availability of investment resources.

3. Innovative mechanisms of improving business climate in the Russian regions

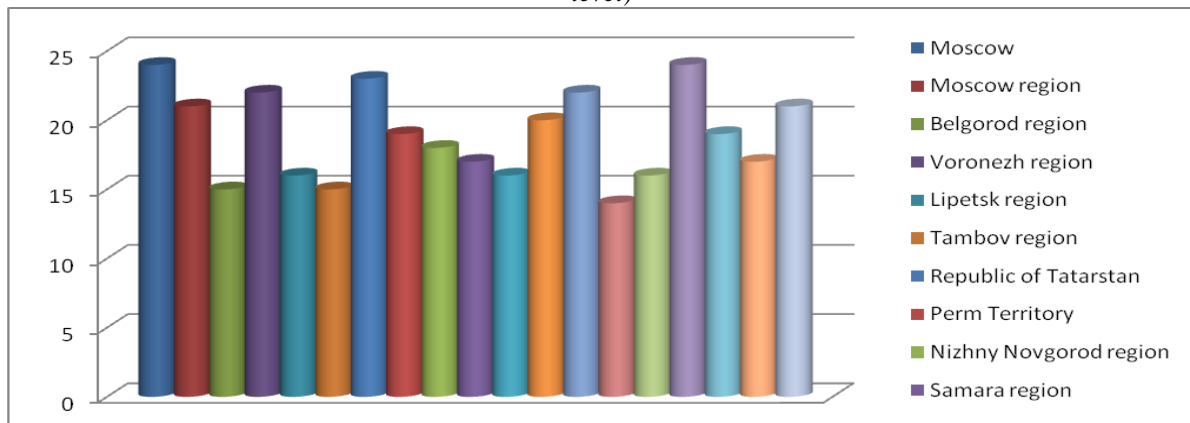
Previously, it was proved that Russia needs a number of measures to reduce social, economic and administrative barriers to the creation of favorable business environment and providing attractiveness of region for international business.

Improving the business climate at the regional level is directed, first of all, to creation of universal environment for economic activity and investment flows, with the direct involvement of the authorities and by establishing a productive dialogue "business-government" in the direction of:

- First, improving macroeconomic conditions for carrying out entrepreneurial activity, improving investment attractiveness and investment inflows;
- Second, providing access to resources (human, information, material and immaterial, etc.) and industrial infrastructure;
- Third, improve the tax environment, including reducing the tax burden on businesses;
- Fourth, improving the state regulation, including the reduction of administrative barriers;
- Fifth, development of education system;
- Sixth, improving relations between business and society.

We have made research of saturation of the regional infrastructure providing business environment for successful business development. It was found that the majority of Russian regions have the infrastructure providing the business environment for successful business development (Figure 3).

Figure 3: Saturation of regions with infrastructure facilities providing business climate, (Infrastructure support level)



Source: By author

Indicators of the business climate are analyzed for all surveyed regions, and the correlation coefficients of these parameters are calculated with each other and with the index of "Infrastructure provision of business climate in the region." The closer the correlation coefficient to one, the stronger relationship (growth of one indicator leads to an increase in the other) and, conversely, the closer it is to zero, the less dependent other indicators from each other. The calculated correlation coefficients indicate the presence of stable dependence of indicators of business climate from infrastructure provision of the region's business climate.

Our research confirms the findings presented in recent publications. C. Calderón, L. Servén in 2011 empirically established close correlation between infrastructure investments (measured in real terms) in a number of 88 countries, proving the presence of causal link between infrastructure and economic growth of regional economies. (Calderón C. et al., 2011). Brazilian researchers found that the scale of investment in infrastructure determine the size of the economic growth and business activity. (Edmund Amann et al., 2016).

However, at the regional level in the business climate assessments the condition its infrastructure should be taken into account (Popkova E.G. et al., 2013). A number of regions with rich business support infrastructure may exceed the other regions on the level of attractiveness for business and as a consequence have higher level of business activity. On the need for infrastructure development to support business objectives is known, at the same time, researchers have noted the need to develop innovative infrastructure (Jarunee Wonglimpiyarat, 2016).

Tessa Conroy et al. note that without support and stimulation of business climate, business development, including access to international market, will not be successful one (Tessa Conroy et al., 2016).

Special place in the infrastructure maintenance of the business climate in the region should be given to the presence of regional business-incubators, accelerators, technological parks and special economic zones. These innovative elements supporting entrepreneurship contribute to the growth of business activity, its integration into the international system. The presence of innovative infrastructure providing business climate let to distinguish the developed region from the developing one (Norat Roig-Tierno et al., 2015).

Studies have found that not all regions of Russia have created an efficient business support system. When comparing regional infrastructure providing business climate, it was found that

those of its members as a business accelerator is absent in Belgorod, Lipetsk, Tambov, Nizhny Novgorod, Kemerovo, Chelyabinsk and Leningrad regions, the Republic of Bashkortostan, the Khanty-Mansiysk Autonomous Okrug - Yugra, and there are technopolis in Moscow, Tambov, Irkutsk, Novosibirsk, Leningrad regions, the Republic of Tatarstan. However, the indisputable fact is that the increase of expenses for the support of business infrastructure is a driver of economic growth (Frischtak, 2013).

Some of the shortcomings identified in relation to certain regions, can not be applied in relation to information and consultation support of business. In all the regions of Russia online resources are created to provide information and consulting support to businesses, but they do not provide full-fledged dialogue between business, society and government.

The high value of online resources in business development and improving the business climate in the region is evidenced by numerous publications (Riviere et al., 2016). State may initiate the creation of public-private platforms that allows businesses to support the interests and improve the social climate (Bram Klievink et al., 2016). Edward Boon et al. note that business is increasingly using online resources to attract customers, and marketing of products; at the same time the effectiveness of the use of Internet resources is determined by the degree of trust and support of business (Edward Boon et al., 2015).

In this regard, experience of the Voronezh region is remarkable, where for the past five years, regional electronic online resource improving business climate is created and operates.

In order to improve regional business climate constructive suggestions are posted on the portal, aimed at: reduction of administrative barriers, reducing skills shortages, fight against unfair competition, inefficient judicial system, public administration, ensuring the availability of financial resources, etc. Moreover suggestions pertaining to the improvement of the region's business climate should reflect the real needs of the business and the population of those or other events, innovative products and services that meet the requirements of financial feasibility and practical realization.

Prerequisite of placement of offer on the portal for improving business climate is presence of the author's opinion about how his/her proposal will impact on improving of business climate in the region, i.e., what specific company or group of companies thanks to this proposal will be further developed and in which sectors of the economy; as well as an indication of ways to implement the proposals at the regional level.

According to the analysis of the proposals received by the portal to improve the business climate, package of the most promising ones is selected, which in the future are subjected to scrutiny in the first place with a focus on indicators of social and economic development of the region, characterizing:

First, the development of labor market, health care, social assistance and social protection, the construction industry and increasing affordability of housing, improving the quality of housing and communal services, modernization of educational system, effectiveness of state youth policy and formation of values, cultural development, improving the quality and availability of cultural services, the development of physical culture and sports, environmental protection and rational use of natural resources, ensuring safety of population and rule of law;

Second, improving the efficiency of the region's economy - efficiency of agriculture, development of industrial complex, effective use of research and education, and innovation and

technological capabilities, development of communications, information and telecommunication infrastructure, modernization of energy infrastructure;

Third, development of entrepreneurship, small and medium-sized businesses in the region;

Fourth, improvement of investment climate and attract of investments in the Voronezh region.

Assessment of the proposal allows you to build a dynamic forecast of change in social and economic development of the region, taking into account the most important factors and to determine the most efficient variant of its implementation at the regional level.

The result is the effective mechanism contributing to the successful implementation of offer, including a set of sound events, resource and time requirements.

4. Conclusions

In this regard, it can be argued that the assessment of business climate in the region should be established taking into account the infrastructure support, in terms of the availability of innovative infrastructure for business development including international one.

The main factors determining the business climate in the region is the presence of tax incentives, the cost of attracting investments and the development of business support infrastructure.

The increase in government expenditure on the creation of efficient infrastructure is an essential condition for the growth of business activity and improvement of business climate in the regions. To promote entrepreneurship, increase integration and improve business international activity at the level of Russia's regions is required a number of measures to reduce economic and administrative barriers to the formation of favorable business environment.

Informatization of society opens up new horizons for improving business climate and business growth of regions. Conducting comprehensive study of existing forms of business support and improvement of business climate, helped to recommend a mechanism, Internet portal, to improve business climate, which is a communication platform where entrepreneurs and interested citizens can report about the factors impeding or, on the contrary, contributing to the development of business activity in the region, exchange ideas, propose mechanisms for implementing the proposals. We believe that the positive experience in the creation of the portal to improve business climate in the region, is advisable to distribute in Russia, which will not only increase the level of business confidence, to implement business support measures, demanded by the real economy, but promote the growth of international business activity.

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DEMAND FORECASTING OF POSTAL SERVICES OF ČESKÁ POŠTA, S.P.

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Abstract. Česká pošta, s.p. is the traditional post service provider in the Czech Republic and it is one of the largest employer in this area. Full liberalization of the postal services sector were occurred in 2013 and activities of Česká pošta, s.p. are threatened by competitive companies in this sector. This means that the postal market was opened for the international companies (DHL, UPS, GLS, DPD) operating in the global market. The goal of Česká pošta, s.p. is to supply such products and services to maintain a stable position in a competitive market. Thorough analyse of current demand of postal services is necessary for management, because of appropriate targeting offer, that has to respond to customer requests and satisfies customer's needs. The aim of this paper is to analyse statistical data regarding of provided services of Česká pošta, s.p. in the period 2002 – 2015. The information obtained from the analysis of the realized traffic volume will be the base for the forecasting of postal services for the year 2016 that will be performed by the methods of mathematical statistics. In first step of the statistical analysis it will be recognized the trend components of the time series by the growth characteristics. If the existence of the trend component is confirmed, estimation of trend parameters will be performed. Then will be performed the chart analysis. The results from the analysis will be confirmed or disproved by the Theil's coefficient.

Keywords: postal services, demand of postal services, time series, statistical analysis

JEL Classification: C12, C15, C53, E27, L87

1. Introduction

Developing technologies enable new communications capabilities that rival postal services so that postal services are unjustly considered unpromising industry. This is a traditional communication that is not only in the individual countries of the EU granted to the national postal operator. (Gautier, Poudou, 2014, Leiren, 2015) The rise in electronic communications and the recent liberalization of the postal market in the European Union have put national postal-service providers in Central and Eastern Europe (CEE) under pressure to restructure and optimize their operations. (Tochkov, 2015) While postal monopolies used to be the main source of funding for universal service obligations, the need for alternative funding sources after full liberalization has increased the interest of regulators and the public in knowing the cost of these obligations. (Jaag, 2014) Rapid development of communication technology and trends in globalization processes lead to growing customer demands and use of alternative services in relation to traditional postal service. (Kavran, Rakic, Mostaric, 2012) Market liberalisation has a positive effect on innovation and that an increase in the market share of the competitors stimulates the investment in innovation, at least until the market share of the

competitors reaches a certain threshold. Letter volume is also significant and has a positive impact on innovation GDP per capita. (Felisberto, 2013)

Despite the rapid development of electronic communications and the transition to a global information society postal services remain part of everyday life and still plays an important role in ensuring communication between people. Undoubted growth in the supply of postal services of different providers of these services and the willingness of customers to choose from individual portfolios menus supports the view that customer loyalty is by default offered by the national postal service operator declines.

Universal service providers are usually national operators, who are owned by the state. There was also the privatization of postal services, which resulted in a reduction in the quality of universal service provision. (Schuster, 2013)

Postal operators have attempted to improve efficiency by cutting costs, whereby post offices have been closed and mail boxes dismantled, mail delivery has been cut back, and the workforce has been reduced. But these cost-saving measures have been constrained, as most national postal-service providers are state-owned or government-controlled entities that operate under the universal service obligation, which stipulates national coverage at affordable rates. (Sidak, 2015) On the market for CEP there are important factors such as customer expectations and technological advances. (Stich, 2002) The degree of competition in domestic markets and the independence of national regulatory authorities are the main factors to explain the increase in efficiency in the postal sector. (Quiros, 2011)

2. Materials and Methods

Czech Telecommunication Office (CTO), the National regulatory authority in the Czech Republic, keeps statistics about delivered and incoming mail of the company Česká pošta, s.p. Statistics are published by the CTO on their annual reports and because these information are public, we can find them on CTO's website. The statistical data about the number of delivered ordinary postal items, delivered registered postal items, delivered insured postal items and postal money orders in years 2002 – 2015 are the base for this paper. The aim of this paper is to analyse statistical data about realized traffic volume of the company Česká pošta, s.p. and forecast the demand of the postal services for the year 2016. In the first step the trend component of the time series will be investigated by the growth characteristics. Results of this analysis will be verified by using the chart analysis and the Theil's coefficient. If the time series would include the trend component, we should be able to forecast the demand of the postal services in the Czech Republic for the year 2016.

The trend estimation using the growth characteristics is based on the progress of the growth characteristics described in the Table 1. (Pojkarová, 2006)

Table 1: The trend estimation using the growth characteristics

Growth characteristics	Progress of growth characteristics	Trend
$\overline{\Delta_t}$	Approximately constant	Line
$\overline{\Delta_t}$	Approximately increasing	Parabola
$\frac{\overline{\Delta_t}}{\overline{y_t}}$	Approximately constant	Exponential

$\log \frac{\bar{\Delta}_t}{y_t}$	Linearly decreasing	Modified exponential
$\log \frac{\bar{\Delta}_t}{y_t - 2}$	Linearly decreasing	S-curve
$\log \frac{\bar{\Delta}_t}{y_t}$	Linearly decreasing	Gompertz curve

Source: Pojkarová, 2006

The trend estimation using the graphical representation is carried out in MS Excel where the time series is putted into the graph. The trend function and the value of reliability R^2 are generated from the graph. The reliability value indicates the degree of reliability of the estimated trend function and it is defined by the interval $(0,1)$. The more the value approaches 1, the more reliable trend function is. (Pojkarová, 2006)

The trend estimation using the Theil's coefficient is based on the analysis of past behavior of the time series. From the analyzed part is separated part of the observations which will be extrapolated. Respectively, the separated part is tested from the ability to predict. The degree of forecasting quality is given by the discrepancy coefficient. Discrepancy coefficient is the difference between the simulated forecast and already known reality. (Hindls et al., 2000, Hušek 2003)

Theil's coefficient is in the range 3 – 5 %, the mistake of the prediction will be considered as small and the researched model will be good tool for forecasting. If the Theil's coefficient is in the range 5 – 10 %, the further use of the model won't be excluded for the extrapolation. But if the Theil's coefficient is more than 10 %, the analyzed model won't be useful for a quality prediction. (Hindls et al., 2000, Triola 1989)

3. Results

The base for the analysis of realized traffic volume of the company Česká pošta, s.p. were the numbers of delivered ordinary postal items, delivered registered postal items, delivered insured postal items and postal money orders in the period 2002 – 2015. These variables were analysed separately. First of all mentioned methods, the trend estimation using the growth characteristics were used. According to the baseline Table 1, it was found that the time series could have an exponential trend because the value $\frac{\bar{\Delta}_t}{y_t}$ is approximately constant in each variable. In some cases, the value $\frac{\bar{\Delta}_t}{y_t}$ gives the relatively low volatility.

In the variable “delivered ordinary postal items”, the value is in the range from -0,11 to -0,02. In the variable “delivered registered postal items”, the value is in the range from -0,08 to 0,01. In the variable “delivered insured postal items”, the value is in the range from -0,37 to 0,4. And in the variable “postal money orders”, the value is in the range from -0,14 to 0,01. In the cases of the first two variables could be found the exponential trend because of the relatively low volatility in the value $\frac{\bar{\Delta}_t}{y_t}$. In the cases of the last two variables could be found

the exponential trend but the volatility isn't that low like in the first two variables. These hypotheses need to be verified by the estimation of trend parameters given by equation Eq. 1: (Hindls et al., 2000, Keller, 2003)

$$T_t = a_0 a_1^t \tag{1}$$

where $a_1 > 0$, $t = 1, 2, \dots, n$. Parameters a_0 and a_1 are calculated by the equations Eq. 2 and Eq. 3. (Hindls et al., 2000, Keller, 2003)

$$\log \hat{a}_0 = \frac{\sum (y_t^2 \log y_t) \sum (t^2 y_t^2) - \sum (t y_t^2) \sum (t y_t^2 \log y_t)}{\sum y_t^2 \sum (t^2 y_t^2) - (\sum t y_t^2)^2} \tag{2}$$

$$\log \hat{a}_1 = \frac{\sum (t y_t^2 \log y_t) \sum (y_t^2) - \sum (t y_t^2) \sum (y_t^2 \log y_t)}{\sum y_t^2 \sum (t^2 y_t^2) - (\sum t y_t^2)^2} \tag{3}$$

In case of this paper, values of the variables according to Eq. 2 and Eq. 3 were calculated as follows (see in the Table 2).

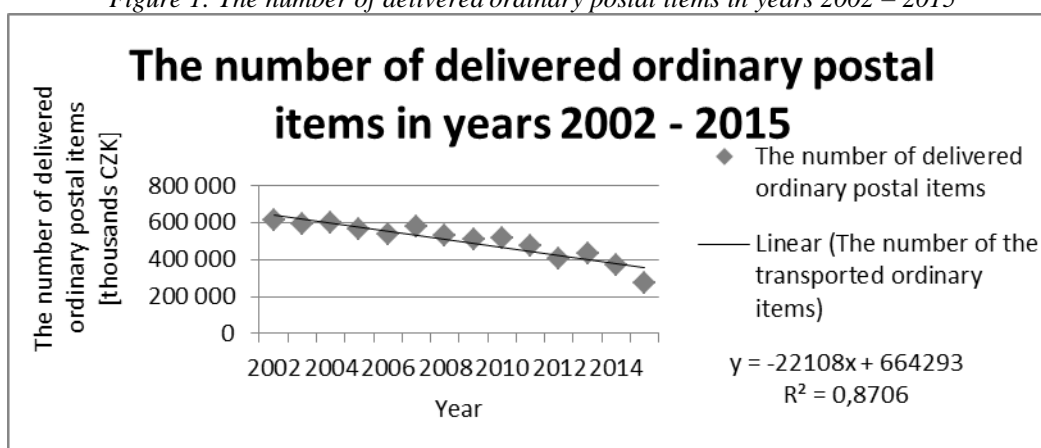
Table 2: The estimation of the trend parameters

	Delivered ordinary postal items	Delivered registered postal items	Delivered insured postal items	Postal money orders
$\log \hat{a}_0$	5,83	5,09	4,34	5,07
$\log \hat{a}_1$	-0,02	-0,01	-0,01	-0,02

Source: authors

Because of the condition belongs to the Eq. 1 ($a_1 > 0$) it can be said that the time series doesn't have the exponential trend. Subsequent method for the estimation of the trend is the graphical representation executed by MS Excel. It is mentioned on the Figures 1, 2, 3 and 4.

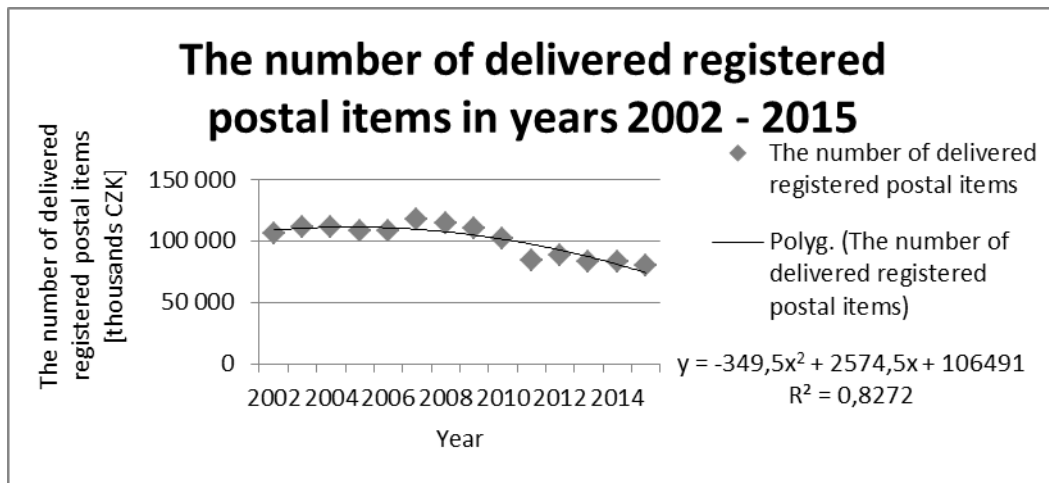
Figure 1: The number of delivered ordinary postal items in years 2002 – 2015



Source: authors

The Figure 1 shows that the number of delivered ordinary postal items has a linear decreasing trend in the period 2002 – 2015. The value of reliability R^2 is equal to 0,8706 which can be considered relevant. The Figure 2 shows the volume of delivered registered postal items in the period 2002 – 2015.

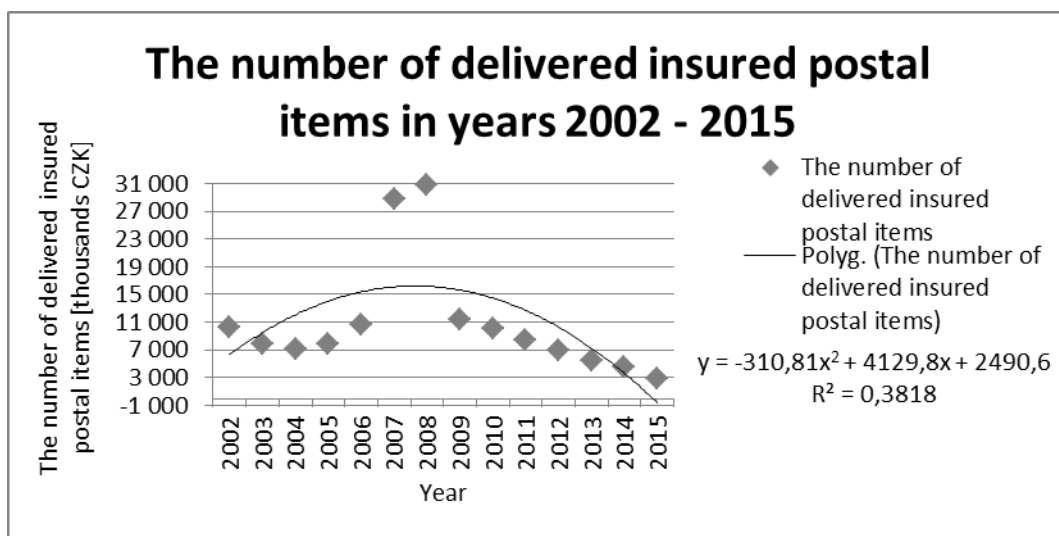
Figure 2: The number of delivered registered postal items in years 2002 – 2015



Source: authors

The Figure 2 shows a decreasing trend as the Figure 1 but the trend is polynomial with the relevant value of reliability R^2 equal to 0,8272.

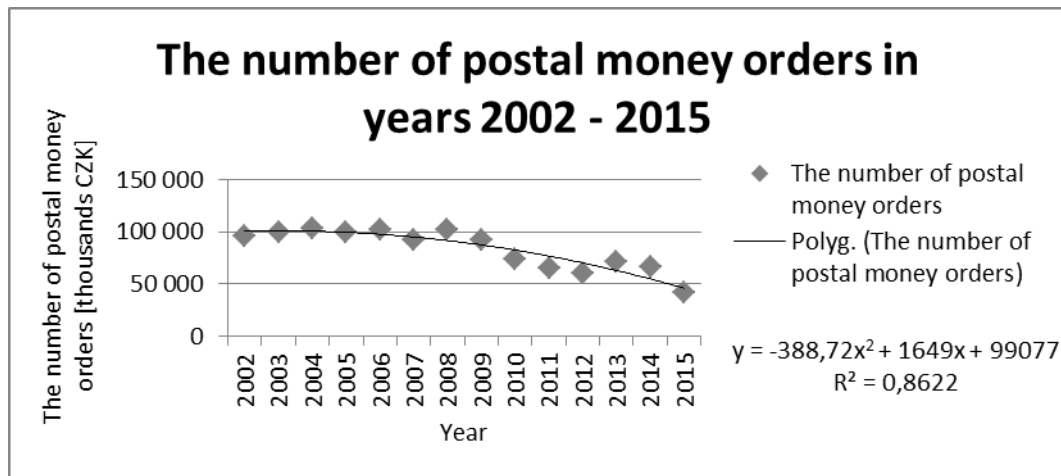
Figure 3: The number of delivered insured postal items in years 2002 – 2015



Source: authors

The Figure 3 shows the low value of reliability R^2 equal to 0,3818. It can't be clearly said that the time series of delivered insured postal items in the years 2002 – 2015 has a polynomial trend. Because the polynomial trend shows the biggest value of reliability R^2 of all trends and still it is too low, we can say that the time series of delivered insured postal items in years 2002 – 2015 has no trend. Actually it is because of the big numbers of delivered insured postal items in years 2007 and 2008.

Figure 4: The number of postal money orders



Source: authors

The Figure 4 shows that the number of postal money orders has a polynomial decreasing trend in the period 2002 – 2015. The value of reliability R^2 is equal to 0,8622 which can be considered relevant.

The trend estimation using the growth characteristics shows that in time series could be the exponential trend. The graphical representation shows that in one case could be the linear decreasing trend, in two cases could be the polynomial trend and in one case could be no trend. It is therefore appropriate to analyse the trend of traffic volume of the company Česká pošta, s.p. by least one another method. Authors of this paper chose the trend estimation using the Theil's coefficient. Authors conducted the extrapolation of the number of delivered ordinary postal items, delivered registered postal items, delivered insured postal items and postal money orders for the years 2012 – 2015 based on time series behaviour during the years 2002 – 2011 that is mentioned on the Table 3.

Table 3: The estimation of the trend using graphical representation as base of extrapolation using Theil's coefficient

	Delivered ordinary postal items	Delivered registered postal items	Delivered insured postal items	Postal money orders
The trend	Linear	Polynomial	Polynomial	Polynomial
The function	$y = -14\,095x + 627\,885$	$y = -835,27x^2 + 7\,700,9x + 97\,002$	$y = -547,68x^2 + 6\,671,8x - 2281,1$	$y = -991,79x^2 + 7\,747,6x + 88\,278$
The value of reliability (R^2)	0,8771	0,7232	0,2775	0,8865

Source: authors

The Table 3 shows the low value of reliability in the case of delivered insured postal items. It can't be clearly said that the time series of delivered insured postal items from the years 2002 – 2011 has a polynomial trend and the extrapolation for the years 2012 – 2015 can't be clearly used. A proof of this is value of Theil's coefficient which is equal to the value 5,35. Relative error of extrapolation is equal to 231,29 %. Definitely we can say that the analysed model of delivered insured postal items is not useful for quality prediction according to the Theil's coefficient. The Table 3 confirms the trend of delivered ordinary postal items, delivered

registered postal items and postal money orders described on Figures 1, 2 and 4. The Theil's coefficient of delivered ordinary postal items is equal to 0,07 and the relative error of extrapolation is equal to 25,63 %. In the case of delivered registered postal items, the Theil's coefficient is equal to 0,09 and the relative error of extrapolation is equal to 29,87 %. And in the last case, postal money orders, the Theil's coefficient is equal to 0,32 and the relative error of extrapolation is equal to 56,20 %. The high level of relative errors of extrapolation means that the analysed models are not useful for quality prediction according to the Theil's coefficient.

4. Conclusion

Although the role of postal services varies with how some of them are being replaced due to new technologies and electronic services as the number of purchases via the Internet, they remain essential. Ability to send correspondence and packages that are in a given period and for a given price delivered to all parts of the country not only to continue to contribute to the social, economic and territorial cohesion. Česká pošta, s.p. continue to perform the function of the operator providing the universal service. Its endeavor is to keep its customers and due to the unfavorable situation on the market for postal services, which is caused by the liberalization of the market and the emergence of new competitors. Expands its range of services, improves the delivery of postal items, whether it is speed or time of delivery.

The goal of this paper was to analyse the traffic volume of the company Česká pošta, s.p. as one of the largest employers in the Czech Republic. The analysis was focused on the time series of delivered ordinary postal items, delivered registered postal items, delivered insured postal items and postal money orders that were found in the CTO's annual reports. The time series were thoroughly analysed by three methods of mathematical statistics to the estimation of the trend.

The method of the trend estimation using the growth characteristics shows the existence of the exponential trend of time series. In the second time, this hypothesis was rejected during the estimation of the parameters of the exponential trend function. The trend estimation using the graphical representation rejected the exponential trend too and by this method was found a linear trend in the time series of delivered ordinary postal items, a polynomial trend in the time series of delivered registered postal items and postal money orders and no trend in the time series of delivered insured postal items. Due to discrepancy of two mentioned methods of the trend estimation were used the third method – the estimation of the trend using Theil's coefficient. This method shows similar results like the estimation of the trend using graphical representation. The most important was the value of Theil's coefficient, respectively the relative error of extrapolation that was in each case higher than 10 %. It means that the analysed models are not useful for quality prediction.

Finally it can be concluded that traffic volume of the company Česká pošta, s.p. can't be predicted. But Česká pošta, s.p. can expected the decreasing trend according to the graphical representation. This may be caused by increasing competition in the market of postal services.

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INDIA'S QUEST FOR BECOMING GLOBALLY COMPETITIVE: AN AGENDA FOR ACTIONS

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Abstract. India is the second most populous country in the world with a population of more than 1.2 billion people. At the time of independence from British colonial rule in 1947, India was desperately poor. The country's leaders chose socialist democracy philosophy for the country with a commanding role for the government. A regime of bureaucratic controls involving licenses and permits was established to govern economic activity. The economy was closed from the outside world and industries were directed to focus on import substitution. The rate of growth in GDP was quite low until the end of the 1980s. Triggered by an economic crisis in 1991, the government liberalized the economy and started a process of aligning with the global economy. In the last 25 years since liberalization, the Indian economy has made rapid strides and is now one of the fastest growing countries in the world. However much needs to be done to make India an advanced and globally competitive country. This paper highlights the key actions necessary to be undertaken by the Indian government, by corporations and organizations in India and by private citizens. The paper is based on a review of academic literature and interviews with policy makers, intellectuals, business executives, entrepreneurs and ordinary citizens.

Keywords: globalization, competitiveness, India, policy, strategy

JEL Classification: F63, O10, P47

1. Historical background of the Indian economy

India is home to more than 1.2 billion people and is second only to China in terms of population. When India became independent from British colonial rule in 1947, it was one of the poorest countries in the world. Life expectancy and literacy rate were very low and food supply was inadequate and there was very little infrastructure. Independent India's leaders adopted a socialist economic philosophy and the government assumed a major role in economic affairs through the implementation of centralized planning focusing on areas such as heavy industry and irrigation. The overall thrust of economic policy was to develop self-reliance by building high tariff walls, discouraging imports, creating dominating public sector companies and strictly regulating the private sector. There were no incentives to firms for improving quality, enhancing production or becoming efficient, so in the decades from the 1950s to the 1970s, India's economic growth remained well below 3,5% per annum. During this period however, India's population grew at a rapid pace from about 361 million in 1951 to 846 million in 1991, hence overall poverty remained pervasive.

India experienced a major balance of payments crisis in the beginning of the 1990s. In order to avoid defaulting on external debt, the government introduced a significant dose of

liberalization in 1991. The currency was devalued, industrial licensing was dismantled, many sectors were opened to the private sector, the economy was opened to foreign competition, import tariffs were progressively rationalized, and the currency was made convertible on the current account (Ahluwalia, 2006). The liberalization policies led to a sharp increase in the growth rate of India's GDP from 1992 onwards with the annual growth ranging between 5,6 and 10,3 percent from 1992 to 2015. GDP per capita increased from USD 309 in 1991 to USD 1581 in 2015 and GDP per capita on a purchasing power parity increased from USD 1160 to 6020 during this period (World Bank, 2016).

2. India's present level of competitiveness

The evaluation of a country's global competitiveness involves comparing the country with other countries across appropriate parameters. The World Economic Forum (WEF) has developed a global competitiveness index which ranks countries on overall competitiveness. There has been criticism that the WEF's index has problems related to assumptions and model specifications (Lall, 2001; Bergsteiner & Avery, 2012), but the index is easy to understand and is widely used to analyse the competitiveness of nations. According to the WEF index rankings published for 2015-16, India is ranked 55th in the world, having improved 16 places from 71st in the previous year (WEF, 2016). Among the BRICS countries, India (55) is ahead of Brazil (75) but behind China (28), Russia (45) and South Africa (48). There are several positive aspects related to India's performance on the global competitiveness index but there are also many challenges that the country needs to address. India's competitive strengths are in the areas of large domestic market size, high level of gross national savings, strong investor protection, buyer sophistication, venture capital availability and low burden of government regulation. India's competitive weaknesses are in the areas of law and order, poor telephone infrastructure, unbalanced government budget, poor health care, high infant mortality, large number of procedures and delays in starting a business, low internet and broadband availability, high level of imports, low level of exports and meagre participation of women in the workforce. India needs to make concerted efforts to remedy specific weaknesses in order to improve its global competitiveness.

3. Literature review on competitiveness

There are several frameworks and models of competitiveness in the academic literature. Dong-Sung and Moon (1998) have suggested that there are four stages in the economic development of nations and the sources of international competitiveness in each stage are based on three factors – physical factors, human factors and government. As countries move from the less developed, developing, semi-developed to the developed stage, their sources of competitiveness change from untrained workers and natural resources to advanced infrastructure and professional workforce.

Fagerberg, Srholec and Knell (2007) propose that national competitiveness depends on competitiveness of technology, capacity and demand. Technology competitiveness is enhanced by innovation as reflected in patents, information technology and communication infrastructure; capacity competitiveness can be improved through better educational facilities, availability of markets and financial institutions, and quality of government; while demand competitiveness depends on specialisation and the growth of particular sectors because of

innovative products. Based on this framework, India must improve its innovativeness by investing in research, encouraging publication of articles in scientific and technical journals, and filing of more patents. India must also improve capacity competitiveness by increasing enrolment in secondary and tertiary education, strengthening the financial system and improving governance.

Porter (1990) developed a four factor diamond model for analysing a country's competitiveness. The four factors in Porter's model are factor conditions, demand conditions, related and supporting industries and amount of rivalry in the home market. Strength of these factors, supportive government policy, and chance can enable a country to become competitive in specific industries and industry sectors. Porter's framework was extended by Rugman and D'Cruz (1993) through their creation of the double diamond framework in which the home country diamond of four factors is considered alongside a similar diamond for the host country with which it is trading. In the Rugman and D'Cruz framework, competitiveness does not depend on just home country conditions alone since firms can tap into the competitive diamond of the host country to become more competitive. Rugman, Oh and Lim (2012) have conducted empirical research on national, home region and global competitiveness of a few countries from North America, Europe, and the Asia-Pacific regions. Their analysis suggests that India has a higher level of global competitiveness than its national and home region competitiveness; hence, they imply that Indian firms can improve their competitiveness by aligning with country-specific advantages of the foreign countries to overcome handicaps of low national competitiveness.

Researchers have identified a number of factors that impact competitiveness. Zhang (2010) has found that participation in the global economy via foreign direct investment and trade increases industrial competitiveness of nations. Boulota and Pitelis (2014) found that corporate social responsibility performance impacts country competitiveness especially in countries with a low innovation record. Ng and Metz (2015) suggest that based on the experience of countries such as Canada and Australia, the use of multi-culturalism as a public policy can enhance national competitiveness. Thomson (2004) found that institutional conditions had greater impact on national competitiveness than cost conditions. According to Adams, Gangnes and Schachmurove (2006), China is competitive because of its large pool of low cost labour, good transport and communication infrastructure, large domestic market, facilitative trade policies, substantial inward foreign direct investment and improving quality and design. Montalbano and Nenci (2014) have found through cluster analysis that emerging countries such as India and China do not form part of the same trading group as the developed countries and are hence not a threat to the developed countries.

The academic literature also contains several direct suggestions for improving India's global competitiveness. Sheth (2004) recommends that India must make changes in industrial policy, build national infrastructure, strengthen domestic industry and engage more in international trade. Ahluwalia (2006) has indicated that India needs to improve the growth rate of agriculture, strengthen education and health services, delegate more responsibility for outcomes to the states and local bodies, and reform labour laws. Kumar (2014) has proposed that India's manufacturing policy needs to be revisited in order to increase the share of manufacturing. He calls for action by the Indian industry to train workers, increase self-regulation against corrupt practices of firms, nurture suppliers, and avoid cartelisation. Kumar also highlights the need for the government to reform restrictive labour laws, improve

electricity supply, simplify regulatory requirements related to land and environment and enhance bank credit to industrial units.

4. What India needs to do to improve competitiveness

A series of interviews were undertaken by the author to find out what various groups of people in India think about the ways and means of improving India's competitiveness; interviews were carried out with policy makers, professors, corporate executives, business owners and with citizens. The interviews were carried with two open-ended questions, the first question being as follows:

1. What should be the focus areas of the government in the economic, social and human spheres in order to make India more competitive?

The five areas mentioned most often in response to this question are the following.

Table 1: Focus Areas for India

No.	Focus Area
1.	Governance, law and order
2	Employment for the young job seekers
3	Improvement of agricultural productivity
4	Infrastructure
5	Science and technology

Source: Interviews, own processing

The second question asked in the interviews was as follows:

2. What are some specific actions that should be taken by the government, by companies and by private citizens to make India more competitive?

Many suggestions were obtained in response to this question; some of the specific ones are shown in Table 2.

Table 2: Responsibilities of various entities

Government	Companies and educational institutions	Private citizens
<ul style="list-style-type: none"> ▪ Labour law reform ▪ Reform in land acquisition procedures ▪ Plug leakages in government spending ▪ Improve primary and secondary education ▪ Provide water and sanitation ▪ Improve health care ▪ Urban development ▪ Achieve human development goals 	<ul style="list-style-type: none"> ▪ Invest in training ▪ Improve quality ▪ Ethical behaviour ▪ Invest in research ▪ Develop technology 	<ul style="list-style-type: none"> ▪ Keep surroundings clean ▪ Live harmoniously ▪ Respect women ▪ Protect and educate girl children

Source: Interviews, own processing

5. Conclusion

India is moderately competitive and is ranked 55th among 140 countries in the WEF global competitiveness index for 2015-16. In this paper, the academic literature on competitiveness was reviewed in order to identify areas for improvement in India's competitiveness. The ideas from literature were supplemented by interviews with people from different walks of life to define the focus areas for India and to understand the roles of government, companies and citizens in making India more globally competitive. One of the limitations of this paper is that the data is based on qualitative, interview-based research and hence does not indicate priorities in a quantitative manner. Future research could be carried out using survey methodology in order to obtain quantitative perspectives.

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FINANCING OF SLOVAK SMALL AND MEDIUM SIZED ENTERPRISES IN GLOBALISING ENVIRONMENT

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Abstract. Small and medium sized enterprises play a significant role in the economic development and growth of nations. Globalisation has made economies and businesses become more independent for survival and growth. With globalisation intensifying countries are becoming increasingly for international exchange of goods, services, economic growth and sustainability. SMEs are very vulnerable to fluctuations and unexpected changes of global business environment despite of their special features such as dynamics, flexibility and narrow specialization. The outbreak of the global financial and economic crisis was an external shock that seriously threaten existence of SMEs in European Union. SMEs were affected by the rapid decline in demand for goods and services and by tightening in credit conditions. Confronted with worsening access to credit, SMEs were forced to use alternative source of finance such as the mobilisation of reserves or self-financing. Access to financing continues to be one of the most significant challenges for the creation, survival and growth of SMEs in a globalising environment. According to European Commission and European Central Bank surveys access to finance for SMEs is not such significant problem as it was during the crisis period. SMEs are currently facing significant problems as finding customers, availability of skilled staff or experienced managers. The aim of this paper is to briefly summarize the views of selected authors and results of surveys about the access to finance for European SMEs and present the results of an own empirical survey about financing of SMEs in Slovakia.

Keywords: globalisation, global financial and economic crisis, financing, small and medium sized enterprises.

JEL Classification: G01, G20, G30

1. Introduction

Financovanie podnikov je jednou z najdôležitejších funkcií finančného riadenia podnikov, ale aj nevyhnutnou podmienkou pre ich prežitie a rast. Prístup k finančným zdrojom je kľúčovým predpokladom rozvoja sektora malých a stredných podnikov tak na Slovensku, ako aj v ostatných krajinách EÚ (Sedliačiková et al., 2012). Malé a stredné podniky (ďalej len

“MSP”) vzhľadom na svoje charakteristické črty majú rozdielne potreby v oblasti financií v porovnaní s veľkými podnikmi. Nedostatok finančných zdrojov a obmedzený prístup k cudzím finančným zdrojom (najmä bankovým úverom) sú zároveň považované za najvýznamnejšie prekážky v rozvoji podnikania MSP (Liu, 2014; Majtan & Sinsky, 2014). Podľa Musu et al. (2015) a Fetisovovej et al. (2014) patrí obmedzený prístup k finančným, resp. úverovým zdrojom k štandardným problémom MSP. Sobeková Majková (2011) a Kliešтик & Dengov (2015) dodávajú, že tento obmedzený prístup je zapríčinený najmä vysokou rizikovosťou MSP. Rupeika-Apoga (2014) zdôrazňuje, že prístup k finančným zdrojom silno závisí od stupňa rozvoja spoločnosti, t.j. čím väčšia a oboznámejšia je spoločnosť so širšími možnosťami, ktoré má k dispozícii.

Podľa Belanovej (2015) situácia, keď významný podiel MSP nemôže naplniť svoje finančné potreby – nemôže získať finančné zdroje prostredníctvom bankového sektora, kapitálových trhov, resp. ostatných dodávateľov finančných zdrojov, sa označuje ako finančná medzera MSP (SME Financing Gap). Ako príčiny jej vzniku OECD (2006) uvádza, že poskytovatelia externých finančných zdrojov majú ťažkosti s posudzovaním finančnej situácie podniku a majiteľov, ako i menej intenzívny vzťah medzi MSP a finančnými trhmi (MSP často získavajú finančné zdroje z neformálnych prameňov). Významným aspektom podnecujúcim finančnú medzeru sú asymetrické informácie. V MSP je informačná asymetria vyššia, čo znižuje ich šancu na získanie finančných zdrojov v porovnaní s veľkými podnikmi. Významný faktor, ktorý do veľkej miery ovplyvňuje intenzitu a charakter finančnej medzery, je krajina, v ktorej MSP pôsobia (jej makroekonomické prostredie, inštitucionálny a právny rámec, finančný systém atď.) (Belanová, 2014, A; Belanová, 2014, B)

Podľa Európskej komisie (2015) MSP v Európskej únii v súčasnosti považujú za najnaliehavejší problém v podnikaní nedostatok zákazníkov (25 %). Ďalšími bariérami v podnikaní sú dostupnosť kvalifikovanej pracovnej sily a manažmentu (18 % MSP), konkurencia (14 % MSP), výrobné náklady a náklady na pracovnú silu (13 % MSP) a regulácia (13 % MSP). Prístup k finančným zdrojom je prekážkou len pre 10 % európskych MSP.

Aj výsledky prieskumu Európskej centrálnej banky (2015) naznačujú, že MSP v eurozóne boli najmenej znepokojené prístupom k finančným zdrojom ako prekážkou podnikania v porovnaní s inými faktormi súvisiacimi s ich podnikateľskou činnosťou. Prístup k finančným zdrojom je menej významnou prekážkou v podnikaní pre MSP v eurozóne (11 %), kým hľadanie zákazníkov zostáva dominantnou prekážkou podnikania (25 %). Medzi ďalšími významnými prekážkami sa vyskytli nedostatok kvalifikovanej pracovnej sily, rastúce výrobné náklady a náklady na pracovnú silu, konkurenčný tlak a regulácia.

Z výsledkov prieskumu Slovenskej obchodnej a priemyselnej komory (2016) taktiež vyplýva, že MSP na Slovensku považujú za najvýznamnejšie prekážky vo svojom podnikaní vysoké daňové a odvodové zaťaženie, nízku vymožitelnosť práva, klientelizmus a korupciu pri verejnom obstarávaní. Podnikateľská sféra na Slovensku dlhodobo čelí týmto problémom, čo potvrdzuje aj poradie ich významnosti, ktoré sa nezmenilo od roku 2007.

2. Základné charakteristiky prieskumu

Predmetom prieskumu bolo zmapovanie jednotlivých spôsobov financovania MSP, realizovaných z externých zdrojov. Cieľom prieskumu bolo zhodnotenie využívania externých

foriem financovania MSP na Slovensku v období rokov 2008 až 2015. Súčasťou analýzy využívania externých foriem financovania bolo vyhodnotenie reprezentatívneho prieskumu využívania externých foriem financovania MSP, realizovaného na vzorke 214 MSP v októbri a novembri 2015. Prieskum bol realizovaný dotazníkovou formou.

Najviac podnikov zapojených do prieskumu pochádzalo z Bratislavského (26,17 %), Trnavského (13,55 %), Banskobystrického (12,15 %) a Žilinského kraja (11,21 %). Zastúpenie podnikov z ostatných krajov bolo relatívne rovnomerné, t.j. Nitriansky (9,81 %), Košický (9,35 %), Prešovský (8,88 %) a Trenčiansky kraj (8,88 %).

Z hľadiska odvetvovej štruktúry mali vo výberovom súbore najpočetnejšie zastúpenie priemyselné a stavebné podniky, ktoré boli zastúpené rovnakým podielom (25,70 %). Druhú najpočetnejšiu skupinu tvorili podniky v oblasti veľkoobchodu, maloobchodu, opráv motorových vozidiel a motocyklov (17,29 %). Treťou skupinou s najväčším zastúpením v súbore boli podniky v oblasti poľnohospodárstva, lesníctva a rybolovu (12,62 %).

Z hľadiska veľkostného kritéria mali najpočetnejšie zastúpenie v prieskume malé podniky (43,93 %) a mikro podniky (38,32 %). Najmenšie zastúpenie vo výberovom súbore mali stredné podniky (17,76 %).

3. Výsledky prieskumu

Viac ako polovica MSP zapojených do prieskumu (57,0 %) využívala cudzie finančné zdroje (bankový úver, lízing, atď.), kým zvyšných 43,0 % tvorili MSP s prevahou vlastných finančných zdrojov. V tabuľke 1 uvádzame prehľad intenzity využívania cudzích finančných zdrojov MSP v období rokov 2008 až 2015. Tabuľka bola spracovaná na základe vyhodnotenia škálovej otázky v dotazníku. Jednotliví respondenti mali pomocou 5-stupňovej hodnotiacej škály určiť intenzitu využívania jednotlivých cudzích finančných zdrojov, pričom jednotlivým stupňom boli pridelené váhy: 1 = žiadna intenzita, 2 = slabá intenzita, 3 = stredne silná intenzita, 4 = vysoká intenzita, 5 = veľmi vysoká intenzita.

Table 1: Intenzita využívania cudzích finančných zdrojov MSP v rokoch 2008 až 2014

Finančný zdroj / Hodnotiacia škála	1	2	3	4	5	Vážený ²⁶ priemer
Povolené prečerpanie bankového účtu	43,69%	15,53%	18,45%	12,62%	9,71%	2,21
Bankový úver	25,00%	17,31%	36,54%	9,62%	11,54%	2,65
Ostatné pôžičky (od rodiny, známych)	63,37%	15,84%	10,89%	8,91%	0,99%	1,68
Lízing	36,89%	21,36%	31,07%	5,83%	4,85%	2,20
Faktoring	91,92%	4,04%	3,03%	1,01%	0,00%	1,13
Forfaiting	98,00%	2,00%	0,00%	0,00%	0,00%	1,02
Dodávateľský úver	75,76%	5,05%	13,13%	2,02%	4,04%	1,54
Obchodný úver	89,00%	3,00%	3,00%	4,00%	1,00%	1,25
Zmenka	95,00%	2,00%	2,00%	1,00%	0,00%	1,09
Preddavky od odberateľov	71,00%	18,00%	10,00%	1,00%	0,00%	1,41

²⁶ Pri výpočte váženého aritmetického priemeru sme použili váhy a hodnoty sme následne vynásobili percentuálnym podielom odpovedí pri konkrétnom finančnom zdroji pri konkrétnej hladine významnosti.

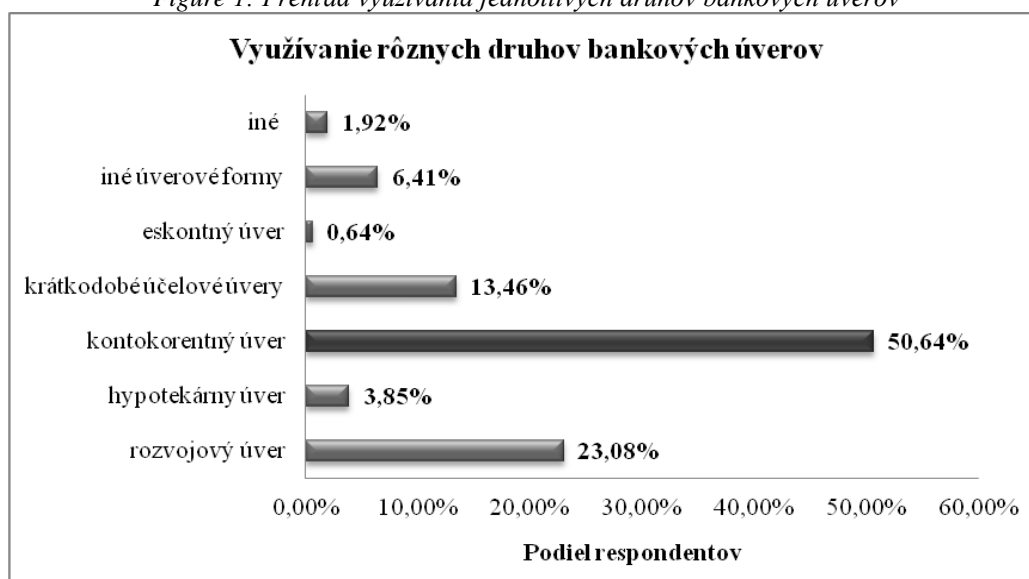
Iné	98,00%	0,00%	2,00%	0,00%	0,00%	1,04
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Source: vlastné spracovanie

Z tabuľky a z poradia vážených priemerov pri jednotlivých cudzích finančných zdrojoch vyplýva, že MSP najintenzívnejšie využívali bankový úver, povolené prečerpanie bankového účtu a lízing.

V prieskume sme sa zamerali aj na využívanie jednotlivých druhov bankových úverov MSP na Slovensku. Prehľad využívania jednotlivých druhov bankových úverov MSP uvádzame v nasledujúcom grafe.

Figure 1: Prehľad využívania jednotlivých druhov bankových úverov

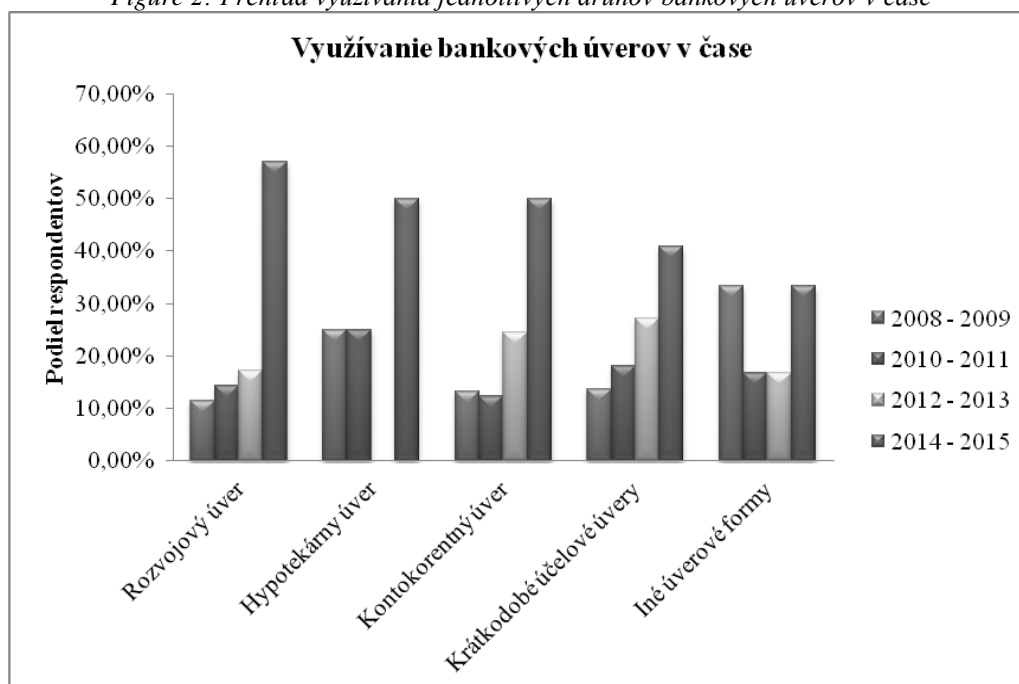


Source: vlastné spracovanie

Vychádzajúc z grafu môžeme konštatovať, že najvyužívanejším druhom bankového úveru medzi MSP (50,64 %) bol kontokorentný úver. Nie je to prekvapujúcim zistením, pretože tento druh krátkodobého úveru poskytujú banky formou povoleného debetu k bankovému účtu a podnik ho môže použiť okamžite na financovanie svojich prevádzkových potrieb. Na poskytnutie tohto druhu úveru banky do určitej výšky úverového limitu nekladú prísne požiadavky, nepožadujú zabezpečenie, či preukazovanie účelu použitia úveru. Rozvojový úver bol druhým najčastejšie využívaným úverom medzi MSP (23,08 %). Tretím najvyužívanejším úverom boli krátkodobé účelové úvery (13,46 %). Iné úverové formy (devízové úvery, úvery na otvorenie akreditívu, na krátkodobé preklopenie nedostatku vlastných zdrojov, atď.) využilo 6,41 % MSP. Hypotekárny úver čerpalo 6 MSP a 3 MSP čerpali iné druhy bankových úverov, t.j. prevádzkový, stavebný a revolvingový úver. Jeden MSP využil eskontný úver.

V nasledujúcom grafe prezentujeme využívanie jednotlivých druhov bankových úverov MSP v období rokov 2008 až 2015.

Figure 2: Prehľad využívania jednotlivých druhov bankových úverov v čase

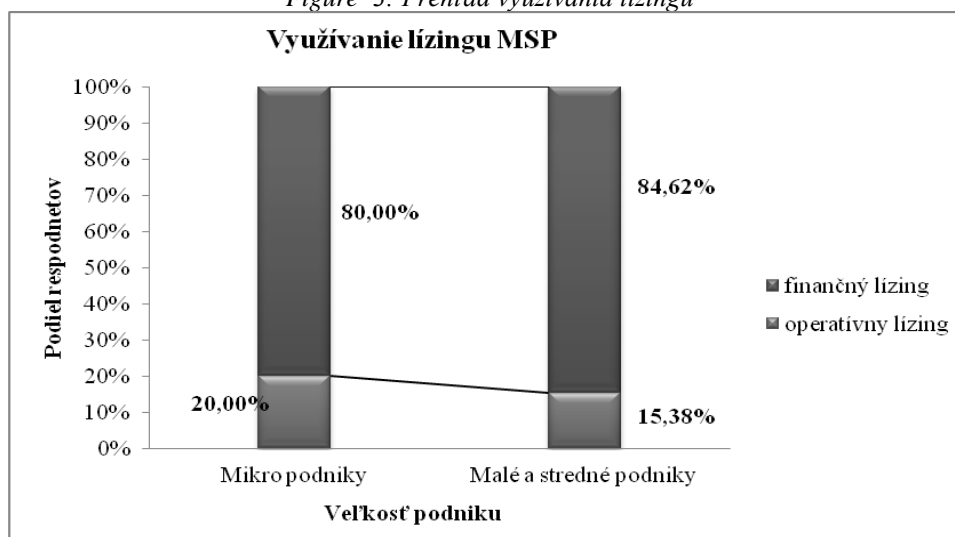


Source: vlastné spracovanie

Vychádzajúc z grafu môžeme pri využívaní kontokorentného úveru MSP v priebehu rokov 2008 až 2015 pozorovať rastúci trend. Rovnaký trend zaznamenávame aj pri využívaní rozvojového úveru a krátkodobých účelových úverov medzi MSP.

V poslednej časti prieskumu sme sa zamerali na využívanie lízingu MSP, pričom sme sa zamerali na parametre ako druh lízingu a účel použitia lízingu. V nasledujúcom grafe prezentujeme prehľad využívania lízingu MSP.

Figure 3: Prehľad využívania lízingu



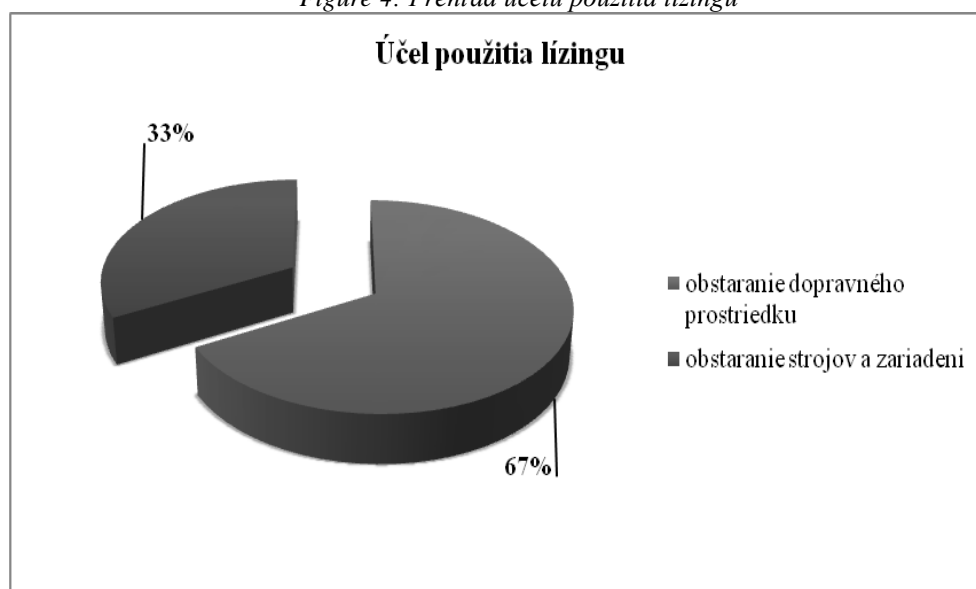
Source: vlastné spracovanie

Z hľadiska využívania jednotlivých foriem lízingu bol finančný lízing častejšie využívaný ako operatívny lízing. Približne 84,62 % MSP naposledy využilo finančný lízing a len 15,38 % MSP využilo operatívny lízing. Z hľadiska veľkostných kategórií podnikov využilo lízing 72,2

% MSP a zvyšných 27,8 % tvorili mikro podniky. Keď sa pozrieme na využívanie operatívneho lízingu medzi mikro podnikmi a MSP, zistíme, že rozdiel je zanedbateľný – 5 mikro podnikov a 10 MSP. Významnejší rozdiel zaznamenávame pri využívaní finančného lízingu, ktorý využilo 55 MSP a 20 mikro podnikov.

Účely použitia lízingu nie sú také rozmanité v porovnaní s účelmi použitia bankových úverov. Väčšinou sa lízing používa na obstaranie dopravného prostriedku a obstaranie strojového vybavenia pre výrobu. V porovnaní s bankovým úverom sa lízing nevyužíva na úhradu faktúr, obstaranie zásob či prevádzkové účely. V nasledujúcom grafe uvádzame prehľad účelu použitia lízingu MSP.

Figure 4: Prehľad účelu použitia lízingu



Source: vlastné spracovanie

Na obstaranie dopravného prostriedku využilo lízing až 67,0 % MSP. Na obstaranie strojového zariadenia túto formu financovania využilo zvyšných 33,0 % MSP.

4. Conclusion

Bankový úver je dominantným cudzím finančným zdrojom využívaným MSP na Slovensku. Najčastejšie využívaným bankovým úverom je medzi MSP kontokorentný bankový úver (povolené prečerpanie bankového účtu), ktorý je relatívne ľahko dostupný, ale patrí zároveň k najdrahším bankovým úverom. Mikro podniky a malé podniky by v budúcnosti mohli využiť mikropôžičku ako substitút kontokorentného bankového úveru. Mikropôžička je určená podnikateľom, ktorí zamestnávajú menej ako 50 zamestnancov, pričom minimálna výška úveru je 2 500 € a maximálna výška je 50 000 €. Doba splatnosti mikropôžičiek sa pohybuje v intervale od 6 mesiacov do 4 rokov. Poskytovateľom mikropôžičiek je Slovak Business Agency a Slovenská záručná a rozvojová banka. Výhodou mikropôžičiek v porovnaní s bankovým úverom je ich dostupnosť pre podnikateľov bez podnikateľskej histórie a podnikateľov, ktorí majú problém získať úver v komerčných bankách.

Vzhľadom na výsledky nášho prieskumu môžeme konštatovať, že bankové financovanie medzi MSP na Slovensku prevláda a bude aj naďalej dominantným zdrojom financovania podnikov na Slovensku.

Pre menšie a začínajúce podniky sa môžu javiť ako perspektívnejšie nové alternatívne formy financovania, ako napr. crowdfunding alebo peer-to-peer lending, ktoré sa čoraz viac dostávajú do povedomia slovenských podnikov. Spoločným znakom oboch je obchádzanie tradičného sprostredkovateľa a priame financovanie drobnými investormi cez online internetové platformy.

Pozitívnym zistením je aj skutočnosť, že MSP v EÚ nevnímajú prístup k finančným zdrojom ako najvýznamnejšiu prekážku pri svojom podnikaní.

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INNOVATIVE APPROACHES IN A SOCIALLY RESPONSIBLE MARKETING IN A GLOBAL ENVIRONMENT

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Abstract. Under the pressure of rapid changes in the marketing environment, with an increasing globalization, intensive competition, number of social, economic and environmental problems in the world, the companies are forced to reassess their business and marketing approaches. Many successful companies have already realized that they must have a sense of responsibility not only for their business activities but also for the development of the whole society. Responsible behaviour cannot be just a one-off random “action”. This often requires a fundamental change in thinking of owners, managers and employees of companies in the ethical, social and environmental area; it must be long-term and consistent business philosophy. On that basis the paper focuses on selected innovative approaches in socially responsible marketing in a global environment – environmental marketing and cause related marketing. The aim is to define the essence of those approaches and indicates the application potential of them in the practice of companies. The environmental marketing is responding to the current negative trends in the natural environment and to the requirements of developing segment of environmentally oriented consumers. Cause related marketing is the commercial activity through which the company and non-profit organisation create a partnership in order to promote the image, product or service because of mutual benefit and together they contribute to the promotion of “good things” or to solving some of societal problem. The selected results of exploratory surveys are included, in which we focused on examining of companies responsible marketing activities effects on consumer decision processes and behaviour.

Keywords: globalization, corporate social responsibility, socially responsible marketing, environmental marketing, cause related marketing

JEL Classification: M14, M30, M31

1. Teoretické východiská skúmanej problematiky

Spoločensky zodpovedné podnikanie je pojem, ktorý už niekoľko dekád vzbudzuje veľkú pozornosť a stáva sa akýmsi fenoménom súčasnej doby. Z terminologického hľadiska sa definuje ako záväzok podnikov naplňovať také stratégie, robiť také rozhodnutia a vykonávať také aktivity, ktoré budú žiaduce z pohľadu celej spoločnosti a jej hodnôt (Bowen, 1953). Zelená kniha Európskej komisie chápe spoločenskú zodpovednosť podnikov ako dobrovoľné

integrovania sociálnych a ekologických hľadísk do podnikových operácií a do interakcií s firemnými stakeholdermi (Hes & Regnerová, 2013; Majerová & Križanová, 2015).

Súčasný trh sa v ostatných rokoch výrazne menia v dôsledku dôležitých, niekedy navzájom prepojených spoločenských síl, ktoré vedú k vytváraniu nových modelov správania, nových možností a výziev (Minárová et al., 2015). Meniace sa technológie, globalizácia, deregulácie, posilnenie pozície zákazníka, neustále sa zvyšujúca konkurencia, kustomizácia, rozvoj „internetovej spoločnosti“ – to sú len niektoré faktory, ktoré ovplyvňujú výber filozofie, ktorou by sa malo riadiť úsilie podnikateľských (ale aj ostatných) subjektov v trhovom prostredí.

Paralelne s vývojom koncepcie zodpovedného podnikania a pod vplyvom vyššie uvedených faktorov sa menilo i vnímanie marketingu podniku. Uvedenie si dôležitosti spoločenskej zodpovednosti, no tiež benefitov, ktoré z jej uplatňovania vyplývajú, sa pretavilo do všetkých oblastí podnikania, aj do oblasti marketingu podniku (Hildebrand & Sankar, 2011). Spoločensky zodpovedný marketing, označovaný tiež ako spoločenský, futurologický, spoločensko-etický či spoločensko-priateľský marketing, predstavuje koncepciu založenú na zosúladovaní a uspokojovaní potrieb spotrebiteľov s dlhodobými záujmami celospoločenského významu (Poliačiková, 2007). Obhajcovia tejto koncepcie považujú za dôvod jej vzniku zmenu vnímania pôvodnej marketingovej koncepcie, ktorej podstatou bolo vyrábať to, čo chcú v danom momente spotrebovať zákazníci, s cieľom čo najefektívnejšie uspokojiť ich impulzívne túžby. Poskytovanie produktov a služieb zameraných na uspokojenie aktuálnych potrieb, však môže mať negatívne dôsledky na ich dlhodobé záujmy, kvalitu života, ich blahobyt, no tiež na životné prostredie, vyčerpanie ekonomických zdrojov a spoločnosť ako takú. Na druhej strane presadzovanie záujmov spoločnosti a izolované marketingové rozhodovanie na základe dlhodobých dopadov podnikania na blahobyt ľudí, je taktiež nemožné. V takomto prípade, by dochádzalo k výrobe výrobkov a poskytovaniu služieb, ktoré by neboli žiadané zo strany trhu, pretože by ignorovali potreby zákazníkov (Feldman, 1971; Kotler, 1972). Spoločensky zodpovedný marketing ako konsenzus medzi týmito dvoma tézami umožňuje zakomponovaním spoločenských a ekologických skutočností do marketingového plánovania a rozhodovania, umiestňovať na trh produkty a služby, reagujúce na požiadavky zákazníka - prinášajúce mu žiadanú hodnotu, avšak spôsobom ktorý zachováva alebo zvyšuje dlhodobý blahobyt spoločnosti (Kotler, 1972).

Spoločensky zodpovedný marketing môže mať v podnikovej praxi rôznu formu, vo všeobecnosti však platí, že sa prejavuje v troch rovinách spoločenskej zodpovednosti. Do ekonomickej roviny možno zaradiť etické a právne aspekty marketingu, no aj dobročinný marketing. Ten čiastočne presahuje aj do sociálnej roviny, pričom je často nesprávne zamieňaný za sponzoring, dobrovoľníctvo či filantropiu. Súčasťou sociálnej roviny je aj sociálny marketing. V rámci environmentálnej roviny sa stretávame s komplexným environmentálnym, resp. zeleným marketingom, ktorý prechádza naprieč celým marketingovým mixom podniku (Musová, 2013; Hroncová Vicianová, 2014). Našu pozornosť sústreďme na inovatívne prístupy v spoločensky zodpovednom marketingu, ktoré sa výrazne prejavujú aj v globálnom meradle, a to environmentálny a dobročinný marketing.

1.1 Environmentálny marketing

V súčasnosti je naša planéta vystavená rôznym negatívnym ekologickým vplyvom, často až globálneho charakteru, ktoré majú rastúcu tendenciu hlavne vplyvom technického pokroku.

Otázky znečisťovania a ochrany životného prostredia sú významné do takej miery, že im venujú osobitnú pozornosť aj marketingoví manažéri. Vytvárajú presvedčivé environmentálne marketingové stratégie, ktoré zahŕňajú všetky marketingové aktivity, počnúc vývojom produktu, prípadne obalu, cez jeho umiestnenie na trhu, spôsoby jeho používania a spotreby až po prípadnú likvidáciu po ukončení jeho životnosti.

Prvé práce týkajúce sa predmetnej problematiky pochádzajú zo 60-tych rokov (napr. od Kotlera a Levyho (1969)), ktorí rozpracovali koncepciu spoločenského marketingového manažmentu. Ich priekopnícky článok následne podporil upozornenie aj na skúmanie environmentálnych otázok. Jedna z prvých definícií je z práce *Ekological Marketing* z roku 1976, ktorá environmentálny marketing vymedzuje ako “implementáciu marketingového programu, ktorý je zameraný na environmentálne uvedomelý segment trhu” (Nervi, 2008; Zaušková & Bezáková, 2014).

Pokiaľ ide o označenie marketingu, ktorý výraznejšie zohľadňuje environmentálne kritériá, existuje až na výnimky, určitá voľnosť v používaní termínov “zelený”, “ekologický”, “environmentálny” a “ekomarketing”, s tým, že tieto pojmy sú vzájomne zameniteľné. Jednou z výnimiek je napríklad Peattie (2001), ktorý naopak vo svojich prácach rozlišuje ekologický marketing (zabezpečuje znižovanie počtu škodlivých produktov na trhu), environmentálny marketing (vychádza v ústrety dopytu a využíva ho ako konkurenčnú výhodu) a udržateľný marketing (snaží sa o obsiahnutie všetkých environmentálnych vplyvov výroby a spotreby produktu). Uvedené tri typy následne zastrešuje pojmom zelený marketing.

Z nášho pohľadu definujeme environmentálny marketing ako proces plánovania, implementácie a kontroly vývoja produktu, cenotvorby, prezentácie produktu a jeho distribúcie (vrátane spätného odberu a likvidácie, resp. recyklácie), pričom sú uspokojené potreby zákazníka, podnik naplní svoje ciele a všetky procesy sú environmentálne vhodné, tzn. kompatibilné s ekosystémom (Musová, 2013).

1.2 Dobročinný marketing (cause related marketing)

Jedným z najkreatívnejších a nákladovo najefektívnejších riešení spoločensky zodpovedného marketingu je dobročinný marketing (cause related marketing), ktorý prináša na jednej strane uspokojenie požiadaviek zákazníka, na druhej strane plní spoločensky zodpovedné záväzky podniku, a zároveň aj pozitívne vplýva na jeho imidž, vďaka čomu získava benefity efektívnej marketingovej kampane (Smith & Alcorn, 1991). Pojem dobročinný marketing bol prvý krát použitý v roku 1983 spoločnosťou American Express v kampani na podporu a financovanie renovácie Sochy slobody. Počas posledného štvrtého roka sa spoločnosť zaviazala venovať nadácii Ellis Island Foundation jeden cent za každú platbu vykonanú kartou American Express a jeden dolár za každú novú vydanú kartu. Počas tohto obdobia sa zvýšilo používanie platobných kariet o 28 % oproti predchádzajúcemu roku a výrazne sa zvýšil počet novo vydaných kariet. Spoločnosť American Express bola vďaka kampani vnímaná ako spoločensky uvedomelá, zodpovedná a patriotická. Pre nadáciu Ellis Island Foundation sa vyzbieralo približne 1,7 milióna dolárov na dobročinné účely (Ptacek & Salazar, 1997).

Dobročinný marketing Varadarajan & Menon (1988) definovali ako proces formulácie a implementácie marketingovej aktivity, pri ktorej sa podnik zaväzuje finančne prispieť na dobročinný účel, ak zákazník kúpi tovar alebo službu podporujúcu dobrú vec, prinesie tak úžitok pre podnik, neziskovú organizáciu i individuálneho spotrebiteľa. Dobře realizovaný program dobročinného marketingu môže prispieť k blahobytu podnikateľského subjektu,

pretože zvyšuje záujem zákazníkov o produkty a značky podporujúce dobročinnú myšlienku, vytvára diferencovaný pozicioning značky, buduje priaznivé vzťahy s verejnosťou, posilňuje imidž a goodwill spoločnosti, a tým zvyšovanie tržieb a trhovej hodnoty (Adkins, 1999; Kotler & Keller, 2013). Dobročinný marketing prináša mnohé priaznivé efekty aj pre neziskovú organizáciu, najvýznamnejším je dosiahnutie finančných príjmov, ktoré sú nezastupiteľné pri naplňaní jej vízie.

2. Skúmanie postojov spotrebiteľov k zodpovednému marketingovému správaniu podnikov

V nadväznosti na uvedené teoretické poznatky v nasledujúcej časti prezentujeme vybrané výsledky čiastkových prieskumov, ktoré sme realizovali v súvislosti so skúmanou problematikou. Prvý prieskum bol zameraný na vnímanie environmentálnych marketingových nástrojov spotrebiteľmi. Vychádzali sme pritom z predpokladu, že spotrebiteľia na jednej strane proklamujú svoju environmentálnu orientáciu, na druhej strane svojim reálnym správaním nedostatočne reagujú na environmentálne marketingové podnety podnikov. V druhom sme skúmali, či vôbec a ako spotrebiteľia vnímajú spoluprácu ziskových a neziskových subjektov pri aktivitách dobročinného marketingu a ako pôsobí na ich rozhodovanie. Viedla nás k tomu tá skutočnosť, že úspech projektu dobročinného marketingu vo veľkej miere závisí od dôvery a pozitívneho vnímania spotrebiteľov.

2.1. Vplyv vybraných environmentálnych nástrojov na správanie spotrebiteľov

Vzrastajúce obavy o budúcnosť planéty mobilizujú jej obyvateľov k aktívnejšiemu prístupu k ochrane životného prostredia a odstraňovaniu vzniknutých škôd. Zároveň sú aj motiváciou pre podniky, aby sa týmto problémom zaoberali a environmentálne aspekty zakomponovali do svojich podnikateľských stratégií. Pozornosť im venujú aj marketingoví manažéri, ktorí svojim spoločensky zodpovedným environmentálnym správaním a ponukou environmentálnych produktov reagujú na aktuálne požiadavky spotrebiteľov.

Spotrebiteľia na jednej strane považujú stav životného prostredia za závažný problém, prezentujú svoj záujem o ochranu životného prostredia, na druhej strane len malá časť ich postojov a požiadaviek je transformovaná do kúpyschopného dopytu. Tento predpoklad nám potvrdili aj výsledky nášho dotazníkového prieskumu, ktorého sa zúčastnilo 420 respondentov. Aktívny záujem o ochranu životného prostredia prejavilo len 9 %, skôr finančne by prispelo na riešenie environmentálnych problémov 13 % opýtaných. Negatívne postoje malo až 36 % respondentov (z toho vôbec sa nezaujíma o ochranu životného prostredia 10 %).

Spotrebiteľia pri svojich nákupoch (tovarov dennej aj dlhodobej spotreby) pripisujú len veľmi malú až žiadnu dôležitosť ich dopadom na životné prostredie. V mnohých prípadoch je dôvodom ľahostajnosť slovenských spotrebiteľov. Pozitívnejšie výsledky sme zaznamenali pri produktoch dlhodobej spotreby (elektronika, automobily, nábytok a pod.), pri ktorých si respondenti viac všimajú aj to, z akých materiálov sú vyrobené, aká je ich energetická náročnosť či možnosti likvidácie.

Za rozhodujúci marketingový nástroj možno považovať *produkt*, ktorý je pôvodcom znečistenia životného prostredia, zároveň však môže byť spôsobom, ako zaťaženie životného prostredia znižovať. Environmentálne produkty sú kvalitné výrobky s dlhou životnosťou, vyrobené z netoxických materiálov s využitím energeticky efektívnych procesov výroby

a dodávky, balené v čo najmenšom množstve recyklovateľného materiálu, netestované na zvieratách a nevyužívajúce ohrozené druhy zvierat a rastlín. Pri nákupe potravín respondenti sledujú najmä použité suroviny (takmer 72 % opýtaných) a obalové materiály (36 %), oveľa menej ich už zaujíma napríklad spôsob zneškodnenia produktu (14 %). Ochota vymeniť doteraz používaný produkt za environmentálne vhodný (predpokladá sa, že aj cenovo náročnejší) bola jedným zo zaujímavých postojov našich respondentov. *Cena* by podľa nich (okolo 80 % odpovedí) nemala byť vyššia ako 5 % v porovnaní s pôvodne používaným produktom. O niečo vyššiu sumu by boli respondenti ochotní „obetovať“ pri nákupe elektroniky a nového auta. *Distribúciu* produktov respondenti venujú malú pozornosť, len necelých 17 % opýtaných sa zaujíma o to, akú cestu a akým spôsobom prešiel produkt od výrobcu do jeho domácnosti. Za environmentálne prijateľnú považujú respondenti železničnú dopravu, menej vhodná je podľa nich cestná a letecká doprava. Úlohou *komunikačnej politiky* je podporovať spotrebu environmentálnych produktov a vytvárať povedomie o potrebe ochrany životného prostredia. Dôležitý je tiež pozitívny imidž podniku a jeho produktov u spotrebiteľov. Z výsledkov prieskumu v oblasti marketingovej komunikácie vyplynulo, že spotrebiteľia získavajú informácie týkajúce sa environmentálnej problematiky predovšetkým z televízie (viac ako 41 %) a z internetu (33 %). Menšiu dôležitosť pripisovali printovým médiám (necelých 25 %), informáciám z osobných zdrojov (len 18 %) a minimálny záujem prejavili o letáky. V kontexte súčasného vývoja v oblasti marketingovej komunikácie sa zdôrazňuje význam digitálneho marketingu (Kusá & Zaziková, 2015).

Pri skúmaní možností využívania environmentálneho marketingu podnikmi sme vychádzali z predpokladu, že spotrebiteľia s rôznou úrovňou environmentálneho povedomia rôznou intenzitou reagujú na environmentálne marketingové podnety podnikov. Z výsledkov nám vyplynulo, že hoci sa mnohé podniky snažia správať environmentálne zodpovedne, ostávajú ich podnety bez dostatočného ohlasu. Nemôžeme to však zovšeobecniť na celú spotrebiteľskú verejnosť, pretože na trhu sa nachádzajú na jednej strane segmenty, pre ktoré je typické výraznejšie environmentálne cistenie a prejavujú nadšený záujem o všetko, čo súvisí s ochranou životného prostredia, na druhej strane sú však aj segmenty, ktorých členovia sú k environmentálnym otázkam úplne ľahostajní. Vplyv na životné prostredie žiaľ nepatrí v našich podmienkach medzi najvýznamnejšie faktory ovplyvňujúce nákupné správanie spotrebiteľov, čo považujeme za znepokojujúce. Zároveň však apelujeme na podniky, aby ich to neodradilo od environmentálne vhodného správania a aby svojimi aktivitami zvyšovali povedomie spotrebiteľov o otázkach životného prostredia a tým prispievali k zvyšovaniu aj ich zodpovednosti.

2.2. Dobročinný marketing a jeho vnímanie spotrebiteľmi

Pri zostavovaní efektívnej kampane dobročinného marketingu je dôležité predovšetkým predvídanie pocitov, postojov a následne správania spotrebiteľov, ktorí sa do kampane majú zapojiť a tým prispieť k naplneniu požadovaných cieľov podniku aj neziskovej organizácie. V dotazníkovom prieskume sme sa zamerali na túto skutočnosť a zisťovali sme, aké sú postoje spotrebiteľov k dobročinnému marketingu a či by mohol ovplyvniť ich nákupné správanie. On-line opytovania sa zúčastnilo 400 respondentov oboch pohlaví (200 žien, 200 mužov), rôznych vekových kategórií a vzdelanostnej úrovne.

Zaujímalo nás, či sa respondenti v minulosti už stretli s podnikom resp. produktom, ktorý podporoval nejaký spoločensky prospešný projekt. Viac ako polovica opýtaných odpovedala

kladne (52,5 %). 28 percent opýtaných sa nevedelo vyjadriť, čo však môže znamenať, že už sa s tým stretli, ale nevedia si príslušnú aktivitu správne zaradiť. Ženy registrovali projekty resp. produkty dobročinného marketingu vo väčšej miere (takmer 70 %) ako muži.

Pri detailnejšom skúmaní tohto výsledku sme však zistili, že z uvedených 52,5 % respondentov, si spomenulo na konkrétny podnik/produkt len 132 respondentov (približne 63 % z 210, ktorí odpovedali kladne). Z konkrétnych príkladov uvádzali spoločnosť Avon s jej projektmi a globálny dlhodobý projekt Pampers/Unicef. Pre porovnanie uvádzame výsledky on-line prieskumu z Nemecka z roku 2008, kde až 93,9 % opýtaných uviedlo, že poznajú aspoň jeden projekt dobročinného marketingu, viac ako jeden však poznalo len 58 % a viac ako dva projekty okolo 23 % respondentov. Len takmer každý desiaty poznal viac ako tri projekty (Oloko, 2008).

Môžeme konštatovať, že napriek tomu, že aktivity dobročinného marketingu sú v našich podmienkach sporadické, povedomie respondentov o už realizovaných projektoch je relatívne vysoké. Spotrebiteľia však nie vždy správne pochopili podstatu dobročinného marketingu (zamieňali si ho napríklad so sociálnym marketingom, pravidelnými charitatívnymi zbierkami a pod.). To je podnet pre podniky aj neziskové organizácie, aby aktivity dobročinného marketingu komunikovali jasnejšie a zrozumiteľnejšie. Pozitívom je, že vyššie povedomie sme zaznamenali v mladších vekových skupinách, ktoré predstavujú pre podniky veľmi perspektívne cieľové skupiny. Spotrebiteľia dobročinný marketing považujú za vhodný spôsob spoločensky zodpovedného správania podnikov (48 %), odmietavé stanovisko malo 12 % opýtaných. Ženy sa pritom vyjadrovali o niečo pozitívnejšie v porovnaní s mužmi, z hľadiska veku mu menej dôverujú starší respondenti.

Zaujímavé boli naše zistenia ohľadom vnímania motívov podnikov zapojiť sa do projektu dobročinného marketingu z pohľadu spotrebiteľov. Podľa názoru našich respondentov prevažujú v podnikoch egoistické motívy (sledovanie relevantných podnikových cieľov – zlepšenie podnikového imidžu, zvýšenie odbytu). Demonštrovanie zodpovedného správania je tiež vnímané ako nástroj na zlepšenie imidžu. Naproti tomu čisto altruistické motívy v podobe zámerov podnikov podporovať „dobré veci“, resp. podpora neziskových organizácií, zaostávali. Opäť sa, podľa nášho názoru, vytvára priestor pre podniky na vhodnejšie komunikovanie svojich motívov verejnosti. Mnohí spotrebiteľia sa totiž pozerajú na zodpovednosť podnikateľských subjektov skepticky, najmä po zverejnení viacerých škandálov a neetických praktík podnikov v ostatnom období.

Spotrebiteľov motivuje k účasti na dobročinnnej marketingovej kampani najmä „dobrý pocit po nákupe“ (59 %). Sú ochotní zapojiť sa do projektu, ak sa ich to osobne dotýka, alebo sa o problém osobne zaujímajú (49 %), oslovuje ich jednoduchosť spôsobu podpory – nie sú nútení nijako meniť svoje spotrebiteľské návyky (39 %).

Pozornosť sme zamerali aj na vplyv dobročinného marketingu na nákupné rozhodovanie spotrebiteľov. Kampanou podporovaný produkt by si vybrala takmer polovica opýtaných, ďalších 17 % by si ho skôr vybrali ako nie. Časť spotrebiteľov by bola ochotná za takýto spoločensky prospešný produkt zaplatiť aj vyššiu cenu (približne 47 %). Z geografického hľadiska respondenti preferovali podporu národných projektov, z hľadiska tematického zamerania kampaní sa zaujímali o projekty zamerané na podporu pomoci deťom, podporu zdravia a humanitárnu pomoc.

Záujmom každého podniku v prípade realizácie dobročinného marketingu by teda malo byť vytváranie čo najpozitívnejšieho vzťahu spotrebiteľov k podporovanému produktu, značke či samotnému podniku a partnerskej neziskovej organizácii. Pozitívne vnímanie sa však nemusí automaticky transformovať do nákupného rozhodnutia. Každý spotrebiteľ sa rozhoduje na základe rôznych faktorov a nie všetky jeho rozhodnutia musia byť čisto racionálne. Výsledky prieskumu nám potvrdili, že hoci je dobročinný marketing v našich podmienkach zatiaľ relatívne novým pojmom, má veľký potenciál a je jednou z vhodných možností preukázať zodpovednosť v správaní podnikov, ale aj spotrebiteľov.

3. Conclusion

V období narastajúcich ekonomických, sociálnych a environmentálnych problémov, z ktorých mnohé nadobudli globálny charakter, podnikom už nestačí len orientácia na potreby a želania spotrebiteľov. Tradičná marketingová koncepcia sa pod tlakom zmien v marketingovom prostredí transformuje na tzv. spoločenskú koncepciu marketingu, ktorá zohľadňuje nielen dlhodobé záujmy spotrebiteľov, ale aj dlhodobé záujmy spoločnosti. Informovanejší, vzdelanejší a náročnejší zákazníci sú stále menej ochotní akceptovať nekvalitné produkty za prehnané ceny, výrobné a distribučné procesy poškodzujúce životné prostredie, či nepravdivé a zavádzajúce informácie z marketingovej komunikácie podnikov. Do popredia sa dostávajú inovatívne, zodpovednejšie postupy a metódy.

Spoločensky zodpovedný marketing je novou perspektívou, z ktorej podniky pristupujú ku každodennému marketingovému plánovaniu a uskutočňovaniu podnikateľských rozhodnutí. V procese marketingového rozhodovania si zodpovedný podnik musí uvedomiť dôležitosť dlhodobého uspokojovania potrieb a želaní svojich zákazníkov (a spoločnosti), čo ale môže byť v rozpore so snahou dosiahnuť krátkodobý zisk. Manažéri, ktorí myslia dlhodobo, identifikujú a využívajú nové podnikateľské príležitosti súvisiace s etickým, sociálnym a environmentálne vhodným správaním. Starostlivo prehodnocujú svoje súčasné marketingové postupy a pozitívne reagujú na nové výzvy dôslednejšou prípravou budúcich marketingových stratégií a ich zodpovednou implementáciou. Takýto postup podnikom nepochybne prináša mnohé efekty, či už v podobe spokojných zákazníkov, lojálnych zamestnancov, lepších ekonomických výsledkov, ako aj pozitívneho vnímania verejnosťou.

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GLOBAL TRENDS OF THE PERSONNEL MARKETING IN SERVICE ENTERPRISES

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Abstract. Personnel marketing represents a relatively new area of human resources activities in the corporate and business practice. The essence lies in the fact that the potential employee is becoming "the client" and management through marketing tools is doing everything possible in order to gain and keep employees in the company. Personnel marketing also helps to identify the needs and wishes of employees, both existing and potential, which can ensure a competitive advantage against other organizations. However, the globalization of markets causes, that also the field of personnel marketing must adapt to changing conditions and current trends, which include modern technologies and so on. Only in this way human resources marketing can fill its essence, namely, that it is built on the people and their quality. The article deals with personnel marketing in service enterprises, characterizes both areas - internal and external human resources marketing. It defines tools of marketing mix in personnel marketing (i.e. marketing mix for the labour market) and basic tasks of personnel marketing, which includes recruiting employees, profiling of employees, motivation and so on. The main part of the article represents an analysis of current trends in human resources marketing and its application in a particular services enterprises at national and international level. Based on the analysis, in conclusion are outlined measures for the effective application of human resources marketing in service enterprises.

Keywords: personnel marketing, human resources, service enterprises, employees, motivation

JEL Classification: M31, M50, M51

1. Introduction

The importance of human resources is often underestimated and does not attach great importance to it (Rebetak & Farkasova, 2015). But they are the creative elements of each organization. They create value and produce results, whether material and immaterial nature (Hitka et al., 2016). Employees are the main source for achieving the strategic objectives of the organization and sustainable competitive advantage in the market (Chlebikova et al., 2015). New approaches to the management of human resources is currently personnel marketing. Its base is built on people and their quality. By appropriate action of personnel marketing tools the company is trying to build a positive image of the employer that through its attractiveness and benefits can reach the suitable potential employees in the labor market. For the current staff it has impact through the convenient communication and various stimuli, creating good relationships, sense of loyalty and cohesion.

2. Personnel marketing

Personnel marketing represents a relatively new field in the theory and practice of personnel activities in the corporate and business practice. It was created by earmarking of personnel management as a separate area of human resources management.

The concept of personnel marketing is currently not used by many organizations and is unknown to them. But if service enterprise wants to become the market leader through human potential and be competitive, it should begin to be interested in trend for attracting people and retaining high-quality employment potential (Gogolova & Ponisciakova, 2015). However, although on the one hand it emphasizes that human resources are an important strategic factor for success, on the other hand, this argument is rarely applied quite strongly. In this context there is a fundamental problem - the use of personnel marketing in the strategic management of human resources. Because the services of individual enterprises are similar and have the intangible nature, the success of such enterprise depends mainly on factors such as the quality of human resources. And in this field it should be sought competitive advantage which will ensure the enterprise to overtake competitor. The basis for obtaining this benefits is marketing orientation on human resources - for this reason we are talking about personal marketing (Kuehn et al., 2016), (Ungerma, 2015). With qualified, motivated, well targeted employees it may be achieved the required quality and gain an advantage against competitors.

2.1 The essence and importance of personnel marketing

Personnel marketing can be defined in several ways. Similarly as for products as well as in services, activity of personnel marketing deals with certain thought attitudes.

Marketing is a philosophy of the company, whose main objective is to identify wishes and needs of customers and their satisfaction (Kotler & Keller, 2013). Due this definition, we can define personnel marketing as philosophy of personal work aimed at solving problems in order to take account of the opportunities and needs of the employees (even the potential), while solutions of problems led to satisfy those needs. The personnel marketing also focuses on the needs and expectations of employees and seeks to ensure compliance of these needs with the objectives of the company. In the personnel marketing, center of interest (i.e. customer) is the employee or potential employee.

The main objective of personnel marketing is creating the conditions for long-term security of qualified and motivated employees. Generally we can describe personnel marketing as a set of activities associated with the creation of the good reputation of the employer. Just as a company built image associated with their services, can also affect its future as an employer. Personnel marketing is thus the way how employers can manage the creation of the corporate image, because it is in the personnel marketing the most important thing. By selecting the appropriate tools it is possible to focus on selected segments of the labor market and become attractive employer exactly for applicants whose company is looking for. All this facilitates, accelerates and simplifies filling vacancies and stabilizes employees. It is important, that the personnel marketing must be in synergy with the corporate communication, corporate culture and HR policies, otherwise it is impossible to achieve long-term results (Hallock, 2007), (Izvercianu & Tion, 2005).

By using the chosen strategy in the field of personnel marketing company determines how it will be perceived in the labor market and thus affects the company's image to the public and to staff.

Personnel marketing is divided into two areas, external and internal. Activities in these areas are focused on different roles and groups of employees.

The role of external personnel marketing is brand building and creating an attractiveness to prospective employees (i.e. to the external labor market). Currently, external personnel marketing represents closer conception of the term. However, personnel marketing was originally defined just by an external areas and denoted the external staffing of human resources (Gogolova et al., 2015). Companies develop concepts of addressing and obtaining employees with the aim to attract the attention of selected target groups.

Through the use of external personnel marketing tools, the company may impress required group of employees and gain suitable staff. With an adaptation of a new employee begins role of the internal personnel marketing and the meeting of its objective, which is satisfied and loyal employee. Kotler's definition of internal marketing captures the essence of the whole concept - the company's success lies in the provision of value not only to customers but also employees (Kotler, 2003).

2.2 Marketing mix in personnel marketing

As the title of personnel marketing suggests, this is actually a combination of human resource and marketing, for that reason basic marketing tools so-called "4P" (Product, Price, Place, Promotion) are supplemented by another important tool that is the essence of personnel marketing - People.

Therefore marketing mix in personnel marketing includes following:

1. Product / Work place
2. Price / Wages, benefits
3. Place / Company, active searching beyond business environment
4. Promotion / Communication tools
5. People / Presentation of employee's company

2.3 Basic tasks of personnel marketing

The essence of personnel marketing is the use of marketing principles in human resources. The aim of very marketing in the company is to attract customers to products and services and persuade him for purchasing and loyalty to the brand. Analogously, it is possible to define the aim of personnel marketing as an effort to attract attention of the labor force and persuade it about the quality of the employer.

The aim of personnel marketing in service enterprises is in principle to sell or rent vacant jobs in order to ensure optimal structure, number and quality of the labor force in accordance with the operational and strategic needs and objectives of the company. Through fulfilling this role and function of personnel marketing, company ensures the competitive advantage in the labor market and thus on the markets of goods and capital. Company is trying to draw attention to its quality in the employment relationship and to become "Employer of Choice" -

preferred employer in the labor market. This is therefore about company's concept for building goodwill in the personnel area.

The current professional literature defines basic and supporting roles, as well as basic and specific functions that personnel marketing provides in the company (Liang et al., 2009), (Myslivcova, 2015). Basic tasks of personnel marketing include:

- Offer and sale of jobs;
- Profiling of jobs;
- Monitoring labor markets in terms of job positioning.

Simultaneously it defines support tasks of personnel marketing in which include:

- Personnel planning;
- Research important for determination of the personnel marketing mix;
- Creation of employee image;
- Searching and recruiting employees;
- Care of employees in the form of support and development of the labor force in the company.

Tasks of personnel marketing are overlapped with functions of personnel marketing in many ways therefore sometimes it can be difficult to separate them.

The basic functions of marketing personnel include:

- Positioning of jobs on the labor market;
- Differentiation of company job offers from the competition;
- Way of dealing with information about job;
- Creation of job design and image;
- Selection of appropriate tools for offer or rent jobs to labor force.

The specific functions of personnel marketing are primarily those that provide personnel marketing inside the company.

Basic and specific functions of personnel marketing are not changed and are the same in the period of economic growth as well as in the periods of economic crisis. Their scope and specification increases mainly due to the processes of globalization, which includes, for example, the emergence of international personnel marketing mix and so on.

Tasks and functions of personnel marketing which related to the process of globalization are acquiring strategic content primarily in terms of structure personnel policy. Due to the fact that the labor market is continuously under the influence of globalization processes and is integrated, tasks and function of personnel marketing, primarily of a strategic nature, will be increasingly linked to the existence of any company.

3. Analysis of current trends in personnel marketing

Quality performance of HR activities shapes the good reputation of the employer and through them the company can apply the tools of personnel marketing. Among the human resources field where the service enterprises may prove their qualities against potential job seekers and use them to create quality mark of employment include:

- Acquisition of employees;
- Selection of employees,
- Recruitment and orientation of staff;
- The importance of the service enterprise, its success and perspective;
- Seriousness in relation to customers and business ethics;
- Caring for work conditions;
- Caring for social and hygienic conditions of work;
- Caring for social development;
- Improving interpersonal relationships and social climate in the service company;
- Caring for staff development;
- Caring for staff education.

Current trends in personnel marketing therefore can be summarized in three points:

1. Ensure quality human resources for the service enterprise.
2. Create information base for personnel management.
3. Increase the attractiveness of the company to future employees.

Until recently, predominantly employers had chosen people in the labor market, but it is no longer the case. Although foreign companies are often trying to attract people by non-traditional ways, Slovak market is quite conservative from that perspective.

Abroad, companies in the recruitment process are not afraid of the various innovative ways. For example Facebook gives financial reward to employees who live near the company. They are rewarded for that they have no problem to refrain in work or stop there if needed.

Certain recruitment company Yellojobs came up with the idea of "Sell your boss." They will pay the employees a certain amount, if another company takes his supervisor on the basis of his recommendation. The chain of hotels and casinos Harra's organizes mass recruitment of MBA alumni through a charity poker tournament.

These unconventional ways of the personnel marketing are rather novelty in Slovakia. Although companies are inventing how to attract candidates through various brain teaser, games, online tests, etc., but it appears that they will have to be more consistent in communication with them.

In a broader sense, each of job offers are viewed as personnel marketing, which tools include such as personnel classifieds. According to Eva Slobodová, senior consultant of the consulting company Amrop Hever Slovakia, classifieds for job offers are mainly creative and quite sufficient by content. In comparison with last years, the job offers have transferred from print and electronic media in the virtual world - the Internet. Given the current trends only classifieds are not insufficient (Kullova, 2008).

Since companies have to face an increasing fight for talent (if they want to get people for fulfill their plans and strategies), they need to be more active, or in some cases even more aggressive. Employers have long been suffering from a lack of quality people, so they must think about how to get them. At present many people are aware of what they are worth in the labor market what a few years ago was not very common at all. They can choose from several offers, while know very well what they get for their work and whether the possible change of employer will pay off. Nowadays people are more careful, they do not leave their job only because of the higher pay.

When choosing a job people do not decide only according to how much they earn. They are looking for references about employers, are managing their own personal career more than ever before and have vision of where they want to get in a few years. Career is not guided only by the company in the spirit of where to place the employee, but also by the employees themselves based on what they want and how the company can help them in that. Many employers have realized that they have to create the best possible labor conditions for people and this applies not only to new employees which they want to gain, but also for those who work for them for longer.

In the past, personnel changes to top management and specialist positions were making generally on schedule, but rarely during the summer. Currently, employers are more flexible than a few years ago. If necessary, they are able to make a deal with the selected candidate about the onset even during summer season. They offer him vacation in the trial period if they really want to get him. Higher interest in some professions is also linked to seasonal work - is common in agriculture, construction, tourism and the like, but not the managerial and professional positions.

As for the job interview and selection procedure, companies will not only rely on classical forms, the new trend is video presentation. This is due to elimination of shortcomings in the evaluation questionnaires, such as the lack of professionalism in the selection procedure and the lack of feedback after completing the interview. Often candidate does not know he does not proceed to the next round of selection. Video presentation also relates to companies. They should look at the offers presentation through the eyes of job seekers due finding out how to best "sell itself". They should not forget to the readable title and brief content in which are clearly described the responsibilities, authority and expectations. It is advisable to inform about process of selection procedure, benefits, or why should the candidate work for the company.

And what are the trends in demand for labor force? Nowadays many service enterprises are looking for young and creative people with a chance of success into their work teams. Thanks to the development of information technologies also the demand for programmers, designers of websites and online specialists is increasing. Enterprises literally maintain the intellectual capital - the know-how of employees.

On the contrary, they are gradually shedding their disloyal employees and those who are not able to intellectually compete with other organizations. Many managers of enterprises indicate that they are not satisfied just with low employee engagement.

4. Conclusion

When decision of the company to apply personnel marketing in practice it is important to respect several principles. In particular, it means to find the factors that have a decisive influence on the success of the company, constantly update and expand the qualifications of staff, try to increase the employees' identification with the company, ensure evaluation and remuneration, care for employees, their qualification and personal development.

As mentioned, if the service enterprise decides to apply personnel marketing, it should add following activities to the filling content of the personnel work:

- See and evaluate all the company's activities in terms of their impact on the labor market;

- Strive for the best possible reputation of the company, eg. by using excellent social program or other employee benefits, the educational system, evaluation, remuneration and etc.;
- Use employee benefits to reach suitable job seekers for their selection and stabilization;
- Long-term troubleshooting of individual employees.

Personnel marketing is not therefore a substitute for human resources management. Its main objective is to address the highest quality jobseekers and to influence them through their marketing tools so that they will decide to work for a particular service enterprise.

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THE INTERNATIONAL PRACTICE OF IMPLEMENTATION OF RISK MANAGEMENT SYSTEM IN RETAIL TRADE NETWORKS

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Abstract. Despite the variety of theoretical and methodological approaches to the formation of the risk management system of retailers, it is necessary to create theoretical and methodical positions, including approaches to the management of the organizations of retail trade network in the network aspect, assessment of external and internal factors with the economic indicators at the micro level. In this paper, based on comparative analysis and correlation and regression analysis, 3 retail chains in Russia were analyzed. The group of internal and external risk factors that affect the economic results of enterprises of retail trade services was formed. The group of indicators to evaluate the relationship of internal and external risks to the economic results of the activity of enterprises of trade services was suggested. The method of organization of risk management system in the enterprises of retail trade services was proposed and tested. The developed algorithm is interactive, it is implemented in the process of cyclic identification of risks and search of management techniques to the moment when each of the risks is controlled.

Key words: risks, management, retail trade

JEL Classification: G20, E42, D86

Introduction

The categories "risk" and "profitability" are the centre of modern management concepts risk. Inevitability of risk in aspiration to the ultrahigh income is considered when planning creation and development of the entity in business plans.

In case of organization development to avoid this economic category as risk simply it isn't possible as it is an integral part of activities of any subject of economy.

Problems of emergence of economic risks by one of the first were considered by A. Marshall, his works laid the foundation for the neoclassical theory of risk. J. M. Keynes entered the concept "tendency to risk" into science, characterizing investment and entrepreneurial risks.

It is possible to distinguish such scientists as A. P. Algin, J. M. Keynes, A. Marshall, O. Morgenstein, F. Knight, J. Neumann, B. A. Rayzberg, V. V. Cherkasov, Iannetti, L., Acciari, V. A. Antoci, S., Reyes, P. M., Li, S., Visich, John K. from the theorists who made a real contribution to development of the theory of risk. Craig, N. C., Raman, A., 2015; Ferreira, K. J., Lee, B. H. A., Simchi-Levi, D., 2016; Gripsrud, G., Benito, GRG., 2005. The aim of the article is generalization and the analysis of models of assessment risk management, studying of

the theoretical concept and methodology of risk management for use in practical activities of the entity. The aim is allowed to formulate a number of the following tasks:

- to execute assessment of impact of external and internal factors of risk on economic result of activities of the entities retail trade service;
- to develop an algorithm of functioning of system of risk management of the entities retail trade service;

Subject of the research is the trading company as an object which needs to be managed effectively.

Scientific novelty of results of the research consists in disclosure of features of system forming of risk management on the entities of services of retail trade:

- the existing approach to the substantial characteristic of the concept "risk management" through a prism of an integrated indicator of activities of the entities of retail trade services which is understood as set of the actions for ensuring process of acceptance and accomplishment of the management decisions minimizing an adverse effect on the organization of risks and its consequences, caused by accidental events, and also supporting socio-economic indexes of activities of the entities at the planned level is expanded;
- the group of the external and internal factors of risk which are making impact on economic result of the entities retail trade service is created, it includes: political, economic, social, market, investment, financial, personnel risks, and also risk management;
- the group of the indicators allowing to estimate dependence of external and internal factors of risk with economic result of activities of the entities of services of the sphere of trade is offered the algorithm providing effective functioning of risk management system, considering that the organization represents set of the processes leading to appearance and enhancement of interrelations between parts of whole is developed (Palsson, H. & Hellstrom, D, 2016, pp. 351-368).

1. Current trends of evolutionary transformations and feature of emergence of risks at the entities of retail trade service

Originally this phenomenon was studied by small group of private sciences — some sections of mathematics, statistics, a number of legal and economic disciplines.

Emergence of various theories of risk is directly connected with active development of market economy. So, for example, the word "hazard", is translated as danger, it was rather widely used as in Adam Smith's works, and other economists. And since 1830 the term "risk" began to be applied only in case of insurance transactions. It means that for nearly hundred years of a concept the risk and danger were applied in parallel and only in the 20th century the concept finally was set risk in economic literature and entrepreneurial practice

The author made an attempt of classification of the risks exerting impact on activities of the entities of retail trade service. Having generalized the classification signs, the author divides all their set into two integrated groups: general and specific. General risks are shown in all spheres of economy and industries, at the same time have no dependence on type of activities of the entities. Specific risks characterize features of the organization and management of the entities of services of retail trade, covering processes of purchasing activity, sales of goods and pre-

sale and after-sale service, specifics of management and personnel processes (Lee, J et al., 2015).

2. Specific features of risk management of the entities of retail trade service

At this stage the paradigm of implementation of risk management "from top to down" providing the organization of risk management at the entity as single system with obligatory coordination from the top management of the company gained ground. Such approach received the name "corporate" ("integrated", "integrative") risk management (Schroeder, K. J. et al., 2015).

Experience of the leading international companies convincingly proves that stability of business development and increase in management efficiency are impossible without active use of risk management as management system component the company regardless of its scales and specific features of production or service provision.

Application of quantitative, qualitative and qualitative and quantitative methods in risk management of the sphere of retail trade has the certain specific features provided in table

Table 1: Table comparative analysis of methods of risk management

Method	Implication	Task of risk management	Application in trade service
Quantitative analysis: - formal mathematical, - statistics and econometric methods, - portfolio theory, etc.	Use of numerical values of a standard deviation, population mean of sizes.	Assessment of risks, risk analysis of the external environment, identification of risks.	The restrictions connected with incompleteness of data, uncertainty of influence of the external environment, not structure of tasks.
Qualitative analysis: - expert methods; - heuristic methods (analysis of hierarchies, method Delfiya, etc.).	The complex of logical methods of processing of information connected with activity of the expert.	The choice of corrective actions (in decision making and risk handling), identification, assessment, handling of risks.	The benefits connected with need of decision making in the conditions of uncertainty (characteristics of the external environment, the choice of option of corrective action).
Modeling on the basis of the qualitative and quantitative analysis: scenario modeling, imitating modeling including Monte Carlo method	Creation of models of real processes and the phenomena on the basis of qualitative and quantitative information.	The choice of corrective actions (in decision making and handling of risk), identification, assessment, risk handling.	The benefits connected with a possibility of research and forecasting of conditions of the object which is characterized by high uncertainty of parameters and also with a possibility of a combination of formal and heuristic methods of receipt of basic data.

Source: self-processed

Taking into account high uncertainty and risk of activities of the entities of retail trade service application of many mathematical methods and models has restrictions in application for a number of reasons: the studied objects and processes are difficult, for them the complete theory within which there would be an adequate mathematical apparatus isn't created now; excessive complexity of mathematical methods and models does them unsuitable for practical use; the processes proceeding in real economic systems often can't be formalized only by

means of linear, nonlinear or dynamic programming as systems aren't structured or poorly structured.

The author, unlike the offered concepts offers use of the following management concept by risk (figure 1). At the first stage there is a research of the possible risks capable to exert impact on the entity of services of retail trade. At the second stage there is an analysis of organizational economic factors of the entity and a research of sources of risk. At this stage there is a research of external and internal environment of the entity. Studying of the external environment shall include research of a condition of production, social, regulatory, cultural, competitive, financial and political environment, carrying out the analysis strong and weaknesses of the entity, opportunities and sources of risks, the main production driving forces and tendencies. The third stage – identifications of risk on which risks which will be able to exert impact on goal achievement and tasks of the entity are determined. Comprehensive identification using well structured systematic process is of great importance as the risk which isn't identified within this element of process can be excluded from the further analysis. The fourth stage is devoted to information for a risk assessment. In case of identification of sources and type of risk availability of the corresponding and staticized information is necessary.

3. Organizational and economic conditions of enterprises' development of retail trade services

Trade industry of Russia is one of more rapidly growing sectors of the economy in recent years. One of modern consumer market's features is the emergence and development of commercial networks, aimed at satisfying the desire of entrepreneurs to obtain the greatest economic effect that was caused by integration of existing resources and consolidation of business organization forms, and it assumes an active development of network principles of business organization. Business development, organized by network principle, is the most common in retail trade, and the scale of spread retail network companies and their development trends on the consumer market make it possible to speak about them as basic elements of modern organization of commodity circulation.

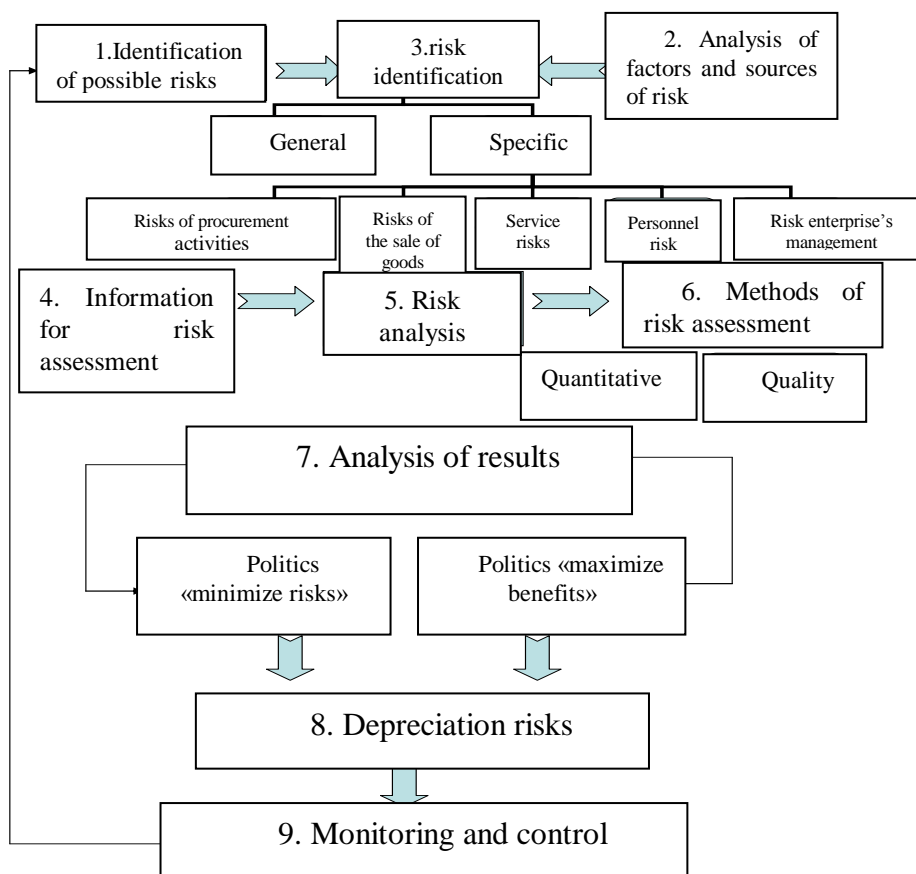
Assessment of impact external and internal risk factors on economic result of enterprises' activity of retail trade services. Analysis and planning. One from representatives of the national retail market is a trading company «Bahetle». Today "Bahtele-1" is the largest Russian retailers in the retail market of Kazan. The purpose of making sales network is the development of mutually beneficial cooperation, the integration of economic interests, material, labor and financial resources of its members for carrying out economic activity. Implementation of business activity involves the continued availability of any risks in connection with what is needed a constant monitoring aimed at identifying them. According to the results of monitoring a manager must take a decision about activities aimed at reducing the effects from identified risks. For Bahetle-1 it is necessary to identify the risks that affect the formation of economic result.

The level of risk depends on many factors, such as related to the company's activities, and do not depend on it. Such factors are called risk factors, understanding them as an essence of processes and phenomena conducive to the emergence of a particular type of risk and determine its character. The amount accounting risk factors is sufficiently large. Enlargement all risk factors can be divided into two groups: internal factors arising in the process of

enterprise's activity and external factors that exist outside the company.

Evaluation of risk management's effectiveness of "Bahetle-1" should begin with an assessment of external risk factors. To improve the efficiency of the research dissertation results in parallel with "Bahetle-1" some indicators of trade organization "Wholesaler" will be learnt by us.

Figure 1: Figure the concept of risk management at enterprises of retail services



Source: self-processed

The results of the correlation analysis, which reflects the relationship of socio-economic indicators and the level of innovation potential correlation analysis let us to reveal the external factors that have the greatest impact on the effectiveness of the activities of "Bahetle-1" and "Wholesaler". Thus, the effect is statistically significant proportion of retail companies in the total number of commercial enterprises - Pearson correlation coefficient was 0.92 - 0.88.

Such factors as the level of inflation (0.89) and the proportion of population with incomes below the subsistence minimum (0.70) have a linear positive correlation, which shows that the higher the level of these indicators, the more influence they have on economic result of the activities of studied organizations. Influence of the level of profitability of sold goods in retail trade services also have a direct effect (0.69).

Negatively correlated with profit such external factors as:

- share of investments in fixed capital industry trade in the total volume of investments,% - the correlation coefficient of minus 0.63;

- share of employment in the trade as a% of total employment in the Russian economy - the correlation coefficient of minus 0.92;
- the share of retail loss-making enterprises in % of the total number of trade enterprises in the Russian Federation - the correlation coefficient of minus 0.36.

This situation suggests about the presence of feedback between the factors and characterizes the state of industry in which any increase in these factors causes a decrease in economic activity results of "Bahetle-1."

The value of correlation coefficient, which shows the impact of investment in fixed capital industry trade in the total volume of investments, shows a significant inverse relationship (minus 0.63).

The situation can be described as dual because federal investment is inequality, which affects the development of a specific trading company. Therefore, this factor is important, what is the direction of target funds for investment, and only then the way in which they influence the economic results of "Bahetle-1."

According to the results of correlation analysis of the internal risk factors on the economic result of "Bahetle-1" we explain the following factors were excluded: the main company assets (correlation coefficient with all the explanatory variables in the range of (-0.41; 0.15)), payables (correlation coefficient with all the explanatory variables in the range of (-0)).

As a result you assess the impact of external and internal risk factors on economic activity of enterprises of retail trade services of "Bahetle-1" we have identified factors that have the greatest impact: external: the share of retail trade organizations in the total number of commercial enterprises in the Russian Federation and the share of employment in trade as % of total employment in the Russian economy; Internal: stocks, labor costs, commercial costs and the coefficient of own funds (Palsson, H. & Hellstrom, D., 2016).

Based on the results of the assessment, we use the identified external and internal risk factors in the formation of the concept of the use of risk management in the LLC "Bahetle-1."

4. Develop a methodology for assessing the most significant risk factors for retailers service

To assess the risk zones and systematization of risks faced by the business activities of the zoning method will be used, according to which are allocated individual risk areas with risks detailed in each. These areas include:

- 1) preparation of the project budget;
- 2) organization and management of the sales process providing logistical and human resources;
- 3) to carry out in due time, with a certain quality in the conditions of resource constraints;
- 4) sale of products.

The first zone is taken into account is linked with the emergence of a number of risks arising from incorrect cost estimates, the volume of resources required, timing of the work.

Evaluation of the project costs must be carried out at each stage of planning and execution of works on the basis of complete information available at the relevant time. Estimating costs approach should be avoided, in which the calculation is made on the basis of the available

funds. Cost estimates should be justified feasibility of investments and the need for temporary resources. Years of experience shows that assessment at a later stage are realistic estimates made at earlier stages. This estimate may be either overestimated or underestimated. In the latter case, no changes will project. As a result of placing limits experts assess the risks in terms of probability of occurrence of a risk event (in shares) and hazard risks for the successful achievement of goals (one hundred point scale). According to risk assessment LLC "Bahetle-1" level indicator "generalized opinion" was from 99.9 to 138.1 points. Exhibited high scores characterize a fairly high general level of consensus and risk importance. In order to systematize the obtained values and the distribution of risk in the general level of influence and control capabilities constitute a risk assessment matrix "Bahetle-1" LLC.

Because of the fact that the problems related to the effective risk management, many enterprises without sound accounting and risk assessment in management decisions do not have to do today. In this case, the entire burden of responsibility for the decision rests with the heads of business units and the company's top management. They often have to work under new conditions and in an unknown situation characterized by high risks, contradictions, permanent and unexpected changes. Understanding the risks of exposure to help carry out a more comprehensive cost-benefit analysis, to minimize unpleasant surprises, make the most of the opportunities and facilitate the solution of the problems facing the company (Valeeva, Yu. & Burganova, L., 2015; Valeeva, Y. S. & Sharafutdinova, N. S., 2015).

Figure 2: Figure algorithm for Risk Management LLC "Bahetle-1" and LLC "Wholesaler"

Algorithm of functioning risk management system			
Stage I: Risk Identification			
Types of losses		Types of risks	
manufacturing	commercial	manufacturing	commercial
Stage II: Assessment and Loss Analysis			
Indicators and methods for assessing		Data to calculate	
Losses and gains	deterministic factor	Information about the production costs and the sale of products	
Stage III: Assessment and Risk Analysis			
Indicators for assessing		Methods	Data to calculate
Average expected value	Average square value	Methods of Mathematical Statistics	Data on production, cost and implementation
Stage IV: Social Risk Assessment			
Determination of personality types: type daredevil, neutral, cautious	Determination of risk appetite: averse, indecisive, inclined		Techniques and methods: survey

Source: self-processed

Methods for detection and risk analysis and management will allow to develop recommendations on the formation and improvement of the business risk management system.

Changes in retail today allow to predict that in the near future:

- appear large shopping complexes with centralized warehouses, computer systems in each store, and means an automatic transmission for the delivery of goods queries from the central warehouse to all stores;
- will be available complete statistics for each store - sales volume and earnings per 1 meter of Commerce Square; the volume of sales and profits on the most affordable places to buyers on the trading floor;

- an increase in sales of each type of goods as a result of its promotion for the campaign, and similar data for product groups and to individual sections of the store;
- more thoughtful placement will be in stores rapidly changing range of goods, the maximum retail space will be given a hot commodity, resulting in reduced distribution costs;
- reduced size and at the same time will enlargement stores;
- automated system for bar code reader and the system analysis of the direct product profitability will be applied everywhere.

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IS TRADE DECLINE A START OF A NEW GLOBALIZATION TREND?

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Abstract. Abstract. The article analyses globalization changes from the international trade trends point of view. In its history globalization has gone through several shifts modifying its features. Therefore, nowadays globalization differs from its original form mostly characterised by high economic growth, intensification of international trade and production factor movement. The international trade, formerly based on spontaneous relations of the sovereign states was gradually transformed into a more institutionalized shape (GATT or WTO structure) after the World War II. The trade acquired a multilateral form and supported the globalization (or hyperglobalization) trend. Later, nevertheless, in contrast to the post-war arrangement, the general economic conditions changed including trade development. Thus, the globalization period running in the past 10-15 years might appear a milestone of the whole process. According to some authors, the pace of globalization has slowed down in response to the world economy changes (economic volatility and uncertainty increase, etc.), nowadays especially as a result of changes in the international trade area. The trade dynamics has lowered compared to the world GDP growth. The reasons are both cyclical and structural. Gradually the nature of the trade is getting more regional bringing rather a multipolar world than a globalized one. Considering the current development of the international trade, the author of the article suggests opening a thorough discussion on the globalization character.

Keywords: globalization, international trade, multipolar world.

JEL Classification: F1, F6, O1

1. “Tradiční” vlny globalizace a obchod

Proces globalizace probíhá zhruba 150 let a formuje zásadním způsobem prostředí světového hospodářství. Jeho *první vlna* započala nejpozději ve druhé polovině 19. století v souvislosti s převládnutím masové průmyslové výroby v době druhé průmyslové revoluce a vlnou integrace formující světovou ekonomiku jako systém vztahů mezi národními státy. Tato vlna trvala pak do první světové války (Haberler, 1964). Moderní fázi globalizace lze však spojovat s obdobím po druhé světové válce, které uvodilo *druhou globalizační vlnu*, jež se rozvinula zejména po r. 1960 (Baldwin & Martin, 1999; McGrew, 2008).

Obě fáze mají řadu shodných rysů. Ty vyplývají z obecné podstaty globalizace, kterou je samotný kapitalistický tržní proces. Funkcí liberálního trhu je maximalizace efektivity a ekonomického růstu. Trhy se proto musí propojovat do větších celků k dosažení úspor z rozsahu. Kromě stěžejního ekonomického faktoru – kapitalismu a trhu – jsou v rozvoji globalizace podstatné technologické a organizační faktory a také politické předpoklady,

zejména prosazení neoliberální ideologie v politice národních vlád a institucí (McGrew, 2008, s. 296-298). Obecné ekonomické (tržní) předpoklady mají většinou setrvalý charakter, zatímco politické mohou být v jednotlivých obdobích modifikovány.

Propojování trhů, resp. globalizace, se v souladu s ekonomickými předpoklady projevuje v několika oblastech pokrývajících jak výsledky výroby, tak její faktory (IMF, 2000). Nejstarším a zásadním fenoménem je rychlý *růst mezinárodního obchodu*, zejména exportu a importu zboží. Ten je od konce 19. století dále provázen masivním *přeshraničním pohybem kapitálu* a současně *mezinárodním pohybem práce*. Později během 20. století, spíše během její druhé vlny, se řadí mezi stěžejní rysy globalizace *internacionalizace znalostí a technologií*.

Globalizační postup byl v první polovině 20. století oslaben, či pozastaven, v důsledku negativních ekonomických i politických vlivů. V ekonomické oblasti se nepříznivě projevilo selhání trhu v době Velké deprese ve třicátých letech, spojené i s oslabením neoliberálního paradigmatu. Za narušení globalizačního trendu lze považovat i období světových válek, které znamenalo dočasné zesílení ekonomické autarkie národních států. Globalizační trend se nicméně po roce 1945 obnovuje, a to i přes složitou ekonomickou a mocensko-politickou situaci v bipolárním, či tripolárním světě (Bernásek, 2002, s. 9-12).

První a druhou vlnu globalizace (do konce minulého století) i přes odlišný průběh spojují podle některých autorů nejen uvedené obecné charakteristiky, ale také míra otevřenosti ekonomiky, která od počátku globalizace vzrostla, avšak ve srovnání obou vln se výrazně nezměnila. Např. i přes neustále rostoucí kvantitu obchodu, C. Hay uvádí, že jeho podíl na světovém HDP byl ve druhé vlně po r. 1960 srovnatelný s první fází před první světovou válkou, popř. i menší (Hay, 2008, s. 332). Podobně se nezvýšil ani podíl přímých zahraničních investic v konstantních cenách (Nayyar, 2002, s. 7-8). Obchodní a kapitálové toky sílí spíše regionálně a neposílily integraci světového hospodářství, resp. míru jeho globalizace (Hay, 2008, s. 342-344).

Celkově byla první i druhá vlna do 90. let dvacátého století, v důsledku postupného převládnutí pozitivních ekonomicko-politických předpokladů a obnovení trendu ekonomické liberalizace, i přes určité výkyvy dlouhodobě charakterizována spíše tendencí k ekonomickému růstu, intenzifikaci mezinárodního obchodu a pohybu výrobních faktorů.

Navzdory uvedeným podobnostem obou vln lze uvažovat v poválečné fázi (po r. 1945) o nových rysech globalizace. Ty se projevují významně právě v obchodní oblasti: v kvantitativním nárůstu mezinárodního obchodu, který byl i podpořen institucionálními změnami v jeho zabezpečení. Z hlediska mezinárodního obchodu proběhla během druhé vlny, jako podstatný globalizační faktor, postupná multilaterální obchodní liberalizace, která vyvrcholila v 90. letech. Tato liberalizace usilovala o obnovu narušených mnohostranných obchodních vazeb a rozvoj mezinárodních investic přerušovaných Velkou depresí a druhou světovou válkou.

Vytvořený mezinárodní obchodní systém (ve formě Všeobecné dohody o clech a obchodu – GATT) mířil k vytvoření takového obchodního uspořádání, které by se opíralo o konsensuální přijetí pravidel k usnadnění obchodu a řešení případných sporů. Podle některých autorů tento systém do 70. let neumožňoval tak rychlý postup globalizace, neboť respektoval zájmy, obchodní a další, jednotlivých států. (Rodrik, 2011, s. 69). Institucionalizace mezinárodního obchodu však dále pokročila, s vrcholem v 90. letech, završením Uruguayského kola GATT a vytvořením Světové obchodní organizace – WTO. Vznik WTO znamenal změnu původního

poválečného uspořádání brettonwoodského typu, považovaného za „mělkou“ globalizaci, která se nyní prohlubuje sjednocováním domácí a zahraniční ekonomiky a politiky a zavdává podnět k úvahám o tzv. hyperglobalizaci (Rodrik, 2011, s. 76, 83, aj.)

Poslední fáze druhé vlny v 90. letech a na počátku nového tisíciletí je tak považována dokonce za období urychlení globalizace (srovnej Natella & Keating, 2015, s. 3). Na urychlení měl vliv souběh příznivých politických a ekonomických faktorů. Geopoliticky se příznivě projevil pád komunismu, po němž se v zásadě sjednotila světová ekonomika do jednoho tržního celku. Vyvrcholil proces transnacionalizace: velké korporace rozvinutých zemí propojily svět a vytvořily další významný definiční znak globalizace. Důležitou změnou v mezinárodním měnovém systému a nesporně i globalizačním faktorem byl vznik nové nadnárodní měny, eura. Velmi příznivě se vyvíjela situace rozvojových zemí: prudce akceleroval růst čínské ekonomiky, posléze i celých skupin zemí (např. BRICS) a tyto státy měly aspirovat na role významných hráčů globalizačního procesu. Svému kulminačnímu stádiu se přiblížila i expanze liberalizovaných kapitálových trhů.

Lze proto soudit, že globalizace dosáhla na přelomu tisíciletí v daných relativně příznivých ekonomických a politických podmínkách svého určitého vrcholu. Současně však další vývoj naznačoval, že se její potenciál v některých směrech vyčerpá a objevily se překážky jejího postupu.

2. “Krise” globalizace a obchod

Jedním ze signálních faktorů hromadění problémů při rozvoji globalizace byly slabiny finančních trhů, které vyústily v bublinové boomy od počátku nového tisíciletí a posléze v těžkou finanční a hypotéční krizi v letech 2008-2009. Krize měla destruktivní charakter ve většině vyspělých zemí; dotkla se mimo jiné nepříznivě i eurozóny a nové evropské měny. Vznikající ekonomická a finanční nestabilita začínala mít charakter dominového efektu s globálním dopadem. Její důsledky se přenesly částečně i do rozvojového světa. Dále zpomalil ekonomický růst Číny a proběhl útlum ve většině zemí skupiny BRICS. Tato skutečnost by mohla, vzhledem k nutnosti reformulace hospodářských politik těchto států, výhledově i oslabit jejich úlohu ve světové ekonomice a zpomalit globalizační proces.

Zvolnila se od počátku nového tisíciletí mnohostranná liberalizace světového obchodu oproti tempu v předchozích dekádách. Očekává se, že v obchodních vztazích, i přesto, že multilaterální proces nepřestane postupovat, zaujme významné místo nárůst regionálních dohod (Leering & Bekjarovski, s. 15-16).

Obchodní vztahy se mohou stát významným příznakem globalizačních změn: globalizační proces se zpomaluje nejen z důvodů narůstající celkové ekonomické volatility a nejistoty, ale i strukturálních změn světového obchodu. Perioda po r. 2000 může proto vytvořit milník globalizace. Jejím znakem se stále více stává tzv. multipolarita (O’Sullivan, 2015, s. 4), jež se demonstruje v sílící regionalizaci²⁷, která střídá tradiční globalizaci. Obchod je charakterizován jako regionální, jestliže se ekonomické aktivity soustřeďují do užších oblastí, zpravidla vymezených jednotlivými kontinenty, resp. subkontinenty. Multipolární scénář předpokládá, že

²⁷ Regionalizace světové ekonomiky, resp. její nová vlna, byla již dříve popsána v domácí literatuře (srovnej např. Cihelková et al., 2007; Cihelková et al., 2010).

obchod poroste pomaleji, v návaznosti na to bude pomalejší i ekonomický růst. Ekonomické aktivity jsou také více vedeny regionálními společnostmi oproti globálním.

Lze vést diskusi, do jaké míry se bude tento scénář naplňovat. Globalizace bude pravděpodobně pokračovat, ale některé její tradiční rysy budou zřejmě modifikovány touto multipolaritou. Proto se jeví jako vhodné monitorovat obchodní změny, především tempo světového obchodu, jeho strukturální změny a vztah ke světovému růstu.

2.1 Změny mezinárodního obchodu v současném stádiu globalizace

Již bylo naznačeno, že rostoucí intenzita obchodu je příznakem zvyšující se otevřenosti a provázanosti ekonomik a je považována za jeden z tradičních, avšak stále stěžejních rysů globalizace. Většina autorů oceňuje dlouhodobou stimulační úlohu obchodu v ekonomické aktivitě zemí. V tomto směru obchod není posuzován jako pouhý vedlejší produkt ekonomického růstu, ale jako jeho nezávislý zdroj, který má zřetelný dopad na životní úroveň (Leering & Bekjarovski, s. 6). Pozitivní dopad je někdy vyčíslován i kvantitativně. Jednoprocentní růst podílu obchodu na HDP by měl zvyšovat důchod na hlavu o 1,5 % (Frankel & Romer, 1999). Zdůrazňuje se rovněž vyšší efektivita exportérů, kteří vstupem na zahraniční trhy zvyšují produktivitu ve svém odvětví (Wagner, 2012). Růst jejich produktivity je pak vyšší než u firem realizující prodeje na domácím trhu.

Mezinárodní obchod jako jeden z klíčových rysů globalizace zaznamenával po druhé světové válce dlouhodobě vysoké tempo. Světová obchodní výměna měřená hodnotou zbožíového obchodu rostla během posledních padesáti let průměrně okolo 10 % ročně. Devadesátá léta a období před finanční a hypotéční krizí pak představují vzhledem k dalšímu vývoji poslední úsek, kdy se pod vlivem příznivých okolností (zejména konec studené války a expanze čínské ekonomiky) projevoval světově silný ekonomický růst, současně s intenzivním zvýšením obchodu (Neville, 2016).

Table 1: Poměr procentního růstu světového zbožíového exportu a světového HDP (klouzavé průměry za vybraná období).

	1995-2000	2000-2005	2005-2010	2010-2014
Export	7,0	5,0	3,5	3,5
HDP	3,4	2,9	2,3	2,5
Poměr	2,06	1,72	1,52	1,40

Source: WTO, 2015; vlastní výpočty a zpracování.

Historické analýzy prokazují, ve srovnání s HDP, podstatně vyšší variabilitu obchodu, který kolísá trojnásobně více než produkce (Engel, 2011). Existuje tedy rychlejší růst (resp. pokles) obchodu než činí zvýšení (snížení) produkce, čili obchod má ve vztahu k HDP vyšší elasticitu. V období patnácti let před finanční krizí byl růst světového obchodu 1,9 krát vyšší oproti dynamice světového HDP a tento poměr se, zvláště v 90. letech, oproti předchozímu období zvyšoval (Leering & Bekjarovski, s. 8-9).

V poslední fázi však zaznamenává vývoj obchodu jiný směr. Elasticita, měřená růstem světového exportu ke zvyšování produkce, v posledních letech poklesla. Pokles je setrvalý po r. 2000 (viz tab. 1), avšak v posledních letech, na základě novějších údajů, v průměru za období 2010-2015 činí poměr dokonce pouze 1,28²⁸. Tempo růstu exportu se tedy s růstem

²⁸ Vlastní výpočet podle (WTO, 2016)

HDP vyrovnává a poměr se bude podle některých analytiků stále více přibližovat jedné se závažnými důsledky pro světový vývoj. (Neville, 2016). Zpomalení obchodu lze chápat, jestliže se bere v úvahu zpětný vliv obchodu na hlavní ekonomické veličiny, jako riziko pro další světový růst a zároveň jako riziko pro další postup tradiční globalizace.

Podle analýz vývoj zatím potvrzuje *změnu relace obou sledovaných veličin* ve vztahu k předchozímu trendu. (Leering & Bekjarovski, s. 10). Jedná se sice o relativně krátké období, z něhož nelze dělat zásadní závěry. Nicméně přesto lze předběžně identifikovat některé faktory, jež stojí za posuny v obchodní elasticitě.

2.2 Příčiny současných změn mezinárodního obchodu.

Krátkodobý až střednědobý obchod je ovlivňován *cyklickými faktory*, jako jsou změny poptávky, které vedou ke změnám importu. Ty se projevíly v době globální hypotéční a finanční krize a bezprostředně po ekonomickém zotavení. Jejich vliv však následně klesal. (Constantinescu et al., 2015).

Menší vliv na kolísání obchodu mělo např. oslabení ekonomického růstu v EU; nepromítlo se však významně do poměru HDP a exportu ve světě v důsledku zpomalení světového růstu (Leering & Bekjarovski, s. 11). Obchod nebyl výrazně postižen ani určitým zvýšením protekcionismu; nárůst obchodních restrikcí byl případně kompenzován pozitivním vlivem globálních hodnotových řetězců (GVC) na mezinárodní směnu (WTO, 2014; Gawande et al., 2011).

Za hlubší důvod obchodního zpomalení je proto považováno působení dlouhodobých faktorů: jak bylo naznačeno, jde o *změny strukturálního charakteru* (Constantinescu et al., 2015), které stojí v základu vývoje obchodní elasticity, resp. procentní změny obchodu vzhledem ke změně HDP. Jak bylo uvedeno, dlouhodobá elasticita vzrůstala, zejména v 90. letech: dosáhla ukazatele dokonce vyššího než 2 a předčila svojí hodnotou předcházející (1970-1985) i následující (2001-2013) období, kdy činila shodně 1,31. Šlo tedy o výrazný strukturální posun ve vztahu obchodu a produktu (Constantinescu et al., 2015). Strukturální faktory měly po zeslábnutí krátkodobých vlivů po krizi 2008-2009 až poloviční vliv na změny obchodu. Zásadní tak je, že obchod přestal pružně reagovat na vývoj HDP a snížila se jeho elasticita.

Jaké byly strukturální posuny ovlivňující elasticitu? Především dochází ke *změně skladby obchodu* jako odraz *mění se míry fragmentace produkce*. Více fragmentovaná výroba představuje více komponentů a jejich dodavatelů (včetně zahraničních) na jednotku produkce a tudíž i větší export a import, resp. zvýšení elasticity obchodu ve vztahu k produktu. Analýzy konstatují nárůst této fragmentace a obchodní elasticity právě v 90. letech (Escaith et al., 2010); podobný vliv měl také nárůst GVC (Gawande et al., 2014). Naproti tomu později, v souvislosti se změnami alokace výroby, dochází k jejich větší koncentraci, zejména zpracovatelského průmyslu a jeho komponentů, do mateřských zemí (např. Neumann, 2015). Zpomaluje se tak fragmentace (či se defragmentuje) produkce, resp. i pomaleji expandují GVC, což se promítá do poklesu dlouhodobé elasticity (Constantinescu et al., 2015). Elasticita významně poklesla např. v USA: ze 3,7 na 1,0; v ČR z 1,5 na 1,1. Právě v Číně se snížil od poloviny 90. let podíl importovaných komponentů v celkové exportní produkci ze 60 % na 35 % a ještě výrazněji ve zpracovatelském exportu. Rostla tak přidaná hodnota domácích čínských firem, při substituci zahraničních inputů domácími (Kee & Tang, 2015).

Jako další faktory, zřejmě s nižší závažností pro změnu elasticity, jsou jmenovány *změna skladby HDP*, prostřednictvím poklesu obchodně intenzivních složek produktu, jako jsou investice (Boz et al., 2014) a dílčí *změny obchodního režimu*, resp. protekcionismus. Míra protekcionismu sice nezpomalila po krizi zásadněji obchod, avšak nedochází ani, ve srovnání s léty 1985-2000, k většímu průlomů v obchodní liberalizaci, schopné zvětšit elasticitu obchodu.

3. Conclusion

Globalizace představuje proces tržního charakteru. Znamenala relativně přímočarý nárůst kvantitativních parametrů integrace většiny součástí světové ekonomiky, měříme-li je pohybem výsledků výroby i výrobních faktorů. V tomto smyslu byla globalizace kontinuálním procesem v průběhu obou svých doposud zaznamenaných vln. Tradiční a stále významnou úlohu v tomto procesu sehrávala intenzifikace mezinárodního obchodu.

Za určitou periodu vyvrcholení tohoto vývoje globalizace lze považovat období 90. let minulého století. Přelom tisíciletí však přinesl komplikace, které se promítly do globální ekonomické krize, zmírnění ekonomického růstu a zpomalení obchodu.

Lze zvažovat, zda tyto jevy představují novou fázi, či trend ve stávající globalizační vlně, a zda změni její dosavadní charakter vlivem zmiňované rostoucí multipolarity, resp. regionalizace světové ekonomiky. Tyto projevy se promítají v restrukturalizaci výroby, koncentrující nyní více svých produkčních součástí do jednotlivých zemí či regionů s důsledkem pro mezinárodní obchod, jehož tempo růstu v posledních letech pokleslo a v důsledku strukturálních změn je ve vztahu k HDP pozorovatelná klesající obchodní elasticita. Změny obchodu mohou být příznakem určitých nových trendů, jež mohou změnit dosavadní povahu globalizace.

Pokles obchodu je ovšem dosud relativně krátkodobý. Některé analýzy sice soudí, že jeho výše uvedené strukturální modifikace v blízké budoucnosti přetrvají (Constantinescu et al., 2015). Nelze však jednoznačně předpokládat dlouhodobý obchodní útlum vzhledem k tomu, že do procesu vytváření mezinárodní dělby práce vstupují stále více nové státy a regiony (jižní Asie, Jižní Amerika, Afrika), vytvářející nové produkční a současně obchodní struktury, které budou představovat např. i nové podněty k rozvoji globálních obchodních řetězců. Za těchto okolností nemusí být útlum obchodu setrvalý a jeho účinky na postup globalizace by měly být předmětem další diskuse.

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HOW DO LABOR RIGHTS RELATE TO INVOLVEMENT IN THE WORLDWIDE ECONOMY?

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Abstract. Relying on research on the link between economic globalization and labor rights (Blanton and Blanton, 2016; Blanton and Peksen, 2016), we first inspect the wider theoretical arguments that address this topic, attempting to supply a broader viewpoint in a sphere of investigation that has generated mixed findings: economic features of globalization are of interest to the examination of labor rights, economies may be inclined to alter their formal labor laws and to participate in voluntary agreements, and labor rights may be a positive advantage that societies obtain from engaging in the worldwide marketplace. Based on this evidence, we identify a demand to explore this topic further and we exemplify our argument via instances of the specific manners in which globalization may influence a labor rights scheme: labor practices may be more predisposed to modify than labor laws, whereas both may impact an economy's assimilation into the international order. Lacking expanded state resources and readiness to implement legal protections, companies may oppose enhanced labor laws by disregarding them. Economies with stable legal systems may have beforehand laws that defend fundamental labor rights. The essential position is that endeavors should be made with regard to attaining a more unbiased balance between the concerns of labor rights and economic competitiveness.

Keywords: labour, right, globalization, economy, state

JEL Classification: J08, J24, J41, J78

1. Introduction

This study builds on a substantial literature of empirical investigations on the link between economic globalization and labor rights. The latter may be an agreement related to market-liberalizing schemes: free markets function advantageously in a setting in which countries annihilate obstacles to international trade and capital (Kunnanatt, 2016), preserve macroeconomic stability, and supply negligible control of businesses and labor markets (the volatility of capital and labor markets, strengthened by macroeconomic stability, can maintain enhanced competitiveness and economic growth). While countries may pass laws that advance labor rights, the latter's actual protection constitutes a responsibility to supervise employers

(Uhrig, 2015) and charge lawbreakers if required. In situations where the country is deficient in either the resources (Ștefănescu-Mihăilă, 2015) or the political determination to vigorously protect these rights, companies should implement the regulations, whether via self-regulation or dynamic commitment in voluntary or private regulatory regimes. (Blanton & Peksen, 2016)

2. Literature review

Even though states may attempt to alter their established labor laws and to employ voluntary agreements, such undertakings may indicate discursive or symbolic endeavors and not considerable responsibilities to enhancing labor rights in practice. Labor practices may be more predisposed to alter than labor laws, to the disadvantage of collective labor rights. Admitting a country intensified legal protections for labor or preserved extant laws (Nica, 2015, A), practices may not enhance without particular endeavors being made to carry out the laws. Instead of vigorously challenging labor entities (Oliver, 2016), a country should alleviate labor rights via a strategy of harmless neglect: globalization would bring about a degradation of labor practices while labor laws persist unaltered. The labor rights regime is rather ineffective in contrast to other rights-based regimes, because of both the character of the important entities along with the normative position of the labor rights. (Blanton & Blanton, 2016) Civil society participants and strengthening public and private supervisory entities (Lăzăroiu, 2015) have a significant function in furthering constancy to worldwide labor standards. Codes of conduct are the channel for conveying worldwide labor standards to supplier companies (Schomann, 2015), and social monitoring are a benchmark of companies' constancy to these standards. Code audits supply a significant window into the circumstances under which private organizations like supplier companies adopt worldwide labor standards. Treaties may either herald or impact domestic normative settings (Brown, 2016), global participants like the International Labor Office (ILO) may advance cohesion to worldwide labor standards via interplay with ratifying countries, and multinational corporations (MNCs) may supply a process for carrying out worldwide labor standards. Domestic legal settings influence businesses' cohesion to worldwide labor standards. (Toffel et al., 2015)

3. Methodology

For the investigation of the formulated issues, we develop first-rate recent literature and prove that the pervasiveness of the worldwide labor rights regime, in addition to the expansion of labor certifications and voluntary codes of conduct (St John, 2015), imply that states more assimilated into international entities tend to have enhanced labor rights conditions. While social assimilation may signify enlarged personal freedoms and physical integrity rights (Lăzăroiu, 2013), the latter may transfigure into diminished degrees of collective labor rights. Labor rights norms would circulate, as countries compete with the labor rights practice of their bordering states. Labor practices and labor laws may impact a state's assimilation into the international order. The detrimental effect of globalization is extremely noticeable in its influence upon labor practices (Popescu, 2014), and countries counter globalization by alleviating the degree to which they implement current laws instead of unswervingly weakening the legal regime for labor rights. (Blanton & Blanton, 2016) Supplier companies tend to satisfy worldwide labor standards in countries that dynamically engage in the ILO treaty regime, having also protective domestic labor regulation. Countries have a supplementary function in

furthering cohesion to worldwide labor standards (Cesaroni et al., 2015) by preserving a free press. Countries are relevant for employing established governmental roles such as lawmaking and for their function in facilitating civil society participants to put forth their own regulatory consequences. Company-level cohesion to worldwide labor standards should be assessed to completely evaluate the effect of transnational regulation. Providers are more flexible with worldwide labor standards when they assist purchasers established in states where buyers are prosperous and socially cognizant. (Toffel et al., 2015)

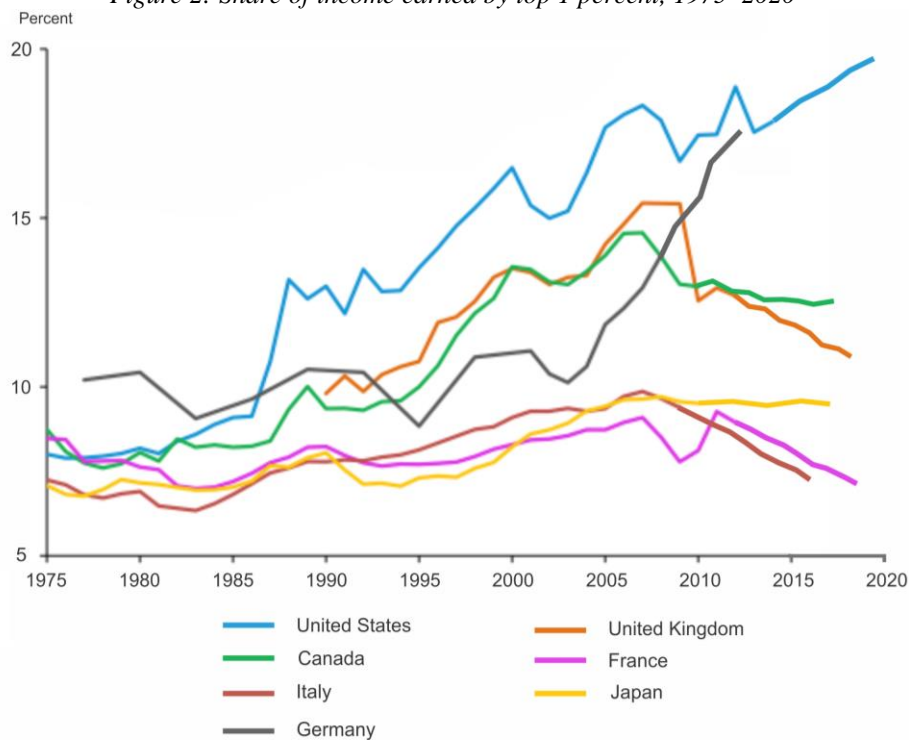
4. Empirical data and analysis

To introduce empirical content to our theoretical model, we start with the finding that in the unavailability of raised country resources and commitment to carry out legal protections, companies may oppose enhanced labor laws by disregarding them. States with robust legal systems may have laws that defend fundamental labor rights. The expanded deregulation of business and labor markets cuts down the rights of employees. The decrease of labor and business regulations may indicate to the whole economy (Dixon, 2015) that employee rights interests are subsequent to business concerns. The legal system measure indicates no statistically relevant impact on labor rights: a state with a robust legal system and the defense of private property rights (Machan, 2016) may have laws that defend fundamental labor rights, and endeavors to enhance the system may not come at the expense of employee rights. (Blanton & Peksen, 2016) The liberalization of trade and finance has generated significant welfare gains that have been disproportionately allocated. Labor standards that defend labor market actors and supply them the method to harmonize as a group influence the wage allocation in an epoch of open markets. Standards raise disparity in labor abundant states as they boost the amount of un- and under-employed (Anderson & Kantarelis, 2016) while augmenting the earnings of hired individuals. In labor scarce economies, capital-intensive output and less elastic labor demand indicate that the employment effect related to more relevant standards and the raised price of labor may be more reduced. In labor scarce environment, more powerful labor standards (Mihăilă et al., 2016) may generate the compression of wages throughout employees. Labor standards may not improve equality or boost disparity. Labor standards curb labor’s capacity to participate globally and restrict the income to employees that openness would under other conditions generate. (Christensen & Wibbels, 2014) (Figures 1–5)



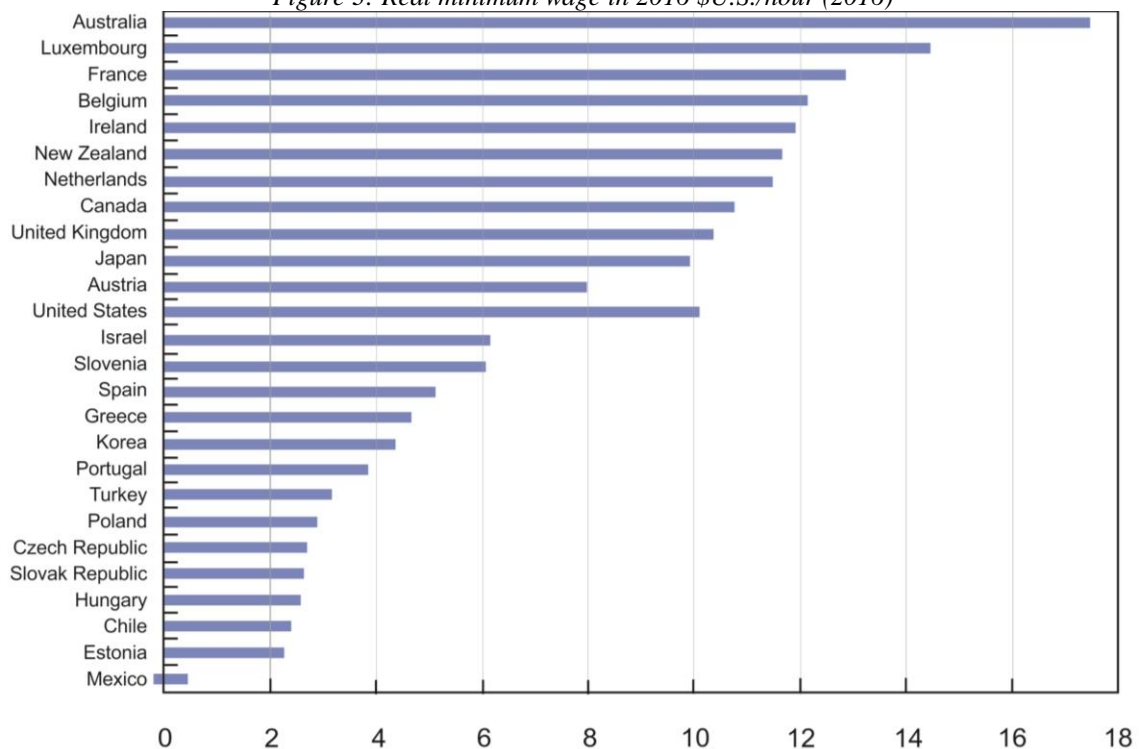
Source: U.S. Bureau of Labor Statistics/Judy Blomquist, Harvard Staff, and our estimations

Figure 2: Share of income earned by top 1 percent, 1975–2020



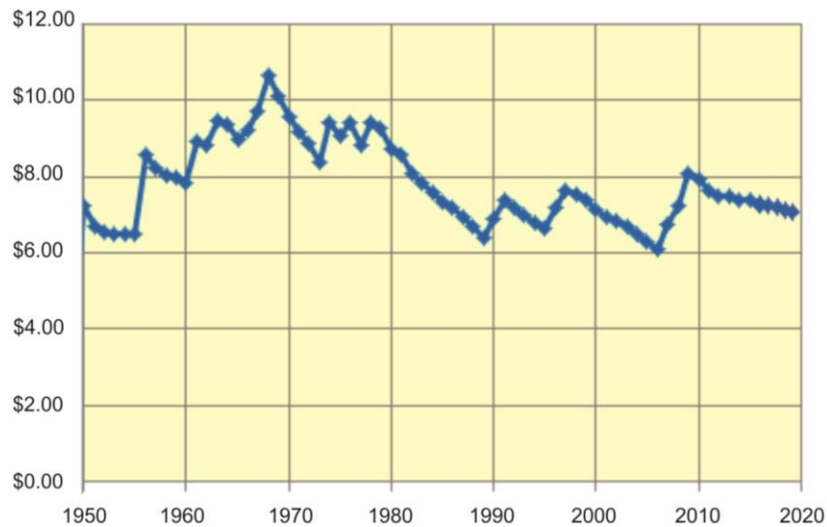
Source: World Top Incomes Database (Alvaredo et al. 2015) and our estimations. Data for all countries exclude capital gains.

Figure 3: Real minimum wage in 2016 \$U.S./hour (2016)



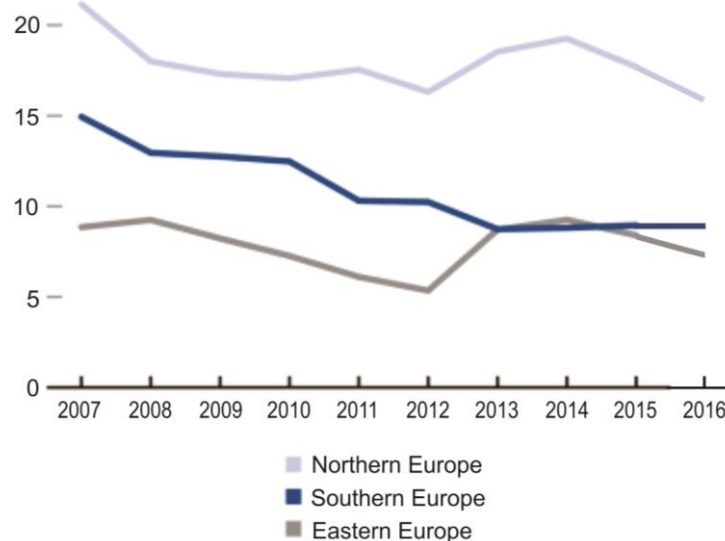
Source: Council of Economic Advisers, U.S.

Figure 4: Federal minimum hourly wage



Source: U.S. Department of Labor (2016) and our estimations

Figure 5: Restrictive labor regulations – the most problematic factor for doing business



Source: World Economic Forum, Executive Opinion Survey, and our estimations

5. Results and discussion

Our findings support our theoretical discussion and empirical analysis and are consistent with research highlighting that political, social, and economic globalization are related to a considerable adverse effect upon labor practices. Globalization has a notably powerful domestic effect, as it impacts power links between the country, labor, and employers, to the disadvantage of labor. Accomplishment of more relevant degrees of democracy within states is related to enhancements in the legal protections (Mulligan, 2015) supplied for labor. The norms disseminated via the various aspects of globalization may be more thoughtful of neoliberal norms (Flegar, 2016), and the latter undermine the degree to which labor rights are defended in practice. (Blanton & Blanton, 2016) As labor is insufficient, labor rights have an adverse or vague impact on the advancement of disparity. Significant labor standards may raise

labor expenses and diminish the demand for labor (an employment effect), and may raise output and wages (a wage effect). The net influence of these effects on a state's income distribution is based on the sensitivity of output to labor expenses. Despite the fact that labor standards aim to protect employees, by raising labor expenses (Nica, 2015, B) they may cut down the demand for unqualified employees (the employment effect of standards). Labor standards are related to raised output and wages among employees who stay hired (the wage effect of labor standards). (Christensen & Wibbels, 2014)

6. Conclusions

The implications of the developments outlined in the preceding sections of this paper suggest a growing need for a research agenda on the link between economic globalization and labor rights. While primary attempts with regard to neoliberalism may not be especially harmful to labor rights, additional endeavors to boost economic freedom (El-Montasser et al., 2016) come at the expense of labor rights. Once states are beyond a particular limit of economic freedom, supplementary harm to labor rights is negligible. There is an adverse link between strategies furthering more global economic openness (Choi & Yu, 2015) and labor rights. Albeit there may be no obvious incongruity between neoliberalism and consideration for labor rights, pro-market schemes generate a decrease in the capacity of labor compared with that of business, which is noticeable in diminished levels of labor rights. (Blanton & Peksen, 2016)

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GLOBAL BUSINESS COACHING AT DACIA GROUP. CONTRASTIVE APPROACH

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Abstract. Business coaching is an emerging domain, growing more and more popular in both business and scholarly community. Being a new concept, it is in need of more research, especially since there is great dissension in the academic word, on its' definition and actual efficiency. The actuality and necessity of more studies on this subject being exposed, we can further proceed to specifying the aim of the article: the analysis of the efficiency of business coaching and the contrastive approach of the business coaching model used in the same international corporation but in two different countries: Romania and Bulgaria. The article focuses on participants' perception with regards to business coaching and its' efficiency, with major highlights on its impact in the management of the chosen corporation. Outcomes are transposed into comparisons which underline not only differences but especially similarities, with the final goal to improve the business coaching domain at an intercultural, global level. The research confirms the efficiency of business coaching on the analysed management of Dacia Group Corporation in both countries, the aim being the knowledge transfer from one location to another in the same corporation. Also, there emerges the necessity for further research in order to reach a global framework on the efficiency of business coaching.

Keywords: business coaching, global coaching, cross-cultural coaching

JEL Classification: M00, M12, M19, M14

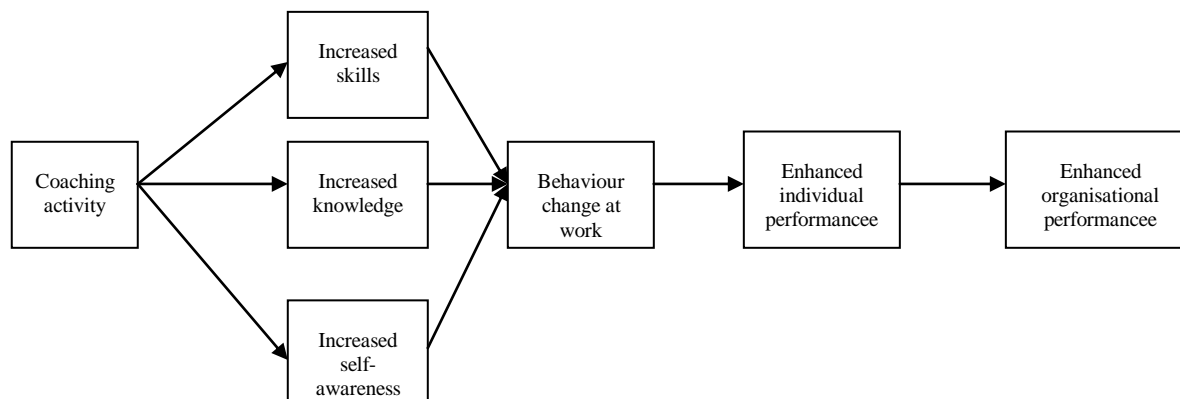
1. Literature review

The article is split into two parts, the first one offers a theoretical framework on the evaluation of business coaching in relation to the cross-cultural dimension, meanwhile the second part is a case study on how business coaching is implemented by the management of Dacia Group Corporation in Romania and Bulgaria.

1.1 Bases of the evaluation of business coaching

Powell & Yalcin (2010) argue that most of the investigations on coaching focus on the change in managerial behaviour having as main aim to increase the organizational effectiveness. Generally, the evaluation of coaching can be made on three levels: the intrapersonal, the interpersonal and the organizational level (Swart & Harcup, 2013). In the hereby article, the following scheme will be used to analyse the impact of coaching at the coachee level.

Figure 1: Business coaching evaluation



Source: MacKIE, 2007, p. 314.

Baker et.al (2008, p. 83) consider that business coaching brings improvements in several areas, more precisely: implication and efficiency, staff management, communication, setting of goals, prioritization and relation between employees and managers. Leadership and staff can not be separated from a coaching perspective (Liljenstrandband & Nebekerb 2008), relationships within corporations being based particularly on common values (Hofstede, 2005, p. 268). However, as new studies argue, only mature organisations that have certain processes and practices can benefits from business coaching (Mihiotis & Argirou, 2016, p. 448).

1.2 Cross-cultural business coaching

Adding the cultural dimension to business coaching is more than necessary (Theeboom, Beersma, & van Vianen, 2014). In a recent research on coaching differences between males and females business executives, the results proved that “male leadership, particularly coaching behavior, is more influenced by societal culture than female leadership”(Ye, 2016, p. 1791).The main aim is to focus on the cultural differences in order to improve the communication and the integration of all employees, and from this perspective, the role of the team leader and his coaching behaviour is particularly important in ensuring optimal business communication (Schaubroeck et al., 2016, p. 1709). As Rosinski (2003) puts it, “traditional coaching tends to operate within the confines of your own cultural norms, values, and assumptions”. In the same context, van der Loch et al. (2013) and Chatwani, N., (2015) connect the cultural aspect with meta-communication. Leaders having experienced a cross-cultural work experience tend to understand better the notion of meta-communication (Lenhardt, 2004, p. 46).

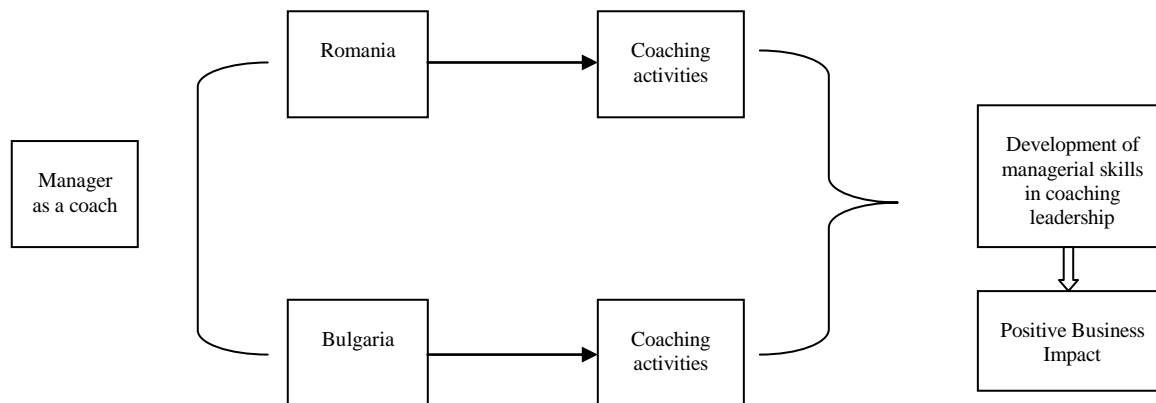
2. Case study

Business coaching is used as a tool of leadership development (Ben-Hador, 2016, p. 88), this being also the case of Dacia Group Corporation in Romania and Bulgaria. Business education assures smart and strategic business directions for development at all levels of organization (Onete et al, 2014, pp. 748). The case study assesses the impacts of the use of business coaching and draws a comparison between both coaching processes.

2.1 Business coaching at Dacia Group. Methodology and participants

The global scenario at Dacia Group with regards to business coaching and its impact on the business is as it follows:

Figure 2: Global coaching scenario at Dacia Group



Source: Dacia document, 2016.

The participants in the research were HR business partner managers in Romania and Bulgaria as well as coaches and coachees in both locations. At first there were performed qualitative interviews having to do with the evaluation of coaching in Romania and Bulgaria, and later on were observed coaching impacts after coachees' interviews. Last but not least, intercultural aspects were assessed.

2.1.1 Outcomes

Table number one makes a summary of the most significant differences between the framework and processes as perceived by the author after the qualitative research on HR managers and coaches.

Table 1: Coaching activity in Romania versus coaching activity in Bulgaria

Bulgaria	Romania
Professional coaching both at External & Internal level	Mainly External Professional Coaching, Internal coaching is currently developing.
The models used as a theoretical background are various.	
All managers	High level managers
Professional Coaching grid	New professional Coaching grid
Coaching issues are dealt by the Coaching Department	Coaching issues are dealt by the HR Office
Individual and team coaching	Trainings for managers generally contain coaching issues
The client is the coachee	The client is the organisation/HR Office
The coachee is involved in the selection of the coach	The coachee is not involved in the selection of the coach
Companies providing the Coach. There is no Professional Coaching Institute in any of the two countries.	
Professionalism is required for coaches	
High level of confidentiality imposed.	Agreements of confidentiality for individual sessions.
Coaching, mentoring, consulting and training do not overlap	Coaching, consulting, training and mentoring overlap.

Source: authors' research

Summing up in terms of methods of selection, coaching in the two countries implies:

Table 2: Coaching major paradoxes in Romania versus Bulgaria

Coaching major paradoxes	Romania	Bulgaria
The client is...	The coachee	The corporation HR department
The coach is selected by...	The coachee (External as well as internal one)	HR department
Key role of HR department in this activity...	Intermediary, in contracting coaching activity	Monitors and evaluates the coaching activity

Source: authors' research

The tables below present a brief summary of key point effects of coaching in Romania and Bulgaria, at the individual level.

Table 3: Coaching impact in Romania from the Coachees' perception

Coaching impact in Romania			
Building enthusiasm Building relationships Building the moral of the team	Empowerment of others	Job satisfaction	Human self-reflection
Build confidence	Developing-yourself	Meeting facilitation	Stress management
Developing coaching leadership	Impact	Self -confidence	Work/life balance

Source: authors' research

Table 4: Coaching impact in Bulgaria from the Coachees' perception

Coaching impact in Bulgaria				
Building enthusiasm Building relationships Building the moral of the team	Making decisions	Empowerment of others	Impact	Human self-confidence
Efficient team-work	Development of coaching leadership	Perspective external/internal	Familiarity/visibility with the organization	Human self-reflection
Better conflict management	Developing-yourself	Skills for interviewing	Skills for listening	Work/life balance

Source: authors' research

During his research, intercultural issues emerged as being particularly important. Further on are summarized the most important aspects collected, the study providing an insight on how managers are perceived (by) and perceive the others.

Table 5: Cultures differences from coachees perception in (1) Romania and (2) Bulgaria

Cultures differences from coachees perception: Bulgarian managers in Romania
Managers in Romania focus on detail and on controlling everything. Managers are very critical with themselves. Managers in Romania expect to know everything from their staff. In Bulgaria there is little transversal communication. Managers in Romania keep themselves away from conflicts.
Cultures differences from coachees perception: Romanian managers in Bulgaria

Fewer discussions in Bulgaria, more discussions and meetings in Romania.
Romanian leadership style not appreciated in Bulgaria.
In Bulgaria decisions are taken with greater difficulty but when made, a project doesn't stop along its way. In Romania changes occur all the time and project can stop any time.

Source: authors' research

3. Conclusion

The hereby research had as major objective the evaluation of the impact of coaching within Dacia Group Corporation in both countries with focus mainly on the business coachees' development and the making of business coaching culture. According to the research, business coaching is used to develop coaching leadership style the impact being positive both in Romania and Bulgaria. This positive impact of business coaching translated also into the fact that coachees perceived the development of leadership (better relationships and communication, better conflict and stress management). As far as the making of coaching culture, from a global point of view, it was seen that there various perceptions of business coaching in Romania and Bulgaria which could negatively impact the efficient making of business coaching culture. As a concluding remark, managers from both countries analysed need to transfer their experience and knowledge for increasing their effectiveness. At the same time, they need to pay special attention to the needs of their staff and other executives as well, particularly if they are in the middle of a multicultural team.

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