South Eastern Europe: Discussing quality of life indicators

Südosteuropa: Diskussion über Indikatoren der Lebensqualität

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Abstract

Quality of life is the substance of sustainable development. This paper deals discusses the quality of life-level in the region compared to that in European Union countries and tries to point out the main weak areas and discrepancies. The analysis is based on six fields of inquiry: economy, education, health, housing, environment and socio-political environment. Demographic and other statistical data are taken from official publications. The analysis shows that SEE countries have lower quality of life- levels in all areas compared to the EU. There is a clear distinction between the core region and the outer zone of the SEE countries.

Zusammenfassung

Lebensqualität ist Gegenstand nachhaltiger Entwicklung. Der Artikel untersucht die in dieser Region erreichte Stufe der Lebensqualität im Vergleich zu Europa (zur Europäischen Union) und versucht, die wichtigsten Schwachpunkte und Diskrepanzen aufzuzeigen. Die Analyse stützt sich auf sechs Befragungsbereiche: Wirtschaft, Bildung, Gesundheit, Wohnung, Umwelt und sozial-politisches Umfeld. Demographische und andere statistische Daten wurden offiziellen Publikationen entnommen. Die Analyse zeigt, dass die Lebensqualität in den südosteuropäischen Länder gegenüber der EU in allen Bereichen niedriger ist. Ein deutlicher Unterschied besteht zwischen Kernregion und Peripheriezone der südosteuropäischen Länder.

1 The concept of quality of life and sustainable development

The concept of quality of life is nowadays widely considered as a new tool for assessing over-all national well-being as well as national trends. There is a close relation between the concept of quality of life and sustainable development. Quality of life is the substance of sustainable development. The central idea of sustainable development is a better quality of life for everyone, now and for generations to come. A widely used definition is "development which meets the needs of the present without compromising the ability of future generations to meet their own needs".

Its complexity and, of course, great regional varieties make it very difficult to define. The most widely used traditional denominators of human progress and development are the Gross National Product (GNP) and its narrower form the Gross Domestic product (GDP), and some other money-denominated indexes of inflation, incomes, interest rates, trade deficits and the national budget. But in order to assess the whole complexity of quality of life one should look behind merely economic statistics to new areas of concern across a broad spectrum, such as: environmental factors, health, education and human rights. In order to embrace all those areas

of concern, the UN Human Development Index (HDI) was created and became the most influential and quoted new formula weighing per capita income (PPP), education and life expectancy. Due to the great regional varieties, the HDI is occasionally combined with some other additional factors, such as environmental factors, poverty gaps, gender and human rights data. So there already exist some 50 national HDI versions. Still one might find aggregating all these aspects into one index inappropriate and often confusing. Diverse aspects of quality of life deserve their own metrics.

2 Modelling and sources

The most recent approaches are systems approaches where a number of dimensions of quality of life are viewed as integral to defining a broad picture of national well-being. These determinants usually include ten to twelve fields: education, health, housing, recreation, natural, political and socio-cultural environment, employment, energy and infrastructure. There are a number of institutions, organizations and agencies throughout the world[1] dealing with the problem of quality of life. Facing growing pressures on urban communities as well as consequences in rural areas and considerable disparities between regions, the main purpose of the quality of life assessment projects is to provide information to decision-makers to improve the quality of life and to ensure sustainable development.

The analysis is grounded in current demographic and other statistical data. The main sources of data are the official publications of: the United Nations, the World Bank, Interpol, the International Labour Office and the Economic Commission for Europe. The availability of international statistical data is of crucial importance for the comparison of countries and regions. As there is no available data on the national level, regionalization on the lower level within each country is not possible.

3 Defining the area

According to the values of main quality of life assesment indicators, two groups of states can be distinguished within South Eastern Europe: the core region (Albania, Bosnia and Herzegovina, Bulgaria, Moldova, Romania, Serbia and Montenegro) and the outer zone, embracing countries which are already members of the EU (Greece, Hungary, Slovenia) and a candidate country (Croatia,). Germany and Finland were chosen as comparative countries from the EU. In addition, the European Monetary Union and high, mid and low income countries of the world (defined by the World Bank) are taken as comparative regions of the world. Comparative regions highlight the general processes and relations involved in quality of life assessment.

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[1] Calvert Group, Bethesda; Quality of Life Project, New Zealand; UK Government Sustainable Development; European Commission Quality of Life and Management of Living Resources Programme; UK Government, The Countryside Agency – Quality of Life Assessment, UK; Mercer Human Resource Consulting, Worldwide Quality of Life Survey, UK; International Living, Quality of Life Index.

4 Quality of life indicators

4.1 Economy

As all core countries in the region are significantly dependent on aid, *aid dependency* is taken as the first important indicator of the economy. Furthermore, the group of economic indicators includes: purchasing power parity and annual growth of household consumption, the two fast-changing value indicators in transitional countries showing an inverse proportional relation; (un)employment, poverty and income (in)equalities.

There is a sharp distinction in aid dependency between the countries of the core region and the outer zone (*Fig. 1*). The values are up to 5 times higher compared to the average value of low-income countries of the world. There is a tendency to assume there will be increasing aid flows to Europe. The countries of the outer zone (Croatia, Slovenia and Hungary) have values similar to those of mid-income countries in the world.

*Fig. 1: Aid dependency*
Source: The World Bank 2004
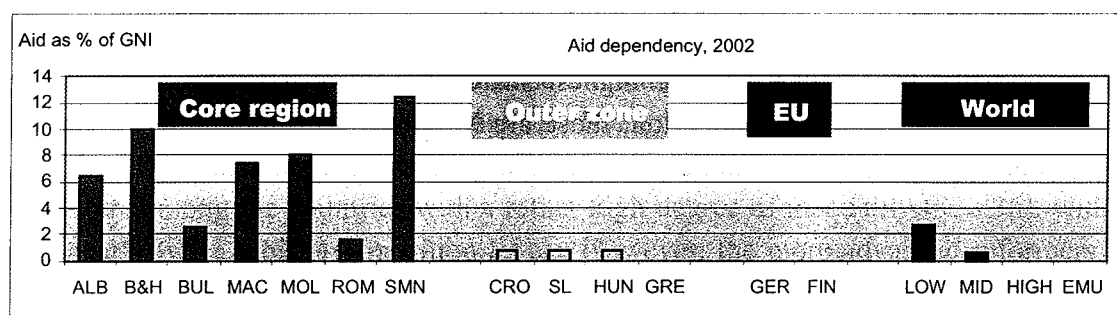
The *purchasing power parity* (PPP) of the gross national income is calculated by converting the GNI to international dollars using purchasing power parity rates. If we are to compare the purchasing power parities in different countries or world regions it is necessary to carry out such a conversion because exchange rates do not always reflect international differences in relative prices. PPP rates provide a standard measure allowing comparison of real price levels between countries. An international dollar, as a measuring unit of PPP, has the same purchasing power over GNI as one US$ has in the United States of America.

The core region of South Eastern Europe is clearly distinguished in comparison to the outer zone, which again forms a group of uniform values, or to the EU (*Fig. 2*). The countries of the core region enter the category of low and mid-income countries.
The values of purchasing power parity, household consumption and poverty are closely related. In countries with already higher income and household consumption, the poverty values are falling and vice-versa; in the poor countries with low values of PPP, the household consumption has risen dramatically.

Fig. 2: Purchasing power parity
Source: The World Bank 2004

PPP GNI per capita, 2002
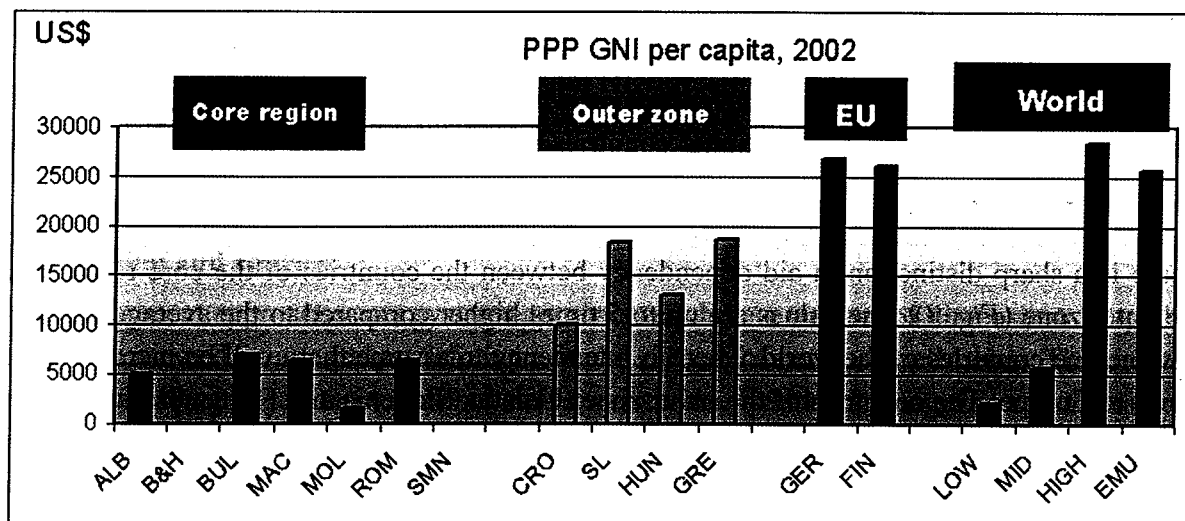
The comparative data of the world regions show that the values of annual growth of *household consumption* drop as the income value is rising (*Fig. 3*). Those South Eastern European countries with the lowest PPP and the highest share of poverty have the highest average annual growth of household consumption; those are Moldova, Albania and Romania, which clearly points to the major social and economic disturbances in the nineties.

Fig. 3: Household consumption
Source: The World Bank 2004

Household final consumption expenditure, 1990-2002
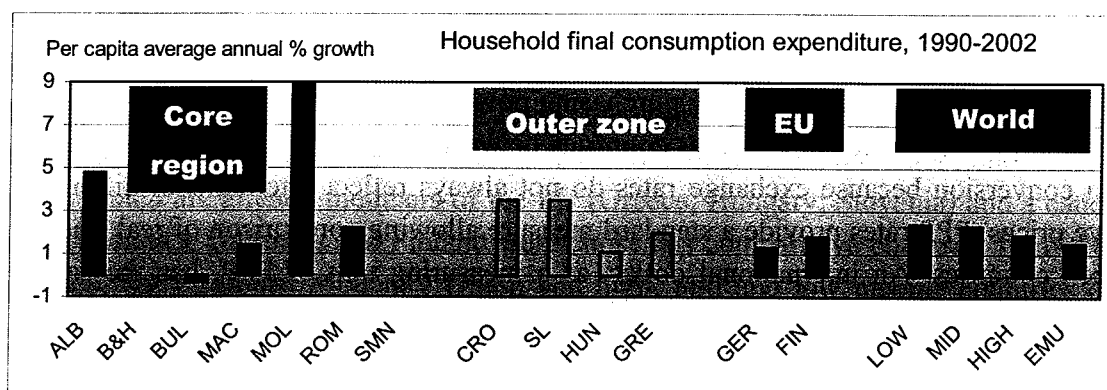
Poverty is expressed by the percentage of the population living below the poverty line of 2 $ a day. The percentage of the population below the poverty line is significant in the core region of South Eastern Europe, notably in Moldova, Romania, Albania and Bulgaria (*Fig. 4*). The percentage of the Moldavian population living in extreme poverty exceeds 60 %. The countries of the outer zone differ from the core countries with low and uniform percentages of poverty (Croatia and Slovenia).

Fig. 4: Poverty
Source: The World Bank 2004

Poverty, population below $2 a day, 2000-02
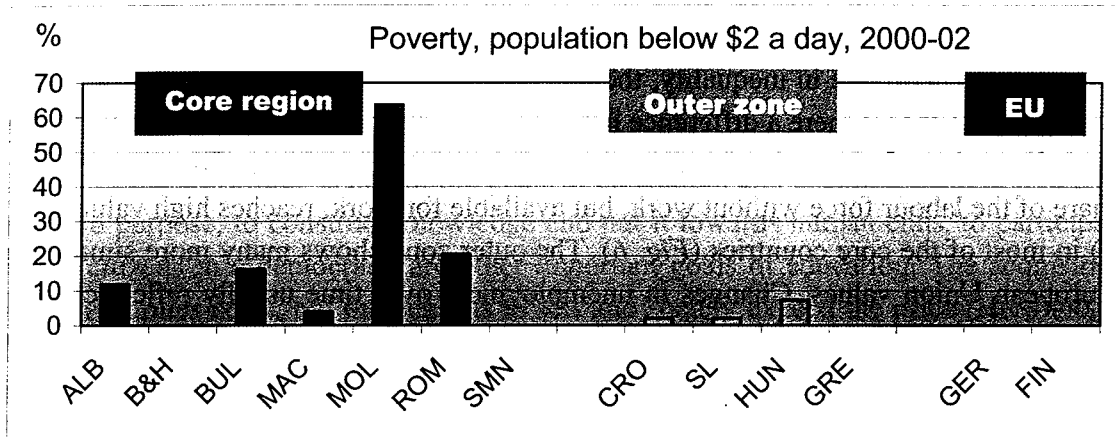
Income inequality is generally increasing in most regions of the world. It is best expressed by the Gini index, a standard measure of inequality with higher figures indicating greater inequality. It measures the extent to which the distribution of income among individuals or households within an economy deviates from a perfectly equal distribution. The countries of South Eastern Europe started the transition period with some of the lowest levels of inequality in the world (Gini values between 21 and 23). Since then, however, inequality has increased steadily in all transition economies (*Fig. 5*). Nowadays some of them, such as Moldova and Bulgaria, are among the countries with a rather high degree of inequality (32 - 36), with Gini indices nearly twice their pre-transition levels. However, the more advanced reformers show much more equal, rather than more unequal outcomes. Croatia is the only country in the region which had decreasing inequality during the last ten years (from 36 to 29) (World Bank 2004).

Fig. 5: Income inequality
Source: The World Bank 2004

Distribution of income or consumption, 2000-2002
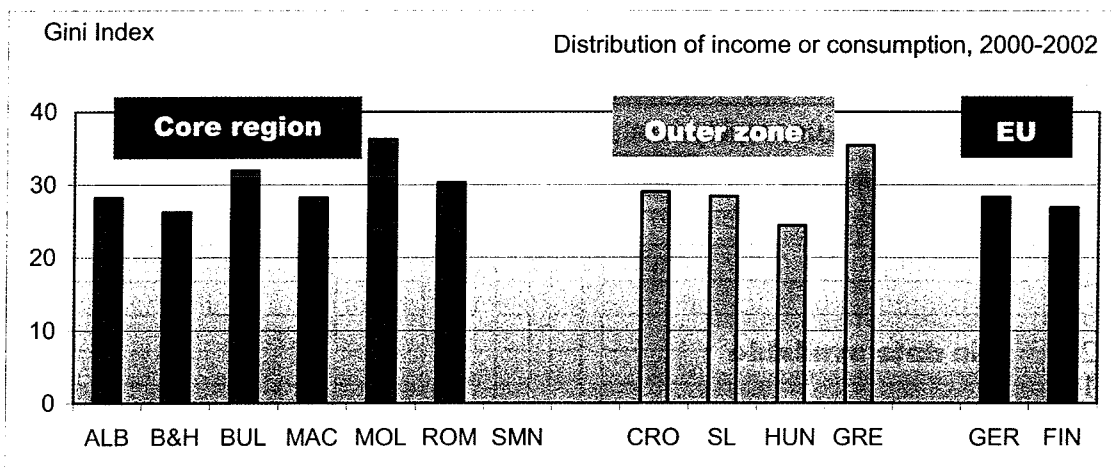
Some of the causes of increasing inequality are related to reforms, but this phenomenon also has a strong correlation to the widespread corruption and poverty in the region. The poor are disproportionately affected by corruption.

In spite of the general rise in inequality, there is no great difference between the SEE and the EU countries. Neither is there a difference between the core and the outer zone of the region. *Unemployment* is a very serious issue in all transition countries. Unemployment, defined as the share of the labour force without work, but available for work, reaches high values (25 % - 30 %) in most of the core countries (*Fig. 6*). The outer zone shows many more similarities to the European Union values. Changes in unemployment over time usually reflect changes in the demand for and supply of labour, which all the transition countries have experienced in the last decade. As to the different types of unemployment, one special problem is that of *long-term unemployment*, which refers to the number of people with continuous periods of unemployment, extended for a year or longer. As countries of South Eastern Europe have undergone deep changes in the labour market, the share of the long-term unemployed is around 50 % of the total unemployed in the countries of outer zone (*Fig. 7*).

Fig. 6: Unemployment
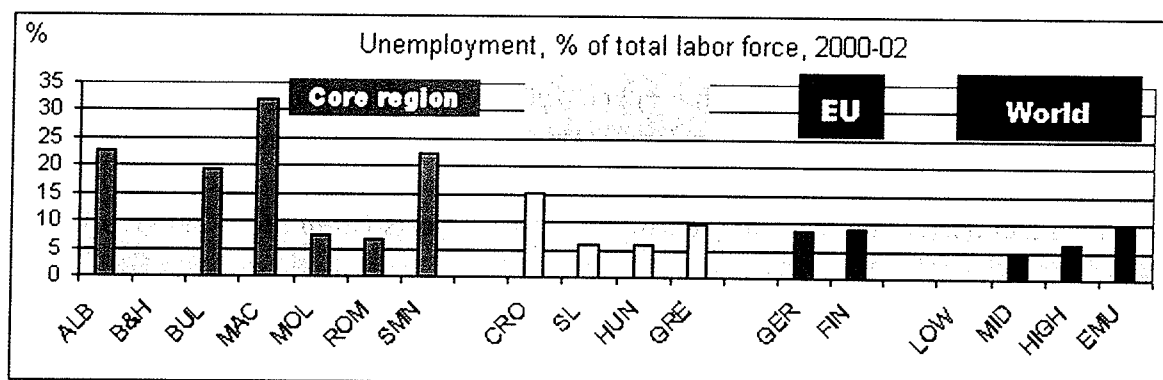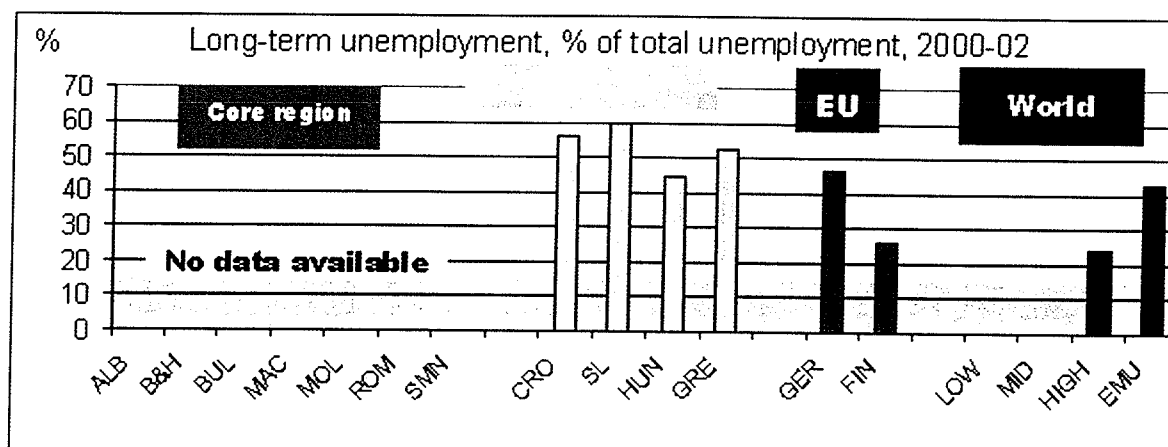Source: The World Bank 2004

Fig. 7: Long-term unemployment
Source: The World Bank 2004

A relatively high percentage of long-term unemployment in the countries with a high level of economic development and low incidence of poverty (Germany, EMU) sometimes is the consequence of the reporting practices.

4.2 Education

Education is the key resource for a country's economic strength and growth. Preparing individuals for the workforce is one of the goals of education, and enabling them to live lives of dignity and purpose, to construct knowledge and put it towards human ends, to participate as informed citizens in a democracy are other important goals of education. The acquisition of knowledge implies costs, but the benefits to self and society exceed the price (HENDERSON et al. 2000). Education, as a quality of life indicator, can be measured by expenditure for education, access to, affordability and distribution of education. Educational expenditure, as the common measure, can be expressed in a number of ways. *Expenditure on education* as a percentage of the GDP can be used most easily as a comparative measure for the countries. The differences between the core countries, the outer zone of the region and the EU are clearly visible (*Fig. 8*):

Fig. 8: Public expenditure on education
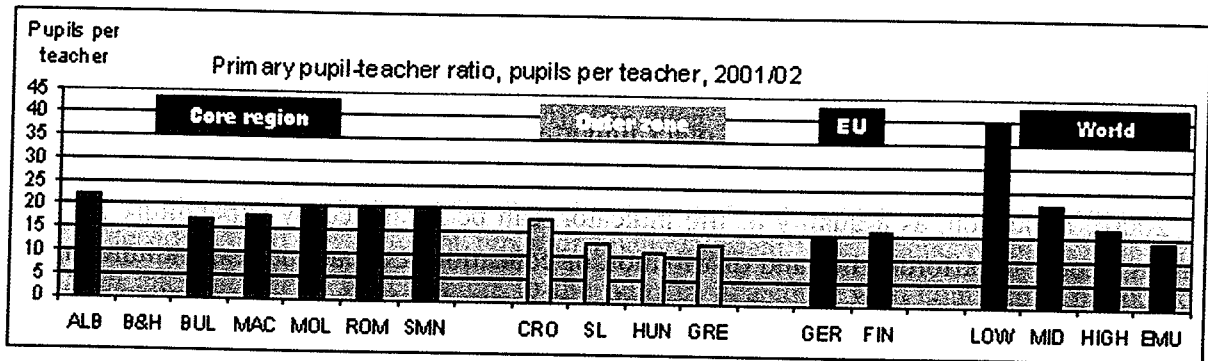Source: The World Bank 2004
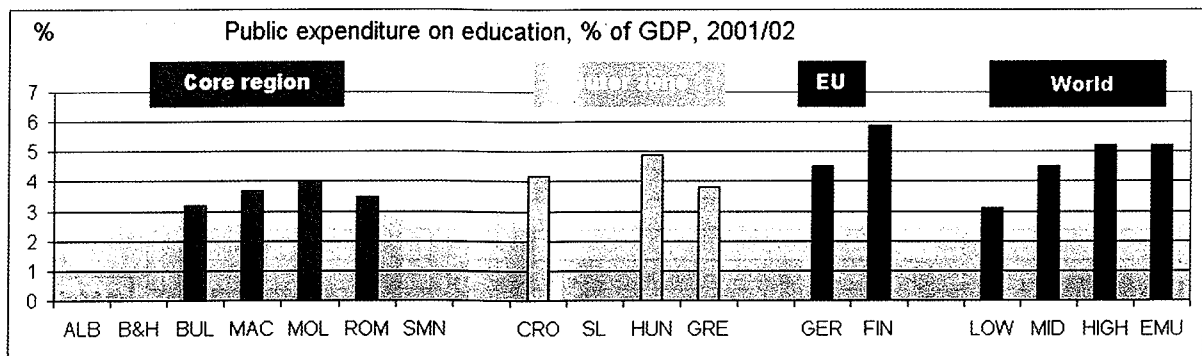
Public expenditure on education varies from 3 % - 4 % of GDP in the core countries to 4 % - 5 % of GDP in the outer zone compared to approximately 5 % of GDP in EU and high-income countries of the world. Apart from total expenditure, it is, of course, a challenge to ensure that resources are allocated to the best use and across the regions within the countries. In many transition countries, falling education budgets have affected opportunities, access and coverage. In many countries, urban and other more prosperous regions have spent more on education while poorer regions have struggled to maintain the basic requirements (Transition 2002). However, the official international statistics do not allow the comparison of regional disparities within the countries.

Generally there is an inversely proportional relationship between the *pupil-teacher ratio* and the level of development. Although there is a slight difference in the ratio between the core countries and the EU, the values are typically low for most of the countries (*Fig. 9*). They are

slightly more favourable in the countries of the outer zone. Falling birth rates also influence the development.
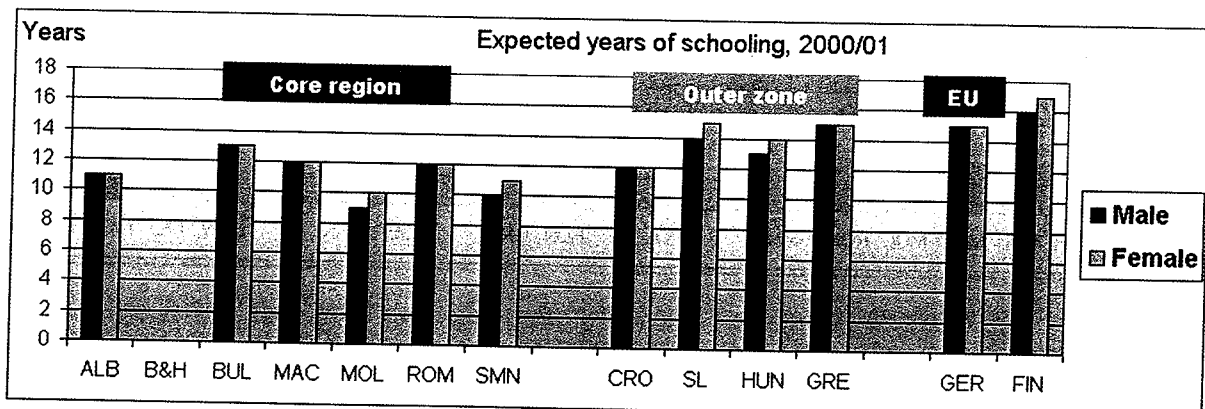
Fig. 9: Primary pupil-teacher ratio
Source: The World Bank 2004

Fig. 9 chart: Primary pupil-teacher ratio, pupils per teacher, 2001/02. Categories grouped as Core region, Outer zone, EU, World. Countries: ALB, B&H, BUL, MAC, MOL, ROM, SMN, CRO, SL, HUN, GRE, GER, FIN, LOW, MID, HIGH, EMU.

Expected years of schooling reflect many aspects of education: public expenditure on education, opportunities, access and coverage. On average, the total number of years is lowest in the core countries, slightly higher in the outer zone and highest in the EU countries (*Fig. 10*).

Fig. 10: Expected years of schooling
Source: The World Bank 2004

Fig. 10 chart: Expected years of schooling, 2000/01. Male and Female bars. Categories: Core region, Outer zone, EU. Countries: ALB, B&H, BUL, MAC, MOL, ROM, SMN, CRO, SL, HUN, GRE, GER, FIN.

4.3 Health

Health involves physical, psychological and social aspects. It is difficult to find good indicators, because different cultures and individuals define health in different ways. Vital statistics are considered as most appropriate because they are available, widely accepted and can be used for comparative analysis (HENDERSON et al. 2000).

The *infant mortality* rate is used widely throughout the world as a general measure of health care. Infant mortality rate is very sensitive to the factors of accessibility and quality health care in the population because it measures the health of the most vulnerable population. Higher infant mortality rates are related to a lower socioeconomic status and lower levels of

education. Infant mortality rates, according to the WHO, decreased in all countries in the nineties. However, the rate is still considerably higher in the core of the region compared to the outer zone and to the EU (*Fig. 11*).

*Fig. 11: Infant mortality rates*
Source: The World Bank 2004
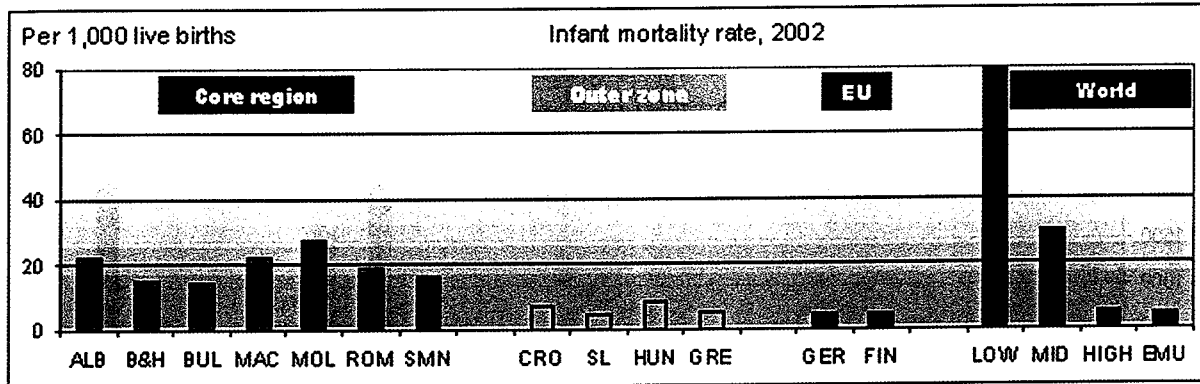
Worldwide, *life expectancy* is increasing. In most countries, according to the WHO, life expectancy at birth is now over 70 years. Life expectancy in the region is within the world average, but still far lower (up to 5 years) compared to EU countries and high income countries of the world (*Fig. 12*).

Fig. 12: Life expectancy at birth
Source: The World Bank 2004
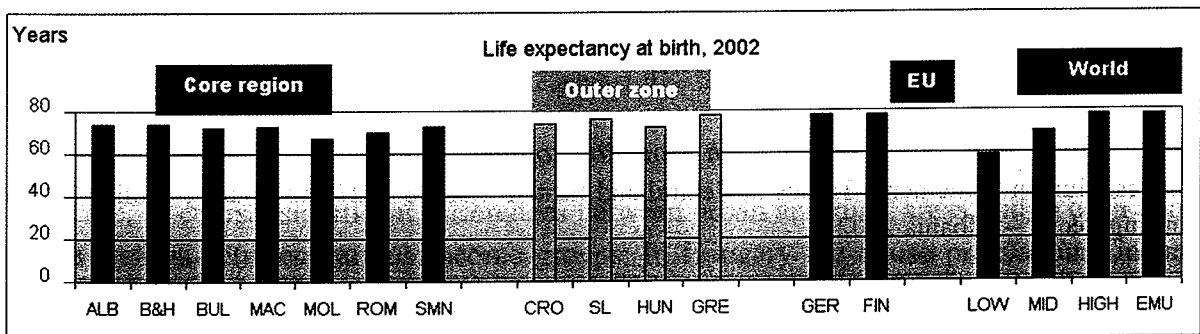
Looking at *health expenditures per capita*, values in the core region do not exceed the values measured in low and mid income countries (*Fig. 13*). Taking into account health expenditure as a percentage of GDP, the results may be surprising. Some of the countries of the region, in particular Croatia, Slovenia and even Macedonia, spend very high percentages of the GDP on health. Croatia is close to Germany with nearly 8 % of the GDP spent on health (Transition, 2002).

Countries often spend significant resources without getting the benefits of quality health care. The main challenge most transition economies face is similar to that in education: the rationalization of the system.

Fig. 13: Health expenditure
Source: The World Bank 2004
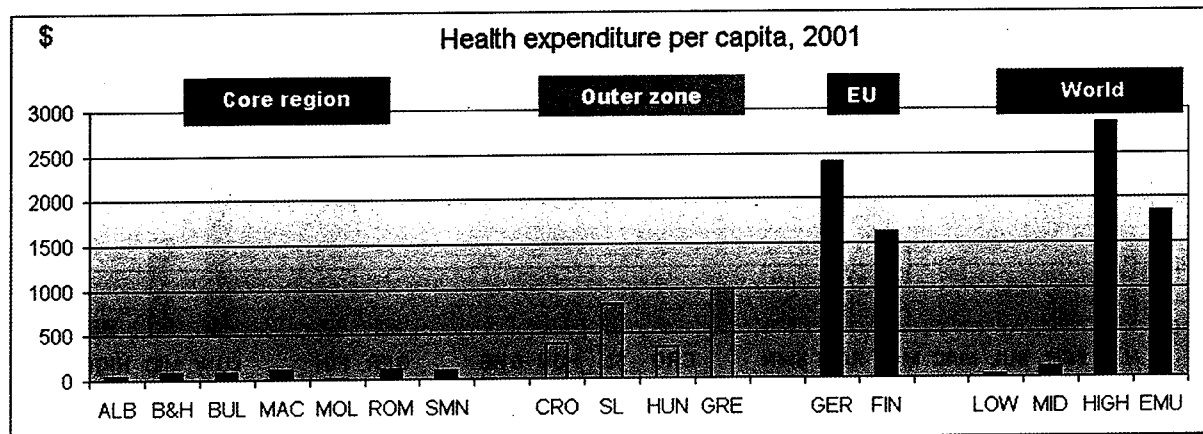
4.4 Housing

Housing is an important contributor to the quality of life. As a quality of life indicator it can be measured and expressed by quantitative and qualitative indices as well as by affordability. Quantitative density indices, such as floor area per person, can be used to assess housing conditions in different countries. Comparing values, it appears that SEE countries have considerably lower values of floor area per person, compared to the average value of other transition countries and notably to West European countries (*Tab. 1*). Albania, for example, only reports 8 sq m. per person.

Tab.1: Indices of housing conditions in transition countries and Western Europe, 1996
Sources: Human Settlements Trends in Central and Eastern Europe 1997 and Country Profiles on the Housing Sector – Albania 2002

Country/Region	Square m per person	
	Total	Country Capital
Hungary	32,1	29,4
Slovenia	19,0	-
Albania	8,0	8,4
Bulgaria	16,7	15,2
Romania	17,4	19,4
All transition countries (av.)	20,4	20,8
Western Europe (Average)	30-45	-

Rural and urban areas differ in quantitative indices as well as in quality standards. While the majority of the urban housing has piped water, electricity and bathrooms, almost half of the dwellings in rural areas lack piped water and modern sewerage facilities. Housing quality is very difficult to measure. It is traditionally related to the physical aspect of housing quality and space standards. However, attention has recently shifted to such indicators as environmental quality, neighbourhood amenities, level of social services, social satisfaction, etc. (Human Settlements Trends in Central and Eastern Europe 1997).

Another important indicator of the housing situation is affordability. This can be measured by the average ratio of the price of a house or flat to annual income. Data were available for a few capital cities only (*Fig. 14*). There is a significant difference in affordability between the SEE core countries, the outer zone and EU countries. A higher value shows that a person has to work longer, and this means it is more difficult to purchase a house or flat.

Fig. 14: Housing affordability
Sources: The World Bank 2004 and Implementation of Human Settlements Policies ... 2000

SOF – Sofia, BEL – Belgrade, ZAG – Zagreb, LJU – Ljubljana, BU – Budapest,
STO – Stockholm
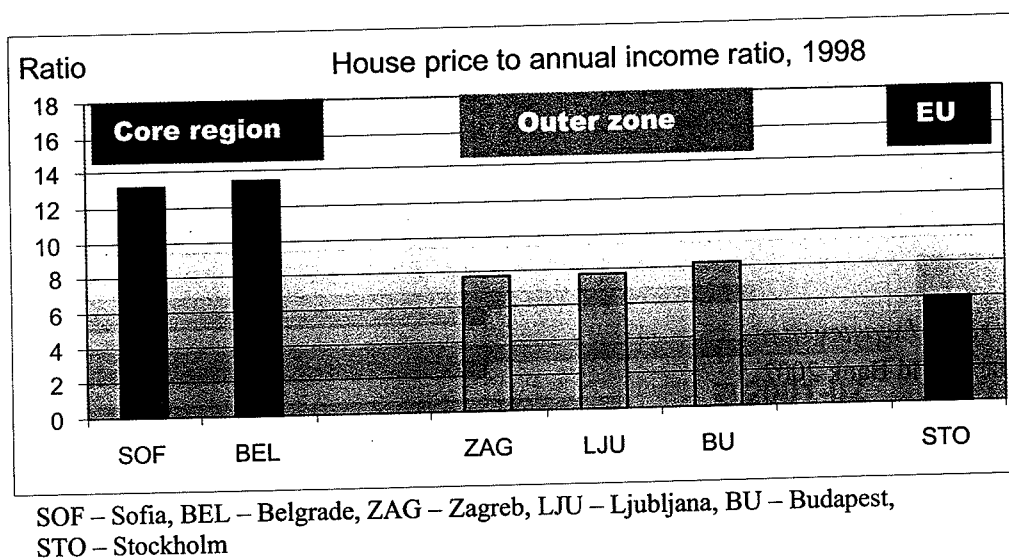
There are, of course, significant differences between urban and rural areas within each country, as well as between various income groups. In Hungary the house price/annual income ratios vary between 17.9 for very low and 3.0 for very high income groups (Implementation of Human Settlements Policies ... 2000).

4.5 Environment

The status of the environment is one of the key features of quality of life. Air and water quality are the main indicators of the overall health of the environment. Air and water are crucial to human life and the pollution of these two resources affects our health.

Environmental impacts are, on the other side, the function of human population and industrial production methods. Increases in population and economic activity have a significant impact on levels of environmental pollution. Industrial operations generate significant waste products which concentrate in the environment. They include air emissions, water pollutants and solid

wastes such as municipal solid waste and industrial hazardous waste. Environmental quality is not only a health concern but also has financial consequences.

There is evidently a relatively low degree of *air pollution* in the countries of SEE, notably in the core countries (*Fig. 15*). As air pollution generally grows with industrial development, this is the consequence of the lower degree of industrialization in the region. On the other hand, some capitals in the SEE countries have a much lower share of *treated wastewater* (*Fig. 16*). Here, a lack of treatment mechanisms is evident.

Fig. 15: Air pollution
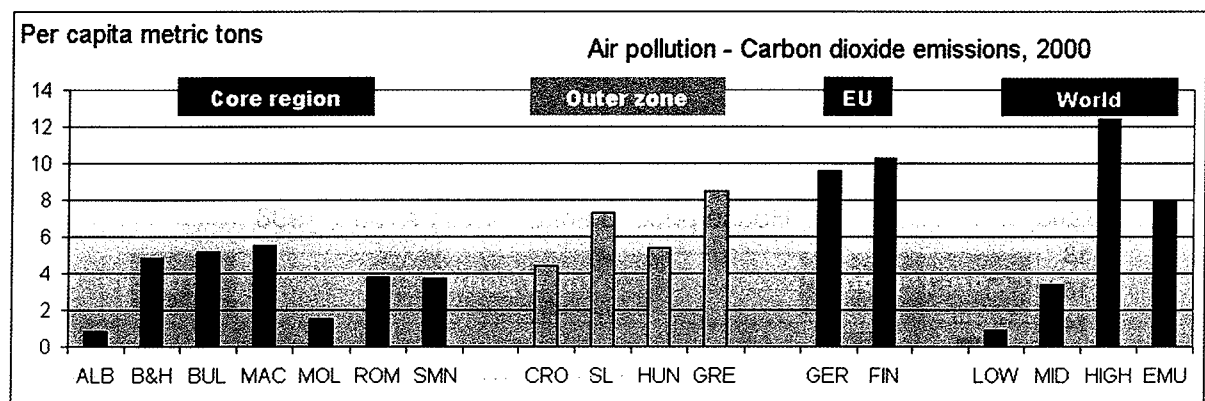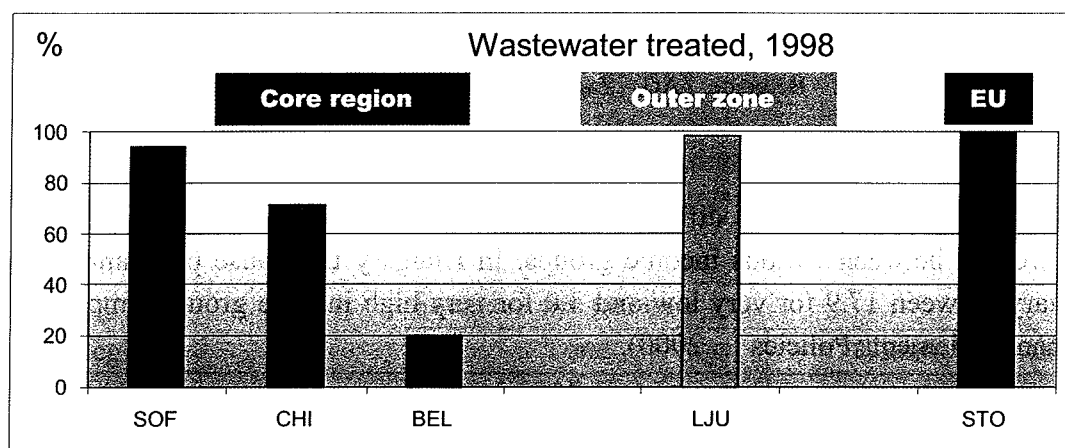Source: The World Bank 2004

Fig. 16: Treated wastewater
Source: The World Bank 2002

4.6 Socio-political environment

There are various ways to assess the quality of the socio-political environment. In this term, aspects of life such as human rights, safety, civil liberties, personal freedom and (absence of) crime and corruption are usually included. Indicators selected depend on the approach, but also on the availability of data.

The *level of civil liberties* indicator embraces the categories of freedom of expression and belief, association and organizational rights, the rule of law and human rights and personal autonomy as well as economic rights. The level of civil liberties is generally low in the region, notably in the core countries (*Fig. 17*). Still, it has considerably improved in the last 10 years, mainly in Romania, Serbia and Montenegro and Croatia.

Fig. 17: Level of civil liberties (1q = least free; 7 = most free)
Source: World Resources 2002 - 2004

Level of Civil Liberties
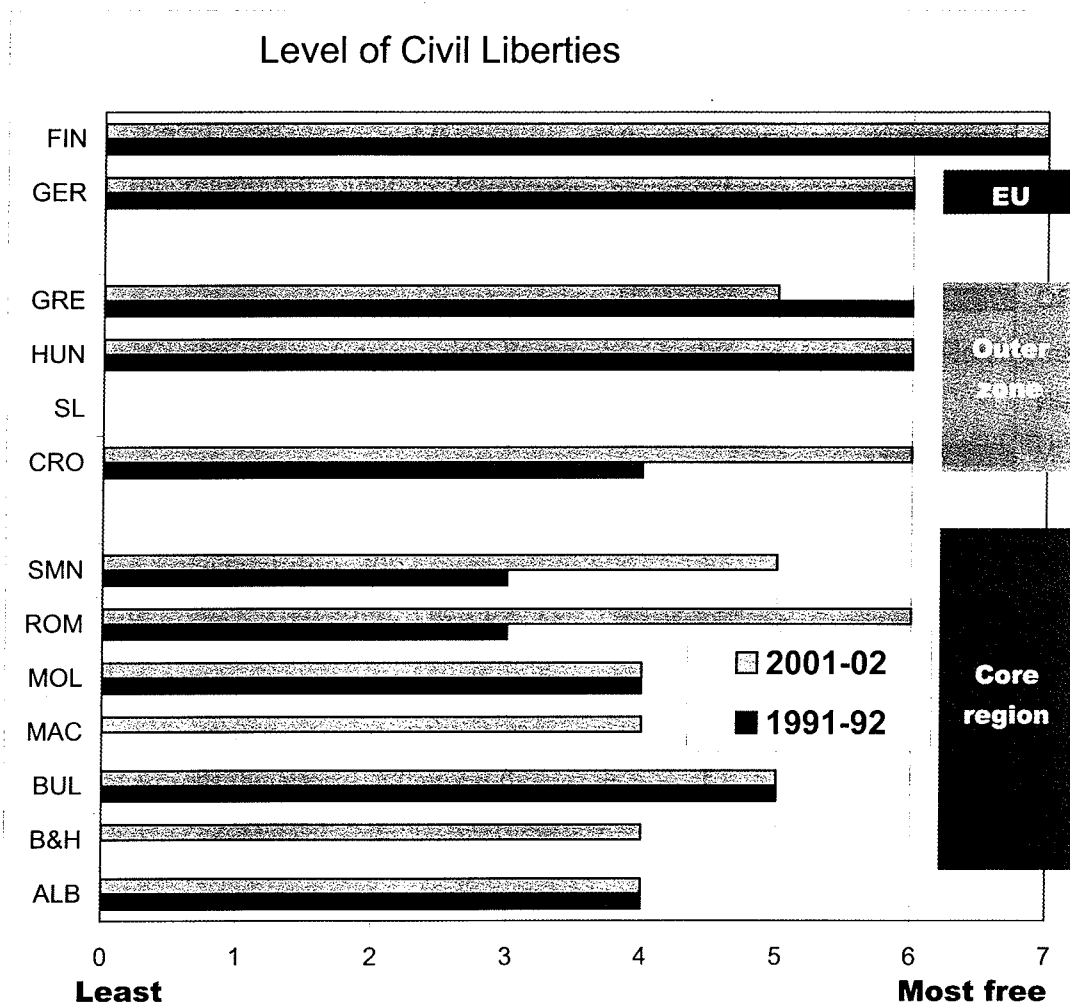
The *corruption perceptions* index measures the degree to which corruption is perceived to exist among public officials and politicians. Corruption is closely related to the high percentage of poverty which is an important problem in the region. The highest degree of corruption is perceived to exist in Romania and Moldova, the countries with the highest percentages of poverty (*Fig. 18*). Bulgaria, Croatia and Greece also have high degrees of perceived corruption compared to the EU countries. Data on corruption and conflict of interest in Albania and Bosnia and Herzegovina show the perception that more than 50 % of people have

to pay for their position or have conflicts of interest. Corruption is harmful to economic growth and diminishes the effectiveness of aid.

Fig. 18: Corruption perception (10 = least corrupt; 0 = most corrupt)
Source: World Resources 2002 - 2004

Corruption Perceptions Index, 2001

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Most corrupt   **Least corrupt**
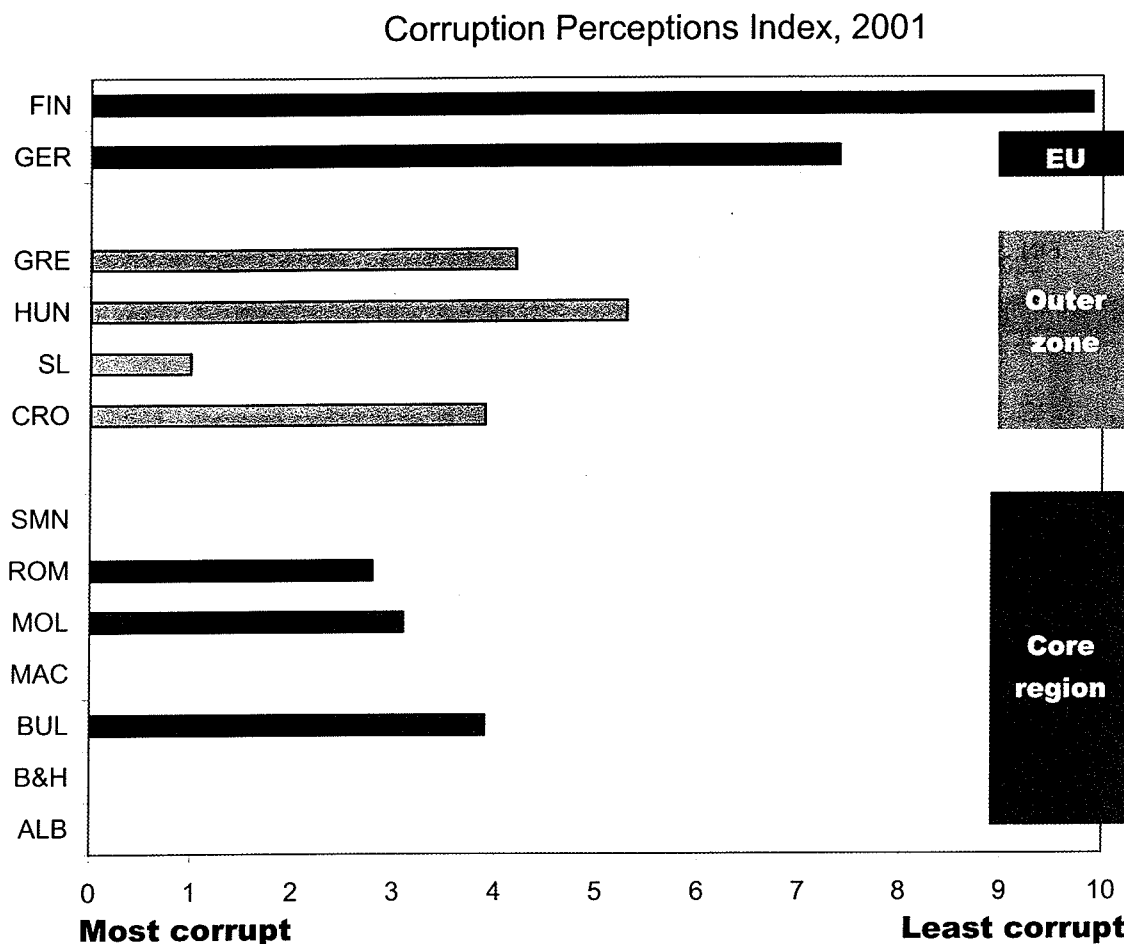
5 Concluding remarks

Compared to the EU countries, the SEE countries have low levels in all areas contributing to the quality of life. A clear distinction can be made in this respect also between the core region and the outer zone of SEE countries. In most areas of the quality of life, the core region shows a high degree of homogenity. The outer zone including members of the EU (Greece, Slovenia and Hungary), and a candidate country (Croatia), shows many more similarities in the quality of life-level to the EU countries.

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