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CHAPTER FOUR

STANDARD OF LIVING IN THE EUROPEAN UNION

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Abstract

This chapter focuses on the measurement of standard of living and on the factors influencing its level. Specific attention is paid to the indicators of standard of living, and the frequent employment of GDP is discussed and compared with possible alternatives. Household income is also a factor of central importance in determining standard of living, and the chapter assesses this factor in terms of household income distribution, the setting of poverty limits, the measurement of income disparity and the causes and effects of poverty. The situation is monitored in five selected EU countries: the Czech Republic, Finland, France, Spain and the United Kingdom.

Keywords: Standard of living, Indicators, Income situation, Disparity, Poverty.

Introduction

The meaning of the term “standard of living” seems quite clear at a first glance: however, upon closer attention one finds that the situation is much more complicated, and possible solutions to these complications are being considered in the literature. Understanding the complex factors involved in measuring standard of living forms the basis for establishing comparative relations as regards the level of advancement for individual states and population satisfaction (which influences consumer behavior). In the

present chapter, some basic issues relating to standard of living and what influences it are described, and a range of indicators used to measure and quantify standard of living are considered.

A person's standard of living is determined by levels of psychological and material need, as well as the living conditions under which those needs can be satisfied. It is clear that standard of living is closely connected with the social status of an individual within society. Each social class (higher, middle and lower) has a different standard of living and the worst problems are often presumed to arise within the lowest social class. If individuals or groups are excluded from institutions or communities, this leads to a **process of social exclusion**, involving economic, social, political or cultural factors. Isolated individuals move towards poverty, and it is extremely difficult for these individuals to reintegrate within society. Furthermore, the risk of social exclusion is increasing, due to prevailing socio-economic developments and other related structural changes in society.

The process of social integration is based on the so-called 'welfare triangle', which consists of the following three mutually related categories: **state** (the legislature), **market economy** (the labor market) and **civic society** (especially the family). These categories are used to determine the extent to which individuals or groups are integrated within society (Krebs, 2005).

The most significant risk factor in terms of social exclusion is **unemployment**. This category includes not only those who are unemployed, but also those with a low quality of employment. Those within this category are often classified as being members of an 'endangered group' and are often socially excluded. The group also includes the long-term unemployed, who may lose their work habits, their self-confidence and their willingness to search for work. As a result, their employment prospects become increasingly remote. The unemployed receive financial support solely through social benefits, and the primary consequence of unemployment is a loss of income, which leads to a related decline in standard of living.

A further factor leading to social exclusion is **low income on a long term basis**, or inappropriate income. People in this category are unable to satisfy their basic needs and thus become socially isolated. Further factors causing social exclusion include the following: low levels of education and academic qualifications, leaving school prematurely, disability, poor health and advanced age, low quality of accommodation and homelessness, gender inequality, migration and racism, marital break-up, raising children in broken families and living in a disadvantaged area. These individual

factors are often cumulative and their negative consequences can intensify very quickly. In order to prevent further social exclusion, it is essential to prevent problems experienced in the past from recurring. Policy is very important in this regard, and should seek to prevent the above-mentioned problems from being passed from one generation to the next (Kotynkova & Nemeč, 2003).

The measurement of standard of living can be considered from two points of view. The first emphasizes consumption, and uses a range of possible methods in order to obtain an objective measure of the level of goods and services consumed. The second focuses on the satisfaction of needs and desires, and involves a comparison between people's actual status and their desired status. This second approach is used by sociologists, who seek to determine how people evaluate their own standard of living in terms of such factors as the following: a person's prospects for satisfying their needs; whether they feel they lack sufficient finances to spend on their needs; their perceptions about the level of job security, healthcare and education received; how safe they feel within the society in which they live and, finally, their level of satisfaction with the environment.

To determine an objective measure of standard of living, its individual segments have to be specified. These include the following, each of which may be quantified and numerically expressed.

- Personal consumption
- Social needs
- Standard of accommodation
- Leisure time activities
- Security of livelihood
- Work conditions
- Environment

The two basic approaches to the measurement of standard of living discussed above may be combined. Such a combinational approach is desirable, as one-sided investigations into yield false results. The objective quantification of consumption does not result in greater precision in the measurement of standard of living, and subjective perception does not necessarily offer a distorted view of the situation.

The public perception and evaluation of standard of living always reflects objectively measurable facts, strongly influenced by a number of further factors. These factors are themselves subjective and have individual impact. They include the following: perception of the political

and economic situation, confidence and future expectations, the influence of the media, life experiences and family background and, last but not least, social-economic status (education, income, property and power).

An objectively discovered measure of financial and material security does not necessarily play a decisive role in the formation of people's opinions concerning their standard of living, and subjective opinions concerning levels of satisfaction of expectation are very significant. Thus, research into standard of living based on subjective opinions and the views of respondents must play an integral part in the research into standard of living, and can be used to supplement the results of objective surveys.

Economic crisis in society and its social impact raise a number of questions concerning the correctness of the emphasis on the dynamics of economic growth, if its inconsistency with the dynamics of social development is taken into account. Based on economic theory, the generally accepted indicator of economic growth evaluation is **gross domestic product (GDP)**, which is the most frequently used indicator of macroeconomic performance. The measure may be broken down into the following components: private consumption (C), investments (I), government spending (G) and net export (NX). Its value is considered to be an indicator of the success rate of social development, as well as a guarantee of growth in the standard of living. This is why GDP is monitored not only by the professional public, but also by political parties, institutions and the media.

The definition of GDP and its calculation indicate that economic success is measured by market output volume, regardless of social benefits. The volume of GDP shows growth even in cases where the final effect of growth is socially undesirable, or where it has a negative impact upon society-wide interests. Typical examples of this are those investment activities which lead to worsening of the environment and to a deterioration in the quality of life.

GDP recalculated per capita of a country's inhabitants is the most commonly used indicator of standard of living. It enables easy comparison within individual countries and thus gives an indication of quality of life, and lists of countries are supplied by the World Bank and the International Monetary Fund. According to these sources, the countries with the highest GDP per capita are Qatar, Luxemburg, Singapore and Norway, and those with the lowest are Congo, Zimbabwe and Liberia.

The society-wide impacts of financial crisis have proved that GDP per capita is not a sufficiently reliable indicator of either development or the stability of the economic environment generating this development. Typical examples are found among new European Union (EU) member

countries; these were classified as highly progressive economies due to their economic dynamics, but the parameters of their social environments did not confirm these results. This was particularly apparent with respect to indicators such as environment quality, education levels, healthcare and care for senior citizens and families with large numbers of children. High dynamics of GDP growth have become “demonizing” and considered as the sole indicator of a “sound” economy. GDP per capita has become an unambiguous indicator of growth in the standard of living.

Investigation into household income and the general public’s perception of the level of standard of living shows that GDP as a general indicator of economic success is not sufficient. This issue has recently been discussed by Stiglitz, Sen and Fittoussi (2009).

Arguments concerning the significance and utilization of GDP as an indicator of social development can be divided into the following three categories:

1. The first is connected with the unsuitable utilization of the indicator for the purposes of evaluating the results of social development on society, and claims that the GDP indicator does not contain such information.
2. The second is methodological, and claims that the evaluation of economic growth in terms of GDP does not distinguish between the positive and negative effects of economic activity. Lack of information concerning the consequences of irresponsible utilization of limited natural resources and lack of information concerning environmental pollution as side effects of economic growth are very important.
3. The third and final line of argument concerns the lack (or very restricted amount) of information concerning the economic effects of publicly beneficial activities and charitable activities, which do not impact upon the market environment.

Based on these arguments concerning the imperfections of GDP per capita as a basic indicator of standard of living, the following questions arise: what should a proper indicator of standard of living include, and what are the alternatives to GDP?

Efforts to identify a precise and quantifiable measure of standard of living have resulted in the formation of various indicators that either extend or replace GDP per capita. There are a number of such indicators, and each incorporates different aspects based upon a range of methodologies. There are many views in the professional literature

concerning this issue, which suggests that arriving at truly objective results is very demanding.

The **Human Development Index** (HDI), formed in 1990 within the United Nations Development program, is one of the most important and most frequently used indicators. It is based on three factors: health, education and standard of living. Fixed minimum and maximum values for the following individual components have been established (Syrovatka, 2008):

- Average life expectancy at birth (25-85 years),
- Literacy of population older than 15 (0-100 %),
- Combined share of population (in the relevant age ranges) attending the first, second and third levels of education (0-100 %),
- Gross domestic product per capita in purchasing power parity (100USD-40,000USD). According to UNDP (2011), standard of living is measured by means of gross domestic product per capita.

HDI can reach value between 0 and 1, where 0 is the lowest standard of living and 1 is the highest.

It has been queried (Sherman et al., 2008) whether GDP is a suitable indicator for the purposes of reflecting individual human welfare or social well-being. Some goods and services are not included in GDP, e.g., housework. Capitalism itself is the reason for this, for services can be assigned a value only if they are bought and sold on the market. GDP also includes items that clearly have a negative effect (or at least do not have a positive effect) on welfare, e.g., cigarettes. These are some of the many reasons which suggest that a new measure of standard of living is needed to replace (or at least to supplement) GDP. Such an indicator would incorporate housework and unvalued benefits and deduct unvalued costs, i.e., pollution resulting from industrial production and transport, and would also deduct other harmful products. **Genuine Progress Indicator**, which includes the above-mentioned measures, meets these requirements.

Quality of Life Index determines standard of living on the basis of nine factors. The first of these is material welfare, measured by means of GDP per capita, followed by health (life expectancy at birth), political stability and safety, family life (divorce rate per 1000 inhabitants), community life (a dummy variable relating to the degree of religious practice or membership of trade unions), climate and geographic conditions (warmer or colder climate), job certainty (measured according to the unemployment rate), political freedom (measured as an average of indices of civil and political freedom on a scale between 1-7, where 1

means complete freedom) and, last but not least, gender equality, which is measured as a ratio of average salaries of men and women (The Economist, 2005).

More recent indicators include **Sustainable Society Index** (in existence since 2006), which includes human, environmental and economic welfare. A constantly sustainable society is a society which meets the needs of the contemporary generation and does not endanger future generations. In such a society, individuals have the opportunity to develop, to be free and to live in harmony with others in their community (Kerk & Manuel, 2008).

A further life situation indicator was created by the Legatum Institute, **Legatum Prosperity Index**. This indicator defines prosperity by means of wealth and welfare. It does not only take money into account, but also considers quality of life. This index consists of eight sub-indices which represent fundamental aspects of prosperity. These include economy, enterprise and opportunities, public administration, education, health, safety and security, personal freedom and social capital. Each of these indices provides two important analyses of a given country: economic evaluation and evaluation of subjective well-being.

Quality of Living Survey is a yearly research survey conducted by Mercer. This tool takes into consideration 39 factors which influence people's life situation, divided into the following ten categories: consumer goods, economic environment, housing, medical and health considerations, natural environment, political and social environment, public services and transport, recreation, schools and education and socio-cultural environment (Mercer, 2012).

Gross National Happiness is a particularly interesting measure. This official indicator was created in the Kingdom of Bhutan, for the purposes of bringing about better awareness of the government and implementing suitable measures. The nine key areas of GNH are psychological well-being, health, education, time use, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience and living standards. GNH consists of indices ranking these nine areas in terms of their importance. It includes indicators of mental health, family relationships, financial safety, healthy days in a month, physical condition, education level, air and water pollution, home possession and, last but not least, human rights and government performance. Pilot research into GNH was conducted in 2006 (International Monetary Fund, 2010).

Quality of life in relation to the environment is measured by **Happy Planet Index** (HPI), introduced in 2006 by The New Economics Foundation, London. HPI places the emphases on responsible resource

consumption. The essential input concerns resources which sustain life and support all areas of human activities. The final output is a long and happy life.

According to Eurostat, quality of life is defined as a nine-dimensional structure, including material life standards (income, consumption, and property), health, education, personal activities (including paid work and volunteer work), commuting, leisure time and housing. Another dimension includes such factors as political opinions and governmental power, social contacts, environmental conditions, personal security and economic security (Juhascikova & Stukovska, 2011).

An indicator called **Actual Individual Consumption** (AIC) should also be mentioned. This indicator concerns real individual consumption, and was created on the basis of Stiglitz-Sen-Fitoussi report. It includes all products and services consumed by households, such as consumables, services bought directly and services provided by non-profit organizations and government for individual consumption, e.g., healthcare and education. Although GDP per capita is the most widely used indicator of economic welfare, consumption per capita can be useful for the purposes of comparing the relative welfare of consumers in different countries. AIC per capita usually correlates with GDP per capita, as AIC amounts to the major part of GDP expenditure (European Commission, 2011). Based on the Lisbon meeting of the European Council, a statistical infrastructure was established in 2000 in order to analyze the incomes and life conditions of the EU as a whole (Frick & Krell, 2010). The goal of the European Union Regulation 1177/2003 (on statistics concerning incomes and life conditions) was to determine a common framework for systematic analysis, to ensure that a sufficient amount of data was available based upon selective research, in order to obtain results, on a yearly basis at both a national and a European level, concerning household income, level of poverty and social exclusion.

Selective research by **EU SILC** (European Union—Statistics on Income and Living Conditions) was conducted on the basis of an integrated methodology established by the EU, under the title “Life Conditions”. It enabled the acquisition of comparable and representative data on income distribution in individual types of household, the quality and financial demand of accommodation, the economic effectiveness of inhabitants, the social situation of inhabitants, the number of people living in each household, in addition to a range of other factors. The basic variable used was monthly disposable income per household member, calculated on the basis of equalized income per household. This made it possible to compare the results among individual EU member countries,

on the basis of equalized income value. The outputs obtained were used to establish EU social policy tools.

Socially adverse effects result in income disparity, and one of the simplest and the most frequently used methods of measuring inequality is the dissimilarity index. This measure classifies individuals and households into categories based on income level. The width of the category may differ in deciles, quintiles, or other statistical measures of categorization. If the income category is divided into quintiles, the range of the category is 0.2 (20 %) and can be marked X_i . There are five categories, each receiving a part of the total income marked as Y_i . The first 20% of the income category can be considered the poorest class and the last 20% the richest. The index can be calculated as a relation $ID=0.5 * \sum X_i - Y_i$ and has a value-range between 0 and 1. A value of 0 means absolute equality and value and 1 means complete inequality (Morse, 2004). Based on the data, a **Lorenz curve** can be constructed, expressing the relation between absolute inequality and real inequality in income distribution.

Generally, we can say that the higher the degree of income inequality in a given area, the more poverty there will be in that area. However, the term 'poverty' involves a range of factors which will now be explained.

Inequality and poverty have been troubling almost the whole world for many years, and globalization has worsened the situation. In addition to income inequality, there are a number of other relevant indicators, such as inequality among groups of inhabitants. Improvements in standard of living cannot be supposed to be the result of improvement in economic conditions, and no direct relation between economic growth and the reduction of inequality has yet been proved. On the contrary, it might be argued that inequality increases during times of economic growth, as the poor do not benefit from that growth. Inequality is a problem in poor countries, but in recent years has emerged as a problem in developed countries as well. A country's wealth does not ensure the protection of all its inhabitants from possible poverty (Greig, 2007).

The lack of goods which a society considers to be desirable is commonly called **deprivation**, and is usually defined in relation to material or social conditions. Deprivation was studied by Townsend, who defined it in terms of 12 key indicators. These include social activities, holidays, "luxury consumer goods" (e.g., refrigerators and televisions), frequent meat consumption, etc. Of course, the role of subjective perception must not be forgotten, and although some people might be deprived, they might not necessarily feel that they are. In most cases, when people start to experience material need, the sense of psychological deprivation

comes only later. Homelessness is considered to be the most serious deprivation problem (Stavkova, Stejskal & Nagyova, 2011).

Methodology

Based on the meeting of the European Council in Lisbon in 2000, a statistical infrastructure was established for the purpose of analyzing incomes and living conditions in the European Union as a whole (Frick & Krell, 2010). The aim of the European parliament directive No. 1177/2003 (on EU statistics in the field of incomes and living conditions) was to establish a common framework which would ensure the availability of sufficient data on sample surveys of households, and to acquire annually updated results on household incomes, levels of poverty and social exclusion, at both a national and European level.

A sample survey of **EU SILC** (European Union—Statistics on Income and Living Conditions) was conducted, under the title “Living conditions”, based on a unified EU methodology. This enabled the acquisition of long-term comparable and representative data in the following (and many other) areas: income distribution in particular household types, quality and financial demands of living, the economic efficiency of inhabitants, social situation and the number of people living in a household. The key variable used was monthly disposable income per household member, calculated on the basis of annual disposable income per household. Based on equalized income value, it was possible to compare results in particular member states of the EU, and to use the outputs to define EU social policy instruments.

In addition to income, basic household characteristics include head of the household, type of household, social group, employment, education and many others. Head of the household requires a more detailed definition. In a complete family, it is always the man, regardless of his economic activity. In incomplete households, the first criterion for determining the head of the household is economic activity; the second is the income levels of particular household members.

The sample survey includes a lot of information which can be interpreted and made available to the public. The data is classified into groups according to various criteria, in order to provide a better analysis of typical characteristics. For instance, original annual income values are recalculated as monthly incomes. As a consequence, from the monthly income of a household, it is possible to calculate income per household member. According to the OECD or EU definitions, it is possible to recalculate the income to one equalised **household member**, and to

enable comparison between selected groups as well as international comparisons.¹

The subsequent calculations, made on the basis of disposable equivalised income, concern the basic characteristics of position, using modus, mean and median. Modus is the most frequent value and supplements the value of average income. The median is set as the mid-value of the sorted set of data and is decisive for setting the poverty limit of the given group of households. A deeper analysis of household income distribution can be carried out based on the analysis of income deciles.

The Lorenz curve shows the level of income distribution. It is a line which forms a 45° angle with the x axis, the so-called “ideal Lorenz curve”. All households would have the same income in this ideal case. The opposite extreme of the Lorenz curve is the so-called “absolutely uneven distribution”, in which the income of the society as a whole is received by one single household. The real Lorenz curve lies somewhere between these two extremes. The **Gini coefficient** is used for the purposes of representing the real Lorenz curve’s deviation from the ideal.

The formula for calculating the Gini coefficient is as follows:

$$G = \left| 1 - \sum_{k=0}^{k=n-1} (X_{k+1} - X_k)(Y_{k+1} - Y_k) \right|$$

X_k and Y_k represent cumulated population and pension variables. The Gini coefficient is not applied solely to the basic aggregate, but to individual segments as well. To obtain a more detailed evaluation of the social situation, it is possible to differentiate households according to individual regions, social groups or education.

The Gini coefficient is the best known and most frequently used tool for measuring inequality. It determines how the real differentiation of incomes differs from the case in which everybody has the same income. The value of the Gini coefficient varies between 0 and 1, and in the case of a value of 0, this represents the extreme of absolute equality, where incomes are equally divided. If the coefficient value is 1, this represents the opposite extreme, absolute inequality (lack of income diversification), with the total income going to just one single household. In the case of coefficient values ranging from 0.44 to 0.6, this means high inequality, and is typical in many developing countries. Relatively low inequality is represented by values ranging from 0.2 to 0.35 (Todara & Smith, 2009).

The disadvantage of the Gini coefficient is that it does not show precisely how inequality is distributed across society as a whole. The coefficient does not say anything about the standard of living, and its calculation requires really high-quality data (Morse, 2004).

Poverty is defined on the basis of the poverty limit, which according to the Eurostat methodology represents 60% of the median of equalized incomes. Household incomes which (per equalized member) fall below this level are considered income endangered.

Depth of poverty is measured using Sen coefficient values, which range from 0 to 1. Values near 0 represent moderate poverty, and values near 1 represent significant poverty.

$$\text{Sen index} = \frac{A - a}{A}$$

In the present chapter, the living conditions and income situation in five European Union countries will be compared. The countries were selected on the basis of the zones of culturally allied countries, as defined by Svetlík (2003). One representative country from each zone was chosen: Finland (for Sweden, Norway, Denmark and Finland), France (for Austria, Switzerland and France), Spain (for Italy, Spain, Greece and Portugal) and the United Kingdom (for the United Kingdom and Ireland). One country from outside these zones was selected (the Czech Republic). The names of these countries will be abbreviated as follows: Czech Republic (CZ), Finland (FI), France (FR), Spain (ES) and the United Kingdom (UK). The monitoring period is 2005 to 2010.

In order to compare incomes and other financial indicators internationally, it is necessary not only to convert the values to the same currency (USD is used most often and EUR is used for comparisons within the EU) but also to clean up the differences in price levels due to the different inflation rates in individual countries. The Purchasing Power Standard (PPS), which creates an artificial currency, is used for these purposes.

Results

The traditional way of determining standard of living in a given country is to use GDP, recalculated per individual inhabitant. GDP is calculated on the basis of personal consumption, investment, government spending and net exports. The average EU member state GDP per capita in 2010 was 24 400 PPS. Across the five selected countries, it was lowest in the Czech

Republic, with a value of 19 400 PPS and highest in Finland, where it reached 28 100 PPS.

The recalculation of GDP per capita, as a percentage measure of PPS to EU average, shows that across the selected countries, Finland had the highest living standard in 2010 (in ninth place within the EU as a whole), with a GDP which was 15% higher than the European average. The United Kingdom was tenth and France eleventh. The living standard in Spain was at the level of the EU average, equivalent to thirteenth place. The Czech Republic, which was in nineteenth position, was 20% below the EU average.

The composition of GDP does not cover quality related aspects of a life situation, and the measure thus represents the success of an economy rather than the standard of living. An alternative indicator of well-being, adjusted to represent household situation, can be represented by the Actual Individual Consumption (AIC) per inhabitant, which shows really consumed products and services within households. Table 1 below shows GDP and AIC per inhabitant, as compared with the EU average in the period 2005-2010.

According to GDP per capita, standard of living was highest in the United Kingdom over the first two years, and was highest in Finland from 2007. However, the AIC per capita shows that standard of living remained highest in the United Kingdom for the whole monitored period. There are several differences in the ranking of the countries over the period. In 2010, in terms of GDP per capita, Finland was doing better than France, but according to the AIC per capita indicator, this situation was reversed. However, the two indicators are consistent in showing that the Czech Republic had the lowest standard of living of the five countries over the monitored period as a whole.

Efforts to quantify standard of living (or life quality) as precisely as possible have resulted in the formation of alternative indicators. Table 2 shows the indicators for which values were known in 2010.

For every country, the ranking reached within the particular indicator is shown, and there is a consequent recalculation of final rankings which takes six indicators into account. The results show that Finland had the best quality of life in 2010, followed by France, the United Kingdom and then Spain. The Czech Republic had the lowest living standard of all the selected countries.

Table 1: Percentage of GDP and AIC per capita in PPS in 2005-010 (calculated by the authors, source: Eurostat)

Country	GDP per capita in PPS, EU 27 = 100						AIC per capita in PPS, EU27 = 100					
	2005	2006	2007	2008	2009	2010	2005	2006	2007	2008	2009	2010
CZ	79	80	83	81	82	80	71	71	73	69	72	71
FI	114	114	118	119	115	115	101	103	107	110	110	111
FR	110	108	108	107	108	108	113	112	112	111	113	113
ES	102	105	105	104	103	100	99	100	100	99	95	95
UK	122	120	116	112	111	112	135	134	130	124	121	121

Table 2: Selected indicators of living standards in 2010 (compiled by the authors)

Country	GDP/cap.	AIC/cap.	HDI	SSI	QLI	LPI	Ranking
CZ	80 (5)	71 (5)	0.863 (4)	6.8 (2)	73 (4)	29.63 (5)	5
FI	115 (1)	111 (3)	0.880 (2)	7.1 (1)	75 (3)	8.38 (1)	1
FR	108 (3)	113 (2)	0.883 (1)	6.8 (2)	82 (1)	19.00 (3)	2
ES	100 (4)	95 (4)	0.876 (3)	6.4 (4)	76 (2)	22.00 (4)	4
UK	112 (2)	121 (1)	0.862 (5)	6.7 (3)	73 (4)	14.63 (2)	3

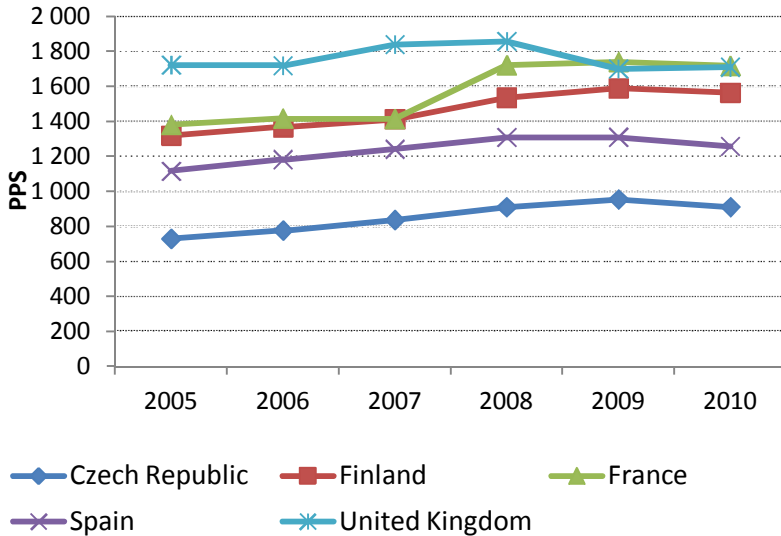
Note: numbers in brackets represent the country's ranking within a particular indicator.

Table 3 and Figure 1 below show the income development over the years 2005-2010 across the selected EU countries, where each country represents a so-called 'zone of cultural alliance'.

Table 3: Income situation of households (in PPS) in 2005 – 2010 (calculated by the authors, source: Eurostat)

Country	Characteristics	2005	2006	2007	2008	2009	2010
CZ	monthly equivalised income in PPS (MEI)	728	776	835	910	954	910
	median in PPS	637	688	737	810	842	804
	base index – MEI in %	100.00	106.55	114.75	124.95	131.05	125.01
FI	monthly equivalised income in PPS (MEI)	1 318	1 367	1 412	1 534	1 588	1 563
	median in PPS	1 178	1 237	1 270	1 380	1 440	1 418
	base index – MEI in %	100.00	103.71	107.13	116.42	120.54	118.63
FR	monthly equivalised income in PPS (MEI)	1 379	1 415	1 413	1 720	1 739	1 716
	median in PPS	1 208	1 250	1 264	1 464	1 473	1 463
	base index – MEI in %	100.00	102.62	102.49	124.78	126.13	124.51
ES	monthly equivalised income in PPS (MEI)	1 114	1 181	1 240	1 309	1 309	1 257
	median in PPS	968	1 047	1 093	1 162	1 165	1 110
	base index – MEI in %	100.00	106.07	111.33	117.48	117.54	112.85
UK	monthly equivalised income in PPS (MEI)	1 720	1 718	1 837	1 856	1 699	1 708
	median in PPS	1 408	1 462	1 565	1 532	1 424	1 422
	base index – MEI in %	100.00	99.90	106.83	107.92	98.77	99.32

Figure 1: Development of incomes in EUR PPS, period 2005 – 2010 (compiled by the authors, source: Eurostat)

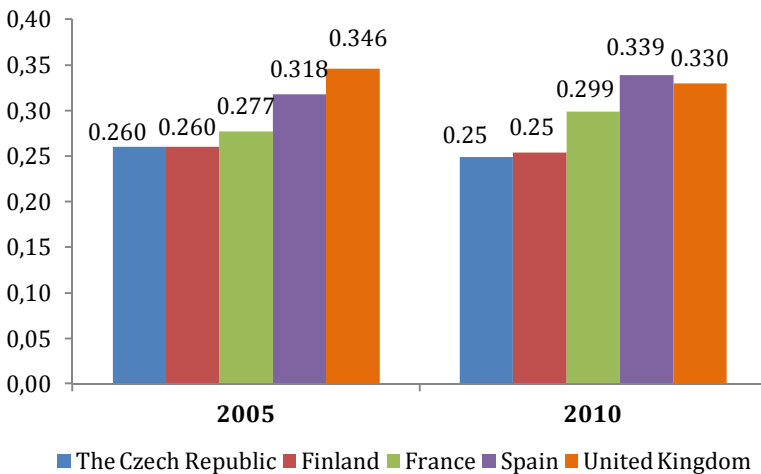


The country with the largest average income growth in 2005-2010 was the Czech Republic (25.01%). A 0.68% decline was noted in households in the United Kingdom. In 2010, French households had the highest incomes (1716 PPS), and earned 1.9 times more than households in the Czech Republic. Households in the Czech Republic had the lowest incomes of all the monitored countries across the period as a whole, in spite of the fact that the country also had the most significant growth. In 2009, incomes in the United Kingdom fell compared to 2008, while they remained equal in Spain.

An important portion of income is represented by social transfers. Every member country of the EU can respond independently to its social problems. The EU only sets out a minimal social standard, the aim of which is to guarantee the best possible level of social protection in all its member countries. Spending on social protection, which aims to moderate the burden upon citizens represented in relation to GDP, is marked in the data as 'social quota'. In each of the selected countries, there was a marked increase from 2005-2010. Spain saw the largest increase in social quota, rising from 20.58% in 2005 to 25.04% in 2010. France, where the social quota was the highest across all the monitored countries, had the

lowest growth and in 2010, its social quota stood at 33.06%, having increased from 31.52% in 2005. The quota in Finland increased from 26.7% to 30.26% and, in the United Kingdom it rose from 26.26% to 29.2%. The lowest spending on social transfers in relation to GDP occurred in the Czech Republic, in spite of the increase from 18.36% in 2005 to 20.43 % in 2010.

Figure 2: Gini coefficients in 2005 and 2010 (compiled by the authors, source: Eurostat)

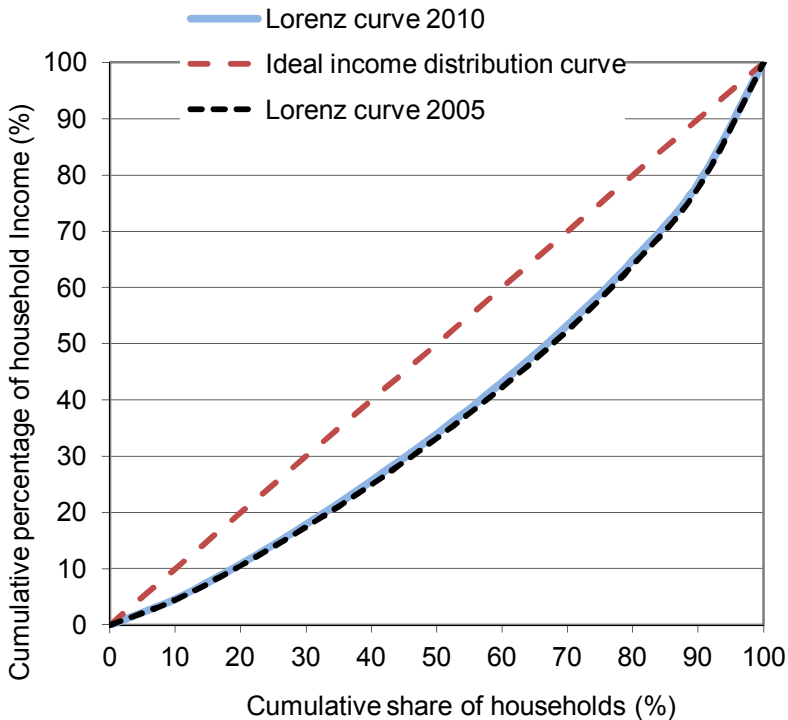


Due to these differing levels, inequality can be found in each of the five countries, and the more significant social problems appear where inequality is greater. The most common indicator of income distribution disparity is the Gini coefficient. Looking at the values of this coefficient as presented in Figure 2, it is possible to state that the selected countries fall within a range corresponding to a relatively low income disparity. Over the monitored period, the values in the Czech Republic and Finland were the lowest. The Gini coefficient reached the highest value (0.346) in the United Kingdom in 2005. This represents a value close to the upper level of relatively low income disparity. On average, the Gini coefficient value in EU member states was 0.306 in 2005, falling to 0.305 in 2010. Spain and the United Kingdom remained above this level across the whole period, which shows that an above-average income disparity prevails in these two countries. In the Czech Republic, a gradual decrease in the

coefficient from 0.260 in 2005 to 0.249 in 2010 can be observed, and similarly in Finland (from 0.260 to 0.254). On the other hand, the value increased in France. In the United Kingdom, the coefficient dropped from 0.346 to 0.330, placing the United Kingdom in second place behind Spain, where the coefficient increased from 0.318 to 0.339.

Figure 3 shows the Lorenz curve of income distribution in the Czech Republic.

Figure 3: Lorenz curve (compiled by the authors, source: Eurostat)



Poverty is a significant worldwide problem and has a variety of causes, including riots in the country or ineffective state power. Nowadays, in a globalized world, poverty exists in developing countries, and is increasing in developed countries as well.

According to the European Commission, the “European Union belongs among the richest parts of the world, nevertheless, 17% of Europeans have low incomes that do not allow them to pay for basic vital needs”.²

European Statistical Office findings concluded that that “17% of EU citizens were at-risk-of-poverty in 2008”.³ According to this report, the percentage of endangered inhabitants in the current EU 27 has remained relatively stable since 2005.

The EU initiated its orientation on poverty phenomena in 2010, when the European Union Council declared a “European year of combating poverty and social exclusion”. One of the main stimuli for this initiative was the fear of the social impact of the economic crisis on economic development.

The findings presented and discussed above suggest that poverty can be understood in two different ways: firstly, poverty can be seen as material hardship and as a lack of basic vital needs (e.g., food, drink) which directly jeopardizes people’s lives; secondly, according to a more recent conception, poverty can be understood in terms of the distinctively lower standard of living of an individual, relative to others in the society, even when the individual is not in life danger and has adequate material possessions. Poverty has several causes, and it is possible to distinguish these, in terms of ‘outer’ and ‘inner’ causes. Outer causes of poverty include the country’s geographical location, its natural resources or size, and the pace of growth of its society. Inner reasons include health and nutrition (famine, AIDS), the level of education, and the country’s institutions (government, market).

Extreme households, in which people do not have access to the financial resources necessary to satisfy even basic needs (such as food and accommodation) subsequently enter the so-called ‘poverty zone’. There are a number of methodologies available for the purposes of monitoring poverty. A European Union project (SILC) has established a poverty threshold at the level of 0.6 (median of disposable income). This threshold has been set based on knowledge of the theoretical distribution of variable income (log-normal distribution). Households below the threshold are deemed to be in danger of falling into poverty.

In 2010, 16.4% of European households lived below the poverty threshold. Table 4 shows an example of the results concerning poverty in the five selected EU countries in 2010. The results show that the Czech Republic retained its position as the country with the least poverty endangered households in the EU. In 2010, only 9% of Czech households were living in the poverty zone. Spain (20.7%) and United Kingdom (17.1%) were above average, and the values in Finland (13.1%) and France (13.4%) were almost the same.

Table 4: Endangered households, 2010 (calculated by the author, source: Eurostat)

Country	Poverty threshold monthly (in PPS)	Households endangered by poverty (%)	Average income of households endangered by poverty (in PPS)
CZ	483	9.0	364
FI	851	13.1	688
FR	878	13.4	667
ES	666	20.7	3676
UK	853	17.1	610

The depth of poverty is a very important indicator, because it shows the reality in terms of the distribution of financial resources among households. This indicator was defined by Proctor et al. (2002) as the ratio of average household income to the defined poverty threshold. It reveals the financial resources which households or individuals lack, and which would be needed in order to rise above the poverty threshold. In order to be able to calculate the poverty coefficient, the average income of households endangered by poverty must be known (households below 60% of the median), marked as 'a'. This income is subtracted from the value determining the poverty threshold (A) and a so-called poverty depth indicator is determined, which represents the household income deficit. The relative indicator is calculated according to the formula $(A-a)/A$ – Sen poverty coefficient. This calculation is shown in Table 5 below.

Table 5: Calculation of Sen Coefficient, 2010 (calculated by the author, source: Eurostat)

Country	A (in PPS)	a (in PPS)	A-a (in PPS)	(A-a)/A
CZ	504	380	125	0.25
FI	851	684	167	0.20
FR	878	657	221	0.25
ES	666	376	290	0.44
UK	853	610	244	0.29

According to these results, the Sen co-efficient for each country is closer to 0 than 1, so we can say that the depth of poverty in the selected countries is low overall, and is at its deepest in Spain and its most shallow in Finland.

Poverty must also be understood from the point of view of material deprivation. Materially deprived households are those which lack 3 or more of the 9 items defined by the EU Committee for social protection and social inclusion. These items include the following: the ability to cover unexpected costs, the opportunity to eat meat regularly, the opportunity to take a holiday once a year, and owning a color TV set, a refrigerator, a car or a telephone. In cases where the households lack 4 or more of these items, they are considered severely materially deprived. Table 6 gives an overview of the percentage of materially and significantly materially deprived households in particular countries. It is necessary to note the situation of households living under the poverty threshold (UPT).

Life conditions are strongly influenced by state fiscal policy, particularly in relation to the function of redistribution, the goal of which is to establish greater equality among individuals. Redistribution is indirectly guaranteed by means of progressive taxation, and is also related to retirement tax, which might negatively influence work effort. Redistribution is secured by means of financial transfers, such as social credits and family benefits. Within a redistributive framework, household pensions are increased by transfer payments and decreased by taxes, benefits, fees and other contributions to the state. The most important redistribution process is the state's social benefits system. Each state should try hard to decrease the number of inhabitants endangered by poverty.

Table 6: Materially deprived households (calculated by the author, source: Eurostat)

Country	Number of households (in %)	Materially deprived households		Severe materially deprived households	
		2005	2010	2005	2010
CZ	Total	25.7	16.2	15.5	7.9
	UPT	68.2	53.2	50.3	37.0
FI	Total	12.4	9.1	5.6	3.6
	UPT	38.8	30.4	21.7	14.2
FR	Total	15.7	13.6	7.5	6.7
	UPT	42.5	41.9	25.4	25.2
ES	Total	14.5	15.2	5.8	5.6
	UPT	29.6	32.4	14.5	15.0
UK	Total	14.2	20.9	6.5	6.0
	UPT	32.0	31.8	17.1	14.9

Conclusion

The results presented in this study show that those countries with the highest standard of living are those in which incomes are highest (Finland, France and United Kingdom). In comparison with others, these countries have the highest government spending on social protection in relation to GDP. However, in these countries, income disparity and poverty are not the lowest. The United Kingdom has the second biggest share of households living below the poverty level (after Spain), and the country with the lowest number of poor people live in the Czech Republic, even though its standard of living is lower than the EU average. France has the highest purchasing power. Thus, every selected country leads the way in terms of some of the indicators selected.

The Czech Republic has the lowest number of poor people, not only among the five countries compared in the present study but across the EU as a whole. Its depth of poverty is moderate, and it has the lowest standard of living, lowest incomes and lowest social quota. However, its redistribution level, in connection with the minimization of income disparity, is effective. In the monitored period, the income of the unemployed grew at a much faster rate than in the whole set of households, and the number of unemployed people endangered by poverty also fell. In other countries, the incomes of pensioners grew. It remains an

open question, though, whether this is the right direction in which to proceed, because strong support for the unemployed has a negative influence on a country's inhabitants as a whole. In spite of the fact that the lowest number of economically weak households are in the Czech Republic, more than half of these suffer material deprivation, which is a sign of the unsuitability of paying attention only to measuring poverty only through border value. It is thus necessary to examine the selected groups in greater depth.

Finland belongs to the countries with the highest living standards and the lowest debt burden. The number of poor people in Finland is slightly higher than in the Czech Republic, but Finland also has the lowest number of materially deprived households in comparison with other countries. Income disparity is also very low and the social quota rather high. Finland can be considered a conscientious nation, with a high provision of government social security and low public debt. Based on these facts, Finland can be considered the country with the highest standard of living.

France has a high living standard and purchasing power, but also has a high level of household debt. Income disparity, poverty and material deprivation are moderate, relative to the other countries monitored. France's social quota is the highest of all the monitored countries, but it is necessary to emphasize its high level of public indebtedness. The needs of French consumers are adequately covered by their incomes, but for a minority of French households, income is insufficient to cover the need for education and equipment. France can be considered a self-confident nation.

The situation in Spain is completely different. Its households have the lowest incomes (after the Czech Republic), the living standard is average and the level of debt is high. The social quota is higher than in the Czech Republic, but social transfers do not prevent a high level of disparity and deep poverty. The Spanish consider themselves rather poor. Accordingly, Spain can be considered the country with the lowest quality of life.

The situation in the United Kingdom is very specific: its inhabitants have a high standard of living and high incomes. The government spends a large amount on social protection, but income disparity is still high, which results in above-average poverty and material deprivation which impacts upon a fifth of all total households. Its ratio of all debts to GDP is the highest of the monitored countries. The United Kingdom was the country in which the development of the financial sphere had the most immediate impact, and this is reflected in its economic decline, which shows up in the analysis of the income indicators across all the selected countries.

These findings show that the issues of poverty and material deprivation which are connected with the risk of social exclusion are very significant, and that they apply to developed EU member states. It seems that poverty levels are at their lowest in the socially oriented and post-communist countries, where indebtedness is low. Social policy is most appropriately oriented in Finland, a country which is not burdened by debts. Here, the number of poor and materially deprived people is low, and more support is directed towards increasing the income of pensioners than towards the unemployed, which is a big mistake in the Czech Republic's redistribution policy. Social policy is a very strong instrument which can significantly decrease poverty levels. However, it is not only how much is spent on social protection which is important, but also towards which social groups the spending is oriented. If social policy is incorrectly focused, this generates economic inactivity and slows down economic growth, and thus decreases the standard of living for a country's inhabitants. Owing to the importance of the role of social policy, it is necessary that particular countries use it effectively. It is more effective to focus on educating groups who are at risk and to generate new employment opportunities.

Household income has a significant influence on consumer behaviour. Consumer behaviour is certainly very different among those who are significantly below the poverty level as compared with those who belong to a higher social class. The extent to which households are willing to incur debt is also important. There are regional differences within every country, but also between countries as a whole. The reasons for this do not lie only in purchasing power, but also in subjective feelings and consumer perceptions, which are strongly determined by particular cultures.

Notes

¹ As a sample EU recalculation, the head of the household is evaluated by the coefficient 1, children of 0-13 years of age have the coefficient 0.3, and other children and household members have the coefficient 0.5).

² European Commission pages at

<http://ec.europa.eu/social/main.jsp?langId=cs&catId=637>; cit. 15. 2. 2011. The data are based on the concept of a relative conception of poverty.

³ http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-SF-10-009; valid to February 6th, 2011.

References

- Bohacova, T. (2007). *Materialni deprivace a chudoba domacnosti v CR*. Available at:
http://is.muni.cz/th/102755/fss_b/BKLBohacova_102755.doc
- European Commission. Eurostat. (2011). *Glossary: Actual individual consumption*. Available at:
http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Actual_individual_consumption_%28AIC%29
- Eurostat. (2012). *Statistics*. Available at:
http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database
- Frick, J.R., and Krell, K. (2012). *Measuring Income in Household Panel Survey for Germany. A Comparison of EU-SILC and SOEP*. Available at: <http://www.diw.de/soeppapers>
- Greig, A., Hulme, D., and Turner, M. (2007). *Challenging Global Inequality: Development Theory and Practice in the 21st Century*. New York: Palgrave Macmillan.
- Informacni institut. (2010). *Diskrečni zustatek*. Available at:
http://www.informacniinstitut.cz/informacniinstitut/Informacni_Institut/Aktuality/Entries/2010/8/31_TZ_Diskrečni_zustatek_lepe_meri_realne_prijmy_ceskych_domacnosti.html
- International Monetary Fund. (2010). *Bhutan: Poverty Reduction Strategy Paper*. Available at:
<http://www.imf.org/external/pubs/ft/scr/2010/cr10180.pdf>
- Juhascikova, I., and Stukovska, Z. (2011). *Zbornik prispevkov z vedeckej konferencie Statistickeho uradu SR: Kvalita zivota v podmienkach globalizacie*. Bratislava: Štatistický úrad SR.
- Kabat, L. (2007). *Prijmova situacia a zivotne podmienky obyvateľstva Slovenska podľa statistiky SILC. Slovenská štatistika a demografia*.
- Kerk, G., and Manuel, A.R. (2008). A comprehensive index for a sustainable society: The SSI – the Sustainable Society Index. *Ecological Economics*, 66 (2-3), 228-242. Available at:
<http://www.sciencedirect.com/science/article/pii/S0921800908000438>
- Kotynkova, M., and Nemeč, O. (2003). *Lidske zdroje na trhu prace*. Havlickuv Brod: Professional Publishing.
- Krebs, V. (2005). *Socialni politika*. Praha: ASPI, a. s.
- Lapacek, M. (2005). *Ekvivalenčni stupnice a prijmová nerovnosť*. Available at: <http://nf.vse.cz/download/veda/workshops/inequality.pdf>
- Mercer. (2012). *Quality of Living Reports*. Available at:
<http://www.imercer.com/products/2011/quality-of-living.aspx>

- Morse, S. (2004). *Indices and Indicators in Development: An Unhealthy Obsession with Numbers*. London: Earthscan.
- Proctor, B. D., and Dalaker, J. (2003). *Poverty in the United States: 2002. Current Population Reports*. Washington, DC: U.S. Government Printing Office.
- Stavkova, J., Stejskal, L., and Nagyova, L. (2011) Income differentiation of households in the Czech Republic. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 2 (1), 26-52.
- Stiglitz, J., Sen, A., and Fittoussi, J.P. (2009). *Report by the Commission on the GDP Measurement of Economic Performance*. Retrieved from <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>
- Svetlik, J. (2003). *Marketing pro evropsky trh*. Praha: Grada.
- Syrovatka, M. (2008). How (not) to measure quality of life: Critical perspectives on the Human Development Index. *Mezinarodni vztahy*, 43 (1), 9-37.
- The Economist. (2005). *The Economist Intelligence Unit's quality-of-life index*. Available at: http://www.economist.com/media/pdf/QUALITY_OF_LIFE.pdf