

# How the Income Situation of Households in the CR Responds to the Economic Development of the Society

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# How the Income Situation of Households in the CR Responds to the Economic Development of the Society

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#### Abstract

The paper deals with the relation between the income situation of households in the Czech Republic and economic growth. The monitoring covers a period of 2005-2010, i.e. a period of a relatively high economic growth and a beginning economic crisis. The period has been chosen based on the available dataset from a survey of the income situation of households and their living conditions - project EU-SILC (European Union Statistics on Income and Living Conditions) - using a unified EU methodology. The income situation of inhabitants has been evaluated from the perspectives of its level and its differentiation. The used indicators were the mean disposable income per a household member, a decile distribution of income, the Gini coefficient for the measurement of income disparities, the poverty threshold and the depth of poverty. The results show that in the years of economic growth, i.e. 2005, 2006, and 2007, indicators of income situation displayed a positive trend the mean disposable income per a household member increased including the median income situation, the number of households at risk of poverty decreased - in 2008 the proportion of Czech households at risk of poverty achieved the lowest percentage of all EU countries, i.e. 5.56%. The beginning economic recession in 2008 can be observed in the values of macroeconomic indicators. The changes in the income situation of households started to be more markedly manifested as late as in 2010, besides the decrease in the final consumption of households, there was a change in the interannual growth of the mean income of households and an increase in the number of households at risk of poverty. The conclusions prove an up to two-year delay of the impacts of the economic development of the society on the living conditions of households.

## Key words

income situation of households, income disparities, economic development, EU-SILC, risk of poverty

#### **JEL classification**

H31, D31, D33

## Introduction and research objectives

Since its accession to the EU, the Czech Republic has gone through a period of economic growth as well as a period of economic crisis. This fact has affected the standard of living and behaviour of households in the CR. The inhabitants' standard of living is strongly affected by their incomes; however, the economic development of the country, its fiscal policy and redistribution instruments are also important. The standard of living is a broad dimension. It involves not only material values but also social, cultural and moral values. It follows and is highly natural that there are disparities in standard of living. For an evaluation of a standard of living, the indicator of the net income is important. For a household to achieve a specific standard of living, it needs to have specific expenses. Essential expenses are those necessary to maintain the certain standard of living, i.e. expenses on shelter, food, transport, health, etc. Schiesser suggests that the indicator called "discretionary income" The indicator represents is used. the household's incomes minus mandatory expenses. It expresses the amount of financial means freely available to a household. The indicator is significant as it also points out the increasing need for social benefits (Kaplan, 1996).

An increase in the standard of living is usually associated with the growth of the country's economy, as expressed by the GDP growth. This relation has been examined by many economists; however, the results are (Perkins, ambiguous Roemer, Snodgrass, 2006). Analyses document that the GDP indicator is insufficient to measure the standard of living. It is obvious that a developed society needs to seek a positive social economic development with a decreasing risk of social exclusion, which is mainly affected by the risk of unemployment, low income in the long term, low level of education, disabilities, bad health condition and old age, low quality habitation or homelessness. family break-up, children upbringing in families at risk of poverty, etc. A determining element in these cases is the state which has to endeavour to reduce the transfer of the mentioned problems from a generation to the following one and keep the balance among the welfare triangle vertices (Kotýnková, Němec, 2003). The three vertices, the state (legislation), market economy (labour market), and the civil society (significance of a family), are essential for a healthy social economic development.

Inequality and poverty are the problems whose significance is rising in the globalized society. The social policy of the European Union continues defining households at risk of poverty in the net relative expression based on

# Methodology

The primary data source for the paper is the European Union project EU-SILC (European Union – Statistics on Income and Living Conditions) examining the income situation and median income (Whelan, 2006). The EU declared 2010 The Year for Combating Poverty and Social Exclusion. Efficient measures against rising poverty and inequality can only be accepted after they have been thoroughly studied and results published. Therefore, it is necessary to search for methods of the measurement of the income situation of households. This is possible thanks to the unified methodology for surveying the income situation of households accepted for the countries of the EU in 2004 (project EU-SILC).

The political objective in this context is to support the economic and social cohesion, primarily based on the convergence of the economic development and the standard of living among rich and poor member states and regions of the EU (Whelan, 2006). Longford et al. claim that one of the most significant objectives of the European Union is a reduction of regional disparities. Currently, over two thirds of structural funds are directed to the countries where the GDP per inhabitant is below the EU average (Longford, Pittau, Yelli, Massari, 2010).

Within its social policy, the state should provide transfers which are effectively aimed. Therefore it is very useful to know the sociospatial dimension of poverty. In a detailed exploration into poverty and an analysis of severan variables the methods of multidimensional comparison can be used (Labudová, Vojtková, Linda, 2010).

The aim of this paper is to examine the living conditions of households. The topics explored are the achieved level of the income situation of households and its development, the measurement of income disparities, the poverty threshold and the number of households at risk of poverty, the depth of poverty, and the volume of provided social transfers. The paper is based on an analysis of the income situation of households with respect to households' social group affiliation and households of different sizes (Turčínková, Stávková, 2011).

living conditions of households. In compliance with the regulation of the European Commission, these surveys have been obligatory for all EU member states since 2004, i.e. for the Czech Republic as well. The first interviews took place in 2005 in the CR under the title "Living conditions 2005". All member states have to follow the unified methodology. The European statistical system (ESS) has higher demands concerning the quality and processing of the data. Therefore, the formerly used Statistics of Family Accounts was replaced with this project. The main aim is to obtain representative data which will illustrate the income distribution of households based on particular characteristics, the number of households at risk of poverty, depth of poverty, material deprivation, social redistribution, etc. (Kabát,2007).

The paper processes the data from the SILC sample survey. However, it is necessary to remember that the data are subject to a statistical error, where two components can be distinguished - a sampling error and a nonsampling error. The sampling error arises when the survey does not explore the whole population and only a selection of the population representing the basic set is examined. The magnitude of the error depends on the range of the sample, frequency or

variability. The non-sampling error occurs during obtaining, measuring or processing the data, caused by a choice of a wrong methodology, system failure, human error or respondent error. However, this type of error can be avoided (Kabát, 2007).

The survey was conducted by specially trained interviewers at a level of regions. The survey was based on a random two-level selection for each region so that the number of respondents was in proportion to the size of each particular region. The unit used was a dwellingand all people who lived there were included in the survey. A problem which appeared was the unwillingness of inhabitants to provide their personal information and their worries that the data could be misused. Uninhabited dwellings, addresses not found or cases of respondents' absence were excluded from the sample. The missing dwellings were not compensated for. Currently, the results of six surveys (2005-2010) are available for the Czech Republic. More detailed information about the number of households involved in particular years is presented in table 1.

Year	2005	2006	2007	2008	2009	2010
Number of households	4,351	7,483	9,675	11,294	9,911	9,098
Source: (ČSÚ 2005-2011)						

Source: (CSU, 2005-2011)

The basic variable of the set is the disposable income of households. This income is used to gain the income per a household member and for a possible international comparison per an equivalized household member. Equivalization can be performed in compliance with the OECD or the EU methodology. The paper uses the EU methodology, which has the following structure: the first adult member of the household (coefficient 1.0), children aged 0-13 (coefficient 0.3), other children and adults (coefficient 0.5). Based on the coefficients, we gain the equivalized value in compliance with the EU methodology (ČSÚ, 2010).

The income of households is the basic variable of the study. In the analysis, important identification variables are taken account of, such as regional division of households, the structure of households based on the social group, education, age and size of the household, but also their subjective opinions which serve for the determination of the overall satisfaction. The analysis uses the following indicators and methodical procedures: descriptive statistics, income decile distribution and comparison, the Lorenz curve, the Gini coefficients, the number of households at risk of poverty and the establishment of the depth of poverty using the Sen index. The descriptive statistics consists of the mean income per a household member, the median, the variability characteristics, basic and chain indices. The median is used as it provides an accurate interpretation both for symmetric and asymmetric distributions and is an initial input for the establishment of the poverty threshold (Meloun, Militký, 2004). The analysis of income deciles shows the distribution of income values and the ratio of deciles can be used for the establishment of income disparities. The decile ratio represents the ratio of the lowest value of the last decile to the highest value to the first decile. It means, the decile ratio does not include 10 % of the lowest and the highest incomes of households so it does not reflect a substantial part of income disparities (Vavrejnová, 2002). The first two deciles refer to the lower social class and the two highest deciles the higher social class. The third up to the eighth deciles are the most numerous middle social class (Kaplan, 1996). The number of households at risk of poverty is established based on the poverty threshold. According to the agreed EU definition, these are households whose income is lower than or equal to 60% of the median income. The Gini

coefficient brings important information concerning income inequality. The Lorenz curve illustrates the income distribution. The horizontal x axis contains the cumulative share of gained income in percents. The vertical y axis represents the cumulative share of inhabitants in the deciles. The ideal Lorenz curve forms an angle of 45 degrees with the y axis. In such a situation all households would gain the same income and this is one of two extreme cases of the Lorenz curve. The second case is extremely unequal distribution when the entire income is gained by one household only. In reality, the Lorenz curve lies between the two extremes and its shape allows us to establish the income differentiation using the Gini coefficient. The value can be expressed using the following equation:

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

where  $x_i$  is the cumulative value of a population variable and  $d_i$  is the income variable (Roženský, 2009).

Another characteristic necessary for the evaluation of the income situation and standard of living in the Czech Republic is the indicator of the depth of poverty in the society. It is theoretical information on what amount of financial means the households lack to be able to climb over the poverty threshold. For its calculation, it is necessary to know the mean income of households at risk of poverty ("a") and the poverty threshold (A). Based on relation (A-a)/A, the Sen index, or the indicator of the depth of poverty (income deficit of households), is obtained, ranging between 0 and 1. The values close to zero indicate moderate poverty and the values close to one indicate

#### Results

The paper aims to analyse the income situation of households in the CR in the period 2005–2010, i.e. the period of both economic growth and recession, and to present the impact of the economic development on the development of the society and the income situation of households. For the analysis we will use the characteristics of the development of the level and structure of the income situation of households, income differentiation, significant poverty. The paper also includes an overview of provided social transfers and their proportion within the disposable income of households. The theoretical function of transfers and their influence on the reduction of the impacts of unequal income distribution is dealt with by (Roženský, 2009).

Within the SILC project, attention is not devoted to quantitative data only; also a complex evaluation of living standards is conducted using subjective opinions on the "quality of life". The assessment of the answers allows for an establishment of the degree of material deprivation, which can be understood as physical or psychological deprivation. It is a lack of something that is considered a value in the particular society (Boháčová, 2007).

share of households at risk of poverty, the depth of poverty, the development of the volume and usage of social transfers, and we will identify the factors which significantly affect the income situation of households and the usage of social transfers.

The basic variable for the calculation of the above mentioned characteristics is the disposable income per 1 equal (equivalized) household member. Due to the use of the standard OECD and Eurostat methodology, 60 % of the equivalized disposable median income is referred to as the poverty threshold.

Table 2 presents data about the development of the level of the income situation and its inequality.

Characteristics	2005	2006	2007	2008	2009	2010
Monthly disposable income per person (FYZ) SILC (in CZK)	9,152	9,455	10,184	10,901	11,879	12,236
Monthly disposable income per person (EKV) SILC (in CZK)	12,232	12,629	13,620	14,627	15,872	16,496
Standard deviation	7,812	7,649	7,726	7,941	9,787	9,489
Chain index EKV (%)	-	3.25	7.84	7.39	8.51	3.93
Basic index EKV (%)	-	3.25	11.35	19.58	29.76	34.86
Median EKV (in CZK)	10,500	10,958	11,815	12,798	13,856	14,435
Poverty threshold (in CZK)	6,300	6,575	7,089	7,679	8,314	8,661
Number of households at risk of poverty (%)	6.80	6.49	5.97	5.56	6.16	6.50
Gini coefficient	0.2456	0.2397	0.2353	0.2296	0.2346	0,2351

Tab. 2: The income situation of households in the Czech Republic

Source: authors' calculations based on (ČSÚ, 2005-2011)

The table indicates a positive trend of the development of the mean income per a household member in the entire monitored period. The monthly income per a household member reaches 16,496 Czk in the CR in 2010. This value rose by nearly 34.86% from the first year of monitoring within the SILC project, i.e. within 5 years. However, the values of chain indices show the differences in the interannual growth. While in the years of the economic growth the interannual increase was around 7%, even 9% at the beginning of the economic recession, in 2010 the economic recession was

reflected in incomes of households as they only rose by 4%. The positive trend with a different interannual growth has also been found for the median – in 2009 an increase by 8.27%, in 2010 by 4.18%.

It follows from the development of mean and median values that the economic development of the society is reflected in the income situation of households with about a two-year delay.

For better orientation, table 3 presents basic macroeconomic indicators of the Czech Republic.

Indicator/year	2005	2006	2007	2008	2009	2010
Interannual growth of GDP (%)	6.8	7.0	5.7	3.1	-4.7	2.7
Expenses for final consumption (%)	2.7	2.9	3.1	2.3	0.8	0.6
Registered unemployment rate (%)	8.96	8.13	6.62	5.44	7.98	9.01
Inflation rate (%)	1.9	2.5	2.8	6.3	1.0	1.5
Basic index of inflation rate (%)	-	102.5	105.4	112.1	113.3	114.9
	Source:	(ČSÚ, 2011)				

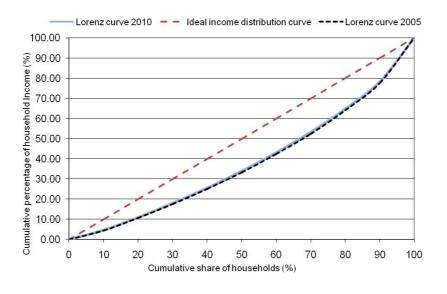
Tab. 3:	Basic	macroeconomic	indicators
140. 5.	Dusic	macroeconomic	muncanors

The economic development of the CR in 2005, the first year of monitoring, was positive, reaching a 6.0% interannual increase in the

GDP. The international consequence was another reduction of the performance gap in comparison to the EU mean. The interannual

acceleration of growth values of the Czech economy continued in 2006. A record value of the GDP interannual growth in modern history was achieved in 2007. This dynamics placed the Czech Republic among the fastest growing countries in Europe. However, in 2008 the period of the global economy drastic development began and the Czech Republic with some delay could not evade this. The first stage of the global crisis hitting the financial sector (the developed countries faced financial instability as early as in August 2007) left central Europe without any more considerable consequences. The situation changed rapidly in the second half of the year after the Lehman Brothers bank fell. The crisis was then transferred to the real economy, where it was reflected in a substantial decrease in demand and an overall deterioration of 'sentiment', or general expectations. All developing markets (highly oriented to export) were seriously struck. In 2008 the Czech gross domestic product rose by 3.1% interannually, but only 0.7% inter-quarterly in the 4<sup>th</sup> quarter. The domestic development was greatly affected by the fact that the European Union, i.e. the most significant market for domestic production, had been in the recession from the 2<sup>nd</sup> quarter. In 2008 the gross domestic product of the EU-27 increased by 0.9% interannually but considering the 4<sup>th</sup> quarter only it dropped by 1.3%. The growth reduction, or rather the decrease, appeared in all EU countries at the end of the year. In the structure of the CR gross domestic product, the dynamics of all expenditure items slowed down. The main cause regarding the consumption of households, whose final expenses increased by 2.9% interannually, was the high inflation rate. Consumer prices increased by 6.3% on average interannually, the most in the 1<sup>st</sup> quarter (by 7.4%), when regulated prices grew and indirect adjusted. were The household taxes consumption was further negatively influenced by the increase in price of raw materials and generally the insecurity about the further economic development (although the impacts of the world economic crisis started to be reflected in the situation at the labour market more markedly only at the end of the year and the increase in the mean nominal wages by 8.5% was the highest from 2001).

To express the income disparity the Lorenz curve and the calculated Gini coefficient for years 2005 and 2010 are used (fig. 1).



*Fig. 1: Lorenz curve in 2005 and 2010* Source: authors' work

The graph shows that the first two deciles, referred to as a lower class (Kaplan, 1996), gain only 11% of the cumulative value of all incomes. The last two deciles, referred to as a

higher class, gain 35% of the volume of all incomes, instead of the ideal 20%.

For a deeper analysis of the income differentiation it is purposeful to examine the

distribution of the numbers of households in the intervals based on the mean monthly disposable income per person (table 4) and the decile distribution of the whole income volume (table 5). The two boundary years were used for the analysis of the monitored period.

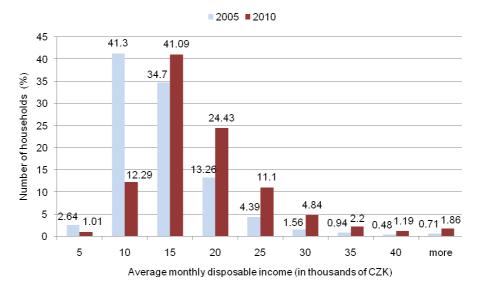
	200	95	2010		
Mean monthly income interval	Relative number of households (%)Cumulative number of households (%)		Relative number of households (%)	Cumulative number of households (%)	
0-5 000	2.64	2.64	1.01	1.01	
5 001 - 10 000	41.30	43.94	12.29	13.30	
10 001 - 15 000	34.70	78.64	41.09	54.39	
15 001 - 20 000	13.26	91.90	24.43	78.82	
20 001 - 25 000	4.39	96.26	11.10	89.92	
25 001 - 30 000	1.56	97.85	4.84	94.76	
30 001 - 35 000	0.94	98.79	2.20	96.96	
35 001 - 40 000	0.48	99.27	1.19	98.15	
40 001 and more	0.71	100	1.86	100	

Tab. 4: The numbers of households in the intervals of mean incomes

Source: authors' calculations based on (ČSÚ, 2005-2009)

The table reveals the negative fact that the monthly disposable income per 1 equivalized household member of 95% of households is up to 25,000 Czk and the monthly disposable income per 1 equivalized household member of approximately 50% of households is below 10,000 Czk, i.e. does not reach the mean value

(year 2005). In 2010 these 50% of households had moved to the income border of 15,000 Czk per an equivalized household member. Similarly, the 95% of households had moved to 30,000 Czk per person within the interval division. The situation is clearer from fig. 2 and 3.

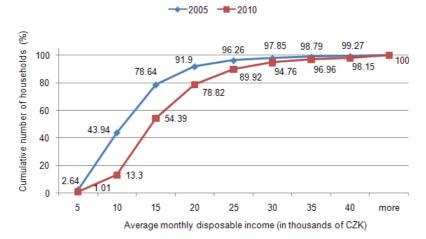


*Fig. 2: The number of households based on mean incomes per 1 household member (%)* Source: authors' work

Considering this distribution, if 5% of households with the highest incomes are left out from further examination, we can calculate the mean income per 1 equivalized household member. In 2005 it was 11,225 Czk (instead of 12,232 Czk when 100% of households from the

sample are used) and in 2010 it was 14,297 Czk (instead of 16,496 Czk).

The progress of the accumulation of the number of households based on the income situation is presented in fig. 3.



*Fig. 3: The cumulative number of households based on mean incomes per 1 household member* Source: authors' work

Disposable monthly incomes per an equivalized household member ordered based on magnitude from the lowest to the highest are

presented in a table of decile distribution (table 5).

		2005			2010	
decile	range of values	cumulative volume of incomes (%)	mean incomes (Czk)	range of values	cumulative volume of incomes (%)	mean incomes (Czk)
10	750 – 6846	4	5 507	- 9400	5	7587
20	6851 – 7968	11	7430	9400 - 10999	11	10281
30	7968 - 8846	18	8397	10999 - 12212	18	11596
40	8850 - 9644	25	9246	12212 - 13250	26	12724
50	9644 - 10500	35	10081	13254 - 14431	34	13807
60	10500 - 11642	44	11067	14439 - 15850	43	15127
70	11646 - 13222	54	12378	15850 - 17735	53	16760
80	13222 - 15321	66	14208	17739 - 20420	65	18989
90	15331 – 18789	80	16820	20422 - 25049	78	22493
100	18861 - 253348	100	27149	25051 - 264721	100	35607

Tab. 5: Decile distribution

Source: authors' calculations based on (ČSÚ, 2005-20011)

The table shows that the last 10% of households with the highest incomes has 20% of the volume of incomes of all households. The first 10% of the volume of income of all households are distributed among nearly 20% of households with the lowest incomes. The decile ratio was 2.76 in 2005 and 2.67 in 2010, which as a rate of income differentiation indicates a favourable development. The percentage distribution of the volume of disposable income in particular deciles is nearly the same in both of the examined years.

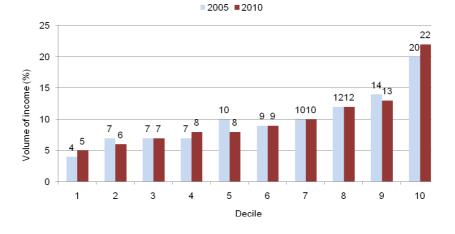
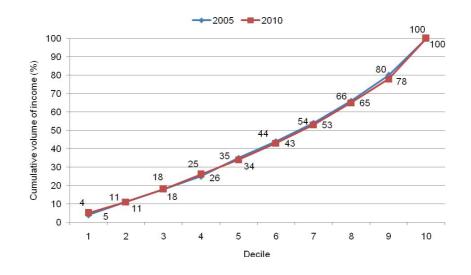


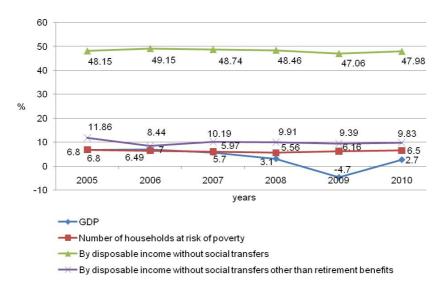
Fig. 4: Volume of incomes in particular deciles Source: authors' work



*Fig. 5: Cumulative volume of incomes in particular deciles* Source: authors' work

According to the EU-SILC results, in 2010 (table 2) nearly 6.5% of households lived at the poverty threshold. This means 591 households in an absolute expression. Despite the frequently repeated statement that the CR has the lowest percentage of households at risk of poverty, the following fig. 6 shows that in the period of economic growth the number of

households at risk of poverty did not manifest the demanded trend. The trend in the number of households at risk of poverty does not have any fluctuations, the values remain almost constant. The years of positive economic growth or the historically highest interannual growth in GDP in 2007 did not have any effect on the income and social fields. The many factors with an effect on the income of households (low unemployment rate, consumption, low inflation rate, provided social benefits, etc.) were not reflected in the total number of households at risk of poverty. The ascertained percentage (around 6%) may be the boundary which cannot be affected by the society as it is an individual's business (his or her lack of motivation to solve the income situation), the percentage which remains constant or responds with slight fluctuations only, in tenths of percents. This conclusion calls for deeper analyses of the groups of households at risk of poverty.



*Fig. 6: GDP growth and the development of households at risk of poverty* Source: authors' work

The more detailed analyses based on the factors which are instruments of the social and economic policy of the state and affect the income situation of households, but mainly the households at risk of poverty, provides interesting findings. Considering the geographical division of the Czech Republic into regions, the lowest proportion of households at risk of poverty is in Prague (3 %). The mean value of the CR in 2005 (6.8 %) was exceeded by regions Ústecký, Moravskoslezský, Zlínský, Olomoucký and Karlovarský. In 2009 (6.16 %) the limit was exceeded by regions Olomoucký, Karlovarský, Jihomoravský, Ústecký, Moravskoslezský and Liberecký. The regions which were below the limit for the entire period are Vysočina, Jihočeský, Středočeský and Královéhradecký regions. A greatest positive change took place the Zlínský region. Regarding in the classification of households based on the number of members, the households at a greatest risk of poverty are those which consist of either "one adult without a partner, at least one child", or "a couple of adults with 3 and

more children", further "one person below 65 years of age" and "one person aged 65 and more". From the perspective of a social structure, the group which is at the highest risk is "the unemployed", "the retired" and with a large distance "the self-employed". Whereas the percentage of the households at risk of poverty in the last mentioned group remained nearly constant (about 5%) during the entire examined period, there was an increase within "the retired" group (from 4.99% in 2005 to 7.48% in 2009). The highest percentage of households at risk of poverty considering the factor of education was found in the group "primary or no education" - around 15%. The group of "learned a trade, lower secondary education" ranges around the CR average (6%). Below the country's average, there are groups "secondary education with а leaving certificate", "tertiary education". The above mentioned factors which are reflected in the number of households at risk of poverty are parts of the social policy of the state and show how they are "effectively" used by the state.

The indicator "depth of poverty" is defined as a ratio of the mean income of households to the defined poverty threshold (Proctor, Dalaker, 2002). It shows what amount of financial means the household lacks to escape the poverty trap and climb over the poverty threshold.

Table 6 presents the income deficit of households for the examined years.

Tuo. 0. Depin of poverty of nousenous							
Characteristics	а	А	A-a	(A-a)/A			
2005	4 999	6 300	1 301	0.21			
2006	5 276	6 575	1 299	0.20			
2007	5 669	7 089	1 420	0.20			
2008	6 142	7 679	1 537	0.20			
2009	6 715	8 314	1 599	0.19			
2010	6 776	8 661	1 885	0.22			

 Tab. 6: Depth of poverty of households

Source: authors' calculations based on (ČSÚ, 2005-2009)

Considering the above presented table, theoretically, if each household at risk of poverty had been given 1,301 Czk monthly in 2005, it would have climbed over the poverty threshold. In 2006 this theoretical amount decreased slightly. In 2007 it increased in comparison with the previous year by 9.3%, in 2008 the increase was slightly lower (8.2%), but in 2009 this amount increased by 4 % interannually. The most considerable increase in the amount necessary for exceeding the poverty threshold came in 2010, when it was 17.8%. Each household would need 1,885 Czk more to escape poverty. Even here the fact that effect of the negative economic the development starts to be obvious, with a delay is confirmed.

The last column of the table shows the calculated Sen index. When its value falls and

approaches zero, we can say that poverty decreases. From 2005 to 2009 the index fell or remained constant, in 2010 it rose to 0.22. Using the index, we can conclude that poverty in the Czech Republic is very moderate.

To reduce income disparities and the number of households at risk of poverty, state uses social transfers. In both examined years the social transfers made about 31 % share in the disposable incomes of households. Considering the structure of social transfers, we can doubt the purpose of the state social support, based on the drastic reduction of the volume of welfare paid in dependence on a household's income (6.21% in 2005, 1.77% in 2010) and the rise in the volume of welfare paid regardless of the household's income (3.65% in 2005 and 5.67% in 2010). The structure of social transfers is presented in table 7.

	Social transfers	2005	2010
1.	state social support	9.79	7.44
	1.1. benefits paid with regard to the household's income (child benefits, solidarity payments, housing benefits)	6.21	1.77
	1.2. benefits paid regardless of the household's income (parental allowance, foster care benefits, birth grant, funeral grant)	3.65	5.67
2.	retirement insurance	81.45	84.19
	2.1. old-age and widow's pension	70.46	72.65
	2.2. disability and orphan's pension	10.99	11.54
3.	assistance in material need	1.53	0.34
4.	sickness benefits	4.02	3.25
5.	employment (or rather unemployment)	1.64	1.87
6.	other social transfers	1.50	2.91

Tab.	7: Structure	of social	transfers	in %

Source: authors' calculations based on (ČSÚ, 2005-2011)

The issue of social exclusion has many dimensions. Therefore, it is necessary to deal with the social situation of inhabitants in a wider context, using not only quantitative but also qualitative indicators. Opinions of household members on how they perceive their income situation are a demanded supplement to the analyses.

Τı	ib. 8: How the	household .	makes	ends m	eet (%)

Characteristic		With high difficulties or with difficulties	With small difficulties or quite easily	Easily and very easily
in total	2005	28.59	61.00	10.41
in total	2010	27.43	63.18	9.39
under the poverty	2005	66.56	30.06	3.38
threshold	2010	64.13	33.84	2.03

Source: authors' calculations based on (ČSÚ, 2005-2011)

Tab. 9: Material deprivation							
Material deprivation – essentials in %							
	~ ~ ~ ~ ~ ~						

Material deprivation – essentials in %									
Number of households	A week's holiday		Meat, fish, poultry every other day		Sufficient heating of the place of living		Unexpected expenses		
	2005	2010	2005	2010	2005	2010	2005	2010	
in total	57.02	58.52	80.83	88.99	89.20	93.95	55.73	60.58	
under the poverty threshold	22.97	23.01	58.45	70.73	79.39	87.48	22.97	21.66	

Source: authors' calculations based on (ČSÚ, 2005-2011)

Generally, the household where 3 and more out of 9 pre-defined items (to own a washing machine, a TV set, a car, to eat meat every other day, to be able to pay for a week's holiday

or an unexpected expense) are missing is considered material deprived. In 2009, 16.89% of households were at risk of material deprivation. Naturally, this proportion was much higher within the households at risk of

poverty (49.43%). In 2010 the number of material deprived households dropped to 16.09%. However, there was an increase within

#### Conclusion

Based on the results of the EU-SILC project survey of the income situation and living conditions of households conducted in the CR in 2005–2010, we can conclude that during the entire examined period the disposable incomes of households grew, but with a different value of the interannual growth. The distribution of households based on the amount of the disposable income did not change. 10% of households with the highest incomes have 20% of the volume of incomes of all households. The first 10% of the volume of income of all households is distributed among 20% of households with the lowest incomes. The income disparity expressed by the Gini coefficient indicates a relatively balanced society as concerns incomes. The percentage of households at risk of poverty is the lowest in the EU. This indicator responded as the first to the change in the economic development of the

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society (it fell until 2008, rose in 2009). The analysis has proved that the indicator of the number of households at risk of poverty has a very small information capacity in relation to particular types of households (based on the size of household, social affiliation, education, regional location). A positive impact of economic growth (expressed by GDP) on the dynamics of the social development (a decrease in the number of households at risk of poverty) has not been confirmed. Concerning the welfare benefits paid regardless of the household's income situation, their meaning is questionable. The results of the survey have clearly proved that years of economic growth, positively affecting the income situation of households, have effect with about two-year inertia as the effect continues for two more years after the trend of the economic development changes.

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## References

BOHÁČOVÁ, T., *Materiální deprivace a chudoba domácností v ČR*. [on-line]. Brno. 2007. [accessed 2011-11-12]. Available at: < http://is.muni.cz/th/102755/fss\_b/BKL- Bohacova\_102755.doc>.

Český statistický úřad. EU-SILC. [CD-ROM]. 2005-2009.

Český statistický úřad. *Makroekonomické údaje* [online]. 2011. [accessed 2011-11-18]. Available at: <<u>http://www.czso.cz/csu/redakce.nsf/i/cr:\_makroekonomicke\_udaje/</u>\$File/67612190.xls>.

Český statistický úřad. *Míra inflace* [online]. 2011. [accessed 2011-11-18]. Available at <a href="http://www.czso.cz/csu/redakce.nsf/i/mira\_inflace">http://www.czso.cz/csu/redakce.nsf/i/mira\_inflace</a>.

Český statistický úřad. *Příjmy a životní podmínky domácností v roce 2009.* [online]. 2010. [accessed 2011-11-16]. Available at: <www.czso.cz/csu/2010edicniplan.nsf/t/BB00497314/\$File/301210mc.doc>.

Informační institut. *Diskreční zůstatek*. [online]. 2010. [accessed 2011-11-10]. Available at: <a href="http://www.informacniinstitut.cz/informacniinstitut/Informacni\_Institut/DISKRECNI\_ZUSTATEK.html">http://www.informacniinstitut.cz/informacniinstitut/Informacni\_Institut/DISKRECNI\_ZUSTATEK.html</a>.

KABÁT, L. Příjmová situácia a životné podmienky obyvateľstva Slovenska podľa štatistiky SILC. In: Slovenská štatistika a demografia, 3/2007. 36 p. ISSN 1210-1095

KAPLAN, G., I. People and Places: Contrasting Perspectives on the Association Between Social Class and Health, 507-519 p. Volume 26, Number 3 / 1996 of International Journal of Health Service.

KOTÝNKOVÁ, M., NĚMEC, O. Lidské zdroje na trhu práce. 1<sup>st</sup> ed., Havlíčkův Brod: Professional Publishing, 2003. 199 p. ISBN 8086419487

LABUDOVÁ, V., VOJTKOVÁ, M., LINDA, B.: *Aplikácia viacrozmerných metód pri meraní chudoby*. E+M. Ekonomie a management: Economics and management. 2010. vol. XIV, no. 1, p. 6--22. ISSN 1212-3609.

LONGFORD M.T., PITTAU M. G., ZELLI R., MASSARI R.: *Measures of poverty and inequality in the countries and regions of EU.* 2010. [online]. [accessed 2011-11-20]. Available at: <a href="http://www.ecineq.org/milano/WP/ECINEQ2010-182.pdf">http://www.ecineq.org/milano/WP/ECINEQ2010-182.pdf</a>>.

MELOUN, M., MILITKÝ, J. Statistická analýzy experimentálních dat. 2<sup>nd</sup> ed., Praha: Academia, 2004. 953 p. ISBN 80-200-1254-0.

PERKINS, D. H., ROEMER, M., SNODGRASS, D. R. *Economics of Development*. New York and London: W. W. Norton. 2006. 604 p. ISBN 0-393-96851-0

PROCTOR, B. D., DALAKER, J. Poverty in the United States: 2002. Current Population Reports. U.S. Government Printing Office, Washington, DC, September 2003. 40 p.

ROŽENSKÝ, V.: Snižují skutečně sociální transfery nerovnost? VŠE, Praha: Nakladatelství Oeconomica, 2009, p. 80. ISBN 978-80-245-1513-7.

STEJSKAL, L. Spotřebitelské důchody na počátku krizového vývoje hospodářství. Littera Scripta. 2011. ISSN 1802-503X.

TURČÍNKOVÁ, J., STÁVKOVÁ, J. Assessment of the income situation of households in the Czech Republic. Agricultural Economics : Zemědělská ekonomika. 2011. vol. 57, no. 7, p. 322--330. ISSN 0139-570X.

VAVREJNOVÁ, M.:: Distribuce a redistribuce příjmů obyvatelstva ČR v průběhu devadesátých let – vývojové trendy (Distribution and redistribution of income of inhabitants of the Czech Republic in the nineties – development trends). Nadání Josefa, Marie a Zdeňky Hlávkových, Studie Národohospodářského ústavu Josefa Hlávky.2002. 79 p., ISBN 9788023902143

WHELAN, C. T., B. MAI<sup>TRE.</sup>*Income, deprivation and economic stress in the enlarged European Union*, Social Indicators Research 83:309–329. Springer 2006, DOI 10.1007/s11205-006-9051-9, 21 p.

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