



Munich Personal RePEc Archive

## **Income differentiation of households in the CR**

Stávková, Jana and Stejskal, Ladislav and Nagyová, Ludmila

Mendel University, Faculty of Business and Economics

2011

Online at <https://mpra.ub.uni-muenchen.de/36509/>

MPRA Paper No. 36509, posted 08 Feb 2012 04:00 UTC

# **Income differentiation of households in the CR**

Stávková J., Stejskal L., Nagyová L.

## **Abstract**

The Czech Republic has recently experienced phases of economic growth and periods of economic crisis, this fact affects the standard of living and household behaviour and affects the formation of life-style. This paper deals with the income situation of households. The main source of data is EU SILC survey from the years 2005 to 2008.

The result of the enquiry and processing of primary data is information about the average income per household member, the poverty level and the number of households at risk of poverty. For the formulation of income differentiation is used Gini coefficient.

Attention is paid to factors that affect income inequality (the number of household members, social group, age). Information, about the income situation of households, is amended by following indicators of material deprivation. The paper also analyses the impact of social transfers on income inequality. The analysis and subsequent solving of the problem of income inequality may be contributed with further analysis of empirical data of this type.

## **Key words:**

income differentiation of households, poverty level, material deprivation, social transfers

## **Preface**

Czech economy in recent years has experienced a period of remarkable economic growth and the financial and economic crisis. Rate this development and is seeking the causes is the contents of a number of theoretical and practical studies. Economic growth

and development is closely related to the income situation of the population. A number of economic theory has been trying to explain the relationship between economic growth, the most commonly used indicator is the volume of gross domestic product for residents, and real living standards in different countries and regions. This work focuses on the analysis and presentation of income for the population. The analysis will be primarily social indicators reflecting the income situation of households.

## **Introduction**

Income development of households is analysed in economic studies in relation to the political, economic and social situation in society. These are the factors that affect income inequality, and vice versa are the instruments of social policy, which affect income situation of households. The article further focuses on the income differentiation of households, their size and measurement instruments for income redistribution. For the representation of income inequality is most often used Lorenz curve. Lorenz curve, as statistically detected, lies somewhere between absolutely fair and totally unequal distribution and can be interleaved with growing exponential curve. Next way how to measure household's income inequality is by Gini's coefficient ( $G$ ), which represents variation of Lorenz curve from the ideal. Absolutely equal distribution of income has the value  $G = 0$ . The effort to get closer to the ideal conditions leads in developed democratic states, including the Czech Republic, to re-distribution. Within the redistribution, income is reduced by taxes, fees and other charges as well as increased the transfer payments. Together with income inequality and its distribution, it's focused on households with income on the poverty line. [Stejskal, Stávková, 2010]. Poverty can be measured according to the basic life necessities, and this concept of absolute poverty is addressed by Maslow [Boháčová, 2007]. Poverty can be measured as the proportion

of food in total expenditure. The curve, which represents dependence of expenditure on a good on total income of consumer, is called the Engel curve. [Macáková, 2007]. In this survey was applied measuring poverty line by setting 60% of equalised median of household's income.

For detailed poverty assessment can be used the Gini coefficient as well as indicators of material deprivation. Deprivation can be explained as physical and mental suffering. It's a lack of whatever, what is considered by specific society as valuable. The value could be represented by standard of living such as income, housing, work, health, household, education or leisure time. Relative deprivation was explored by Townsend [Boháčová, 2007]. He created a list of 12 items that represent key indicators of deprivation.

These items include:

- Haven't spent holiday away from home during the last 12 months (at least 5 weeks);
- Cannot afford to invite friends or relatives for a meal during the last 4 weeks;
- Not able to visit friends or relatives (with meal) during the last 4 weeks;
- Haven't invited friends home during the last 4 weeks to play game or for tea (for children under 15 years old)
- Cannot afford a birthday party for a child on last birthday;
- Haven't gone out to have fun or enjoy a drink, over the past two weeks;
- Haven't fresh food at least four times a week (without meat);
- Haven't a cooked meal once or more times in the last fortnight;
- Haven't a cooked breakfast for most days of the week;
- Haven't a home refrigerator;
- Usually haven't where to spend Sunday (Sunday Joint);

- Haven't these four essential household items at home: WC, sink or washbasin with cold water tap, shower or bath and a gas or electric stove.

Very important is the subjective perception. Some people do not perceive deprivation, even they are deprived according to the measurement results. If the person begins to suffer materially, it is likely that further it brings mental and social deprivation. The most serious problem of deprivation is considered homelessness.

Therefore, developed countries use the institute of redistribution through social transfers. Social transfers are all financial flows from the government directly to individuals and households in the social context. Transfers can be defined as one-sided transaction. They are the major expenditure of fiscal policy. The main function of transfers is to reduce the impact of unequal income distribution. The word "social" means supportive or solidary – in practice the majority living in relative affluence helps needy minority (weaker). This system protects certain groups of people who are in difficult situations against the exclusion, from the society. The social system should support and encourage self-sufficiency of people and their desire to improve the difficult living situation. Income differentiation and the effect of social transfers on income differentiation is not very frequent topic in the literature due to of missing empirical data or difficulties with gathering.

Roženský [2009] is dealing with mechanism of transfers to mitigate the impact of unequal income distribution, from a theoretical point of view. Vecerek [2001] is dealing with income differentiation in terms of development of the CR before 1989 and after 1989. The structure of social transfers is made up of state benefits (benefits paid with

respect to income of the family and benefits paid to families regardless of family income), pension, and benefits of material poverty, health insurance system, disability, unemployment and social services. Analysis of income differentiation according to the above considerations can be made only when a sufficient amount of relevant information. Sources of information are the EU-SILC (European Union - Statistics on Income and Living Conditions). The key variable, obtained by this survey is disposable monthly income per one household member. Objective of this paper is to analyse income differentiation of households, households from poverty level, the depth of poverty, material deprivation and the effect of social transfers to the redistribution of income.

## Materials and methods

The basic variable in the analysis of income differentiation of households is level of disposable monthly income of households from the project EU-SILC (European Union - Statistics on Income and Living Conditions). This project implemented a unified methodology of the European Union since 2005. Selected segments are representative according to basic demographic and socioeconomic characteristics of households with the following frequency.

I: Frequency of households for income survey

<b>Year</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Number of households</b>	4 351	7 483	9 675	11 294

Source: SILC

Statistical characteristics of the file (mean, median) are determined by a standard method (D-FYZ) and also converted the equalised unit (D-EKV) according to adopted common EU methodology (household means an adult with coefficient 1, each additional adult rate is recalculated with coefficient 0.5 and every child has the

coefficient 0.3). All other calculations and conclusions are based on equivalent values. Poverty threshold is set at a median of 0.6. It is based on theoretical knowledge of the income distribution variables [Stejskal, Pustinová, Stávková, 2010]. The basic indicator for the determination of income inequality is the Gini coefficient. Mathematically it is formularized as followed.

$G = 0,5 - \int_0^1 F(x, d) dx$ , where  $x_i$  is cumulative value of population variable and  $d_i$  income variable.

Measurement of inequality in income is done using Lorenz curve. In absolutely equal allocation the curve (line shaped) has angle of 45 degrees to the x-axis (x-axis contains the percentage of households, y-axis percentage of revenue). Lorenz curve, represented by the empirical values is located between absolutely equal and unequal distribution of income. This curve can be interleaved by exponential growth curve. Gini coefficient represents the variation of the actual Lorenz curve to the ideal curve. Absolutely equal distribution of income gives Gini coefficient the value  $G = 0$ .

For the poverty measurement can be used even material deprivation. Deprivation can be explained as physical and mental suffering. It's a lack of whatever, what is considered by specific society as valuable. In this paper are used four indicators of material deprivation:

- The quality of housing (apartment dark, noise, dirt, vandalism, crime)
- Financial problems (subjective opinion, based on how households with incomes to pay an unexpected expense)
- Basic needs (eating meat every other day, new clothes, heating the apartment, one week vacation)

- Household equipment (washing machine, colour TV, car, phone).

Analysis of social transfers' allocation has the following structure:

1. Social transfers
  - 1.1. benefits paid with respect to household income (child allowance, social allowance, housing)
  - 1.2. benefits paid, regardless of household income (parental allowance, foster care allowance to cover the needs of the child, foster parent fees, taking a child allowance, allowance for the purchase of a motor vehicle)
2. pension insurance
  - 2.1. old age and widow's pension, survivors benefits
  - 2.2. orphan's pension and disability
3. benefits in material need
4. batch sickness / sickness and invalidity compensations
5. disability
6. employment (or unemployment)
7. other social transfers

## Results and Discussion

Basic information about income situation of Czech households in the years 2005-2008

are in Tab. II

II: Income situation of Czech households

<b>Year Characteristics</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Average D-FYZ (income per month per one household member)</b>	9 152	9 455	10 184	10 901
<b>Average D-EKV (income per month per one equalized household member)</b>	12 232	12 629	13 620	14 627
<b>Basic index – average income per month D-EKV (v %)</b>	100	103,25	111,35	119,58
<b>Median (in CZK)</b>	10 500	10 958	11 815	12 798
<b>Poverty threshold (in CZK)</b>	6 300	6 575	7 089	7 679
<b>Absolut number of households at risk of poverty</b>	296	486	578	628
<b>Relative number of households at risk of poverty (v %)</b>	6,80	6,49	5,97	5,56
<b>Gini coefficient</b>	0,25	0,24	0,24	0,23

Source: authors` calculation

Tab. II shows that the average income per household member in the years 2005 to 2008 increased from 9.152 CZK to 10.901 CZK. Average income per one household member (D-FYZ) can be used for comparison of the development in the years 1988, 1992 and 1996, Vecerek [2001] is dealing with. It is based on Mikrocensus survey realized by the Czech Statistical Office using very similar methodology to indicator D-FYZ. In 1988, Vecerek [2001], presented the value of 1.858 CZK per 1 household member, in 1992 the value of 2.808 CZK and in 1996 the value of 5292 CZK. In 2005 it reached the value of 9.152 CZK and in 2008 the value of 10,901 CZK for a household member

(Tab.II). Development of indicators in selected years between 2005 and 2008 related to 2005 as a basis represents the Tab. III.

III: Basic Index

<b>Basic index (%)</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
<b>Average income per month D-FYZ</b>	100	103,31	111,28	119,11
<b>Average income per month D-EKV</b>	100	103,25	111,35	119,58
<b>Median and poverty threshold (in CZK)</b>	100	104,36	112,52	121,89

Source: authors` calculation

The Tab. III contains two characteristics of D-and D-FYZ ACS, due to all calculations for comparison are based on recalculated (equalized) household members. The average monthly income of household member D-ACS has increased from 12 232 CZK in 2005 to 14 627 CZK in 2008 which is by 19.5%. The median for this period increased by 21.9%. The large relative increase in median income indicates a favorable income situation of households. Higher average income per household member reached more households. Tab. IV presents the frequency of households in different deciles for better orientation in income differentiation.

IV: Sum of household income D-EKV according to income deciles

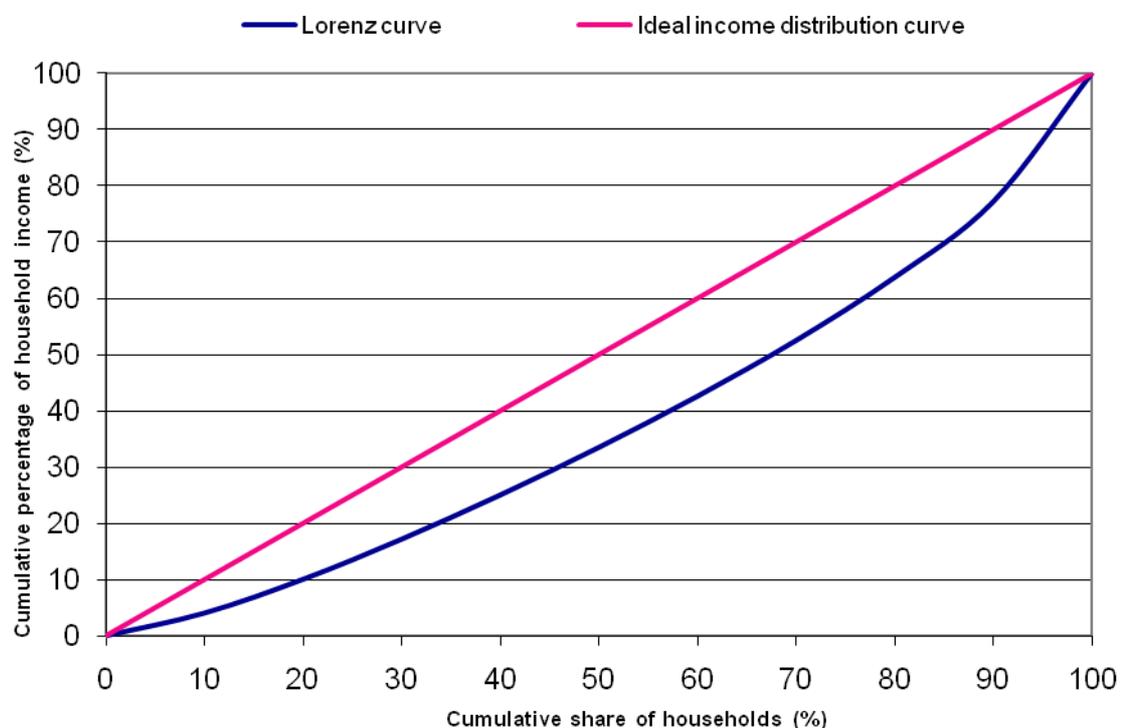
Deciles (%)	2005		2006		2007		2008	
	Absolute expression (thousands CZK)	Relative expression (%)	Absolute expression (thousands CZK)	Relative expression (%)	Absolute expression (thousands CZK)	Relative expression (%)	Absolute expression (thousands CZK)	Relative expression (%)
<b>0 - 10</b>	2 396	4,50	4 373	4,63	6 190	4,70	7 918	4,79
<b>10 - 20</b>	3 232	6,07	5 810	6,15	8 199	6,22	10 369	6,28
<b>20 - 30</b>	3 653	6,86	6 545	6,93	9 217	6,99	11 620	7,03
<b>30 - 40</b>	4 022	7,56	7 204	7,62	10 091	7,66	12 742	7,71
<b>40 - 50</b>	4 386	8,24	7 849	8,31	10 961	8,32	13 852	8,39
<b>50 - 60</b>	4 814	9,05	8 597	9,10	12 005	9,11	15 202	9,20
<b>60 - 70</b>	5 384	10,12	9 560	10,12	13 380	10,15	16 887	10,22
<b>70 - 80</b>	6 180	11,61	10 914	11,55	15 266	11,58	19 176	11,61
<b>80 - 90</b>	7 317	13,75	12 970	13,72	18 117	13,75	22 604	13,68
<b>90 - 100</b>	11 837	22,24	20 681	21,88	28 349	21,51	34 823	21,08

Source: Calculation of authors

The decile distribution table is understood by rule, that the first two deciles represent households known as lower class, from the third to the eighth deciles include household known as middle class and households from ninth and tenth deciles represent higher class. Tab. IV shows, that in the period 2005-2008 the differences between lower and higher class increased, which is understood as a negative state.

Calculations of poverty indicators (Tab. II) show that 6.8% of households in 2005 lived at poverty threshold. Threshold of poverty in this year was represented by the income of 6300 CZK per 1 household member monthly. In 2008 lived at poverty threshold 5,56%, it was 1,24% less, the poverty threshold was at 7679 CZK. Gini coefficient in surveyed period declined from 0,25 to 0,23, which indicates the decreasing income

differentiation. To comment we permit to state Gini coefficient which is stated by Večerek [2001] for the period he elaborated in his paper. In 1988 Gini coefficient was 0,19. This corresponds to the fact that in the period of planned management the income differentiation is relatively low, it is mainly influenced by demographical factors (age, sex, number of children), thus by the “needs”. In 1992 Gini coefficient reached the value 0,25, in 1998 it reached the value 0,27. The increasing value of Gini coefficient signifies increasing income differentiation, increasing influence of socio-economic factors as education and ability to succeed in the labor market. The increase of income differentiation among 1990–1998 also reflects the changes in society, the transition to a market economy and democratic principle of government in society. These reason correspond to decline of Gini coefficient of income differentiation in 2005 and 2008, when the society was stabilizing and gradually adapting to those changes. For representation Lorenz curve is used in Fig. 1, it is based on values from 2008.



1: Lorenz curve in 2008

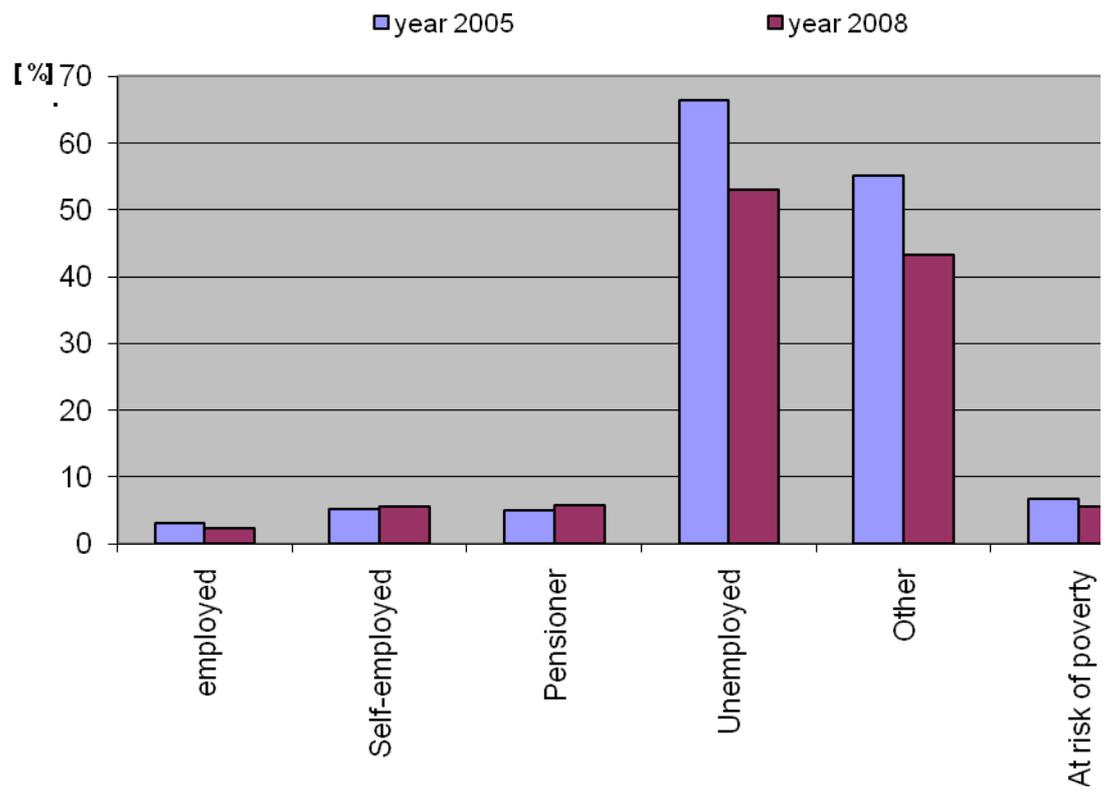
At-risk-of-poverty households segmented according to type of household (affiliation to social group) are shown in Tab. V.

Table V: Number of at-risk-of-poverty households according to social group

Social group	2005			2008		
	Absolute number of at-risk-of-poverty households	Total number of surveyed households	Relative number (%)	Absolute number of at-risk-of-poverty households	Total number of surveyed households	Relative number (%)
<b>Employed</b>	66	2148	3.07	124	5438	2.28
<b>Self-employed</b>	20	391	5.12	51	924	5.52
<b>Pensioner</b>	80	1603	4.99	266	4556	5.84
<b>Unemployed</b>	87	131	66.41	133	251	52.99
<b>Others</b>	43	78	55.13	54	125	43.20
<b>Total</b>	296	4351	6.80	628	11294	5.56

Source: Calculation of authors

The most of vulnerable households is in category unemployed and the fewest vulnerable households are in category employed, this expected presumption was confirmed by the values shown in Tab. V. Roughly the same percentage representation was found in categories of self-employed and pensioners. In both of these categories the number of at-risk-of-poverty increases during the surveyed year. This increase in period from 2005 to 2008 for categories pensioner and self-employed (although it is insignificant) is sufficient reason for studying the share of income redistribution by the taxes and benefits. The most interesting finding is that in the same period there is decline of at-risk-of-poverty population in unemployed category, the decline is significant about 12%.



2: Number of household at-risk-of-poverty according to social group

Segmentation of vulnerable households according to the number of household members is in the Tab. VI.

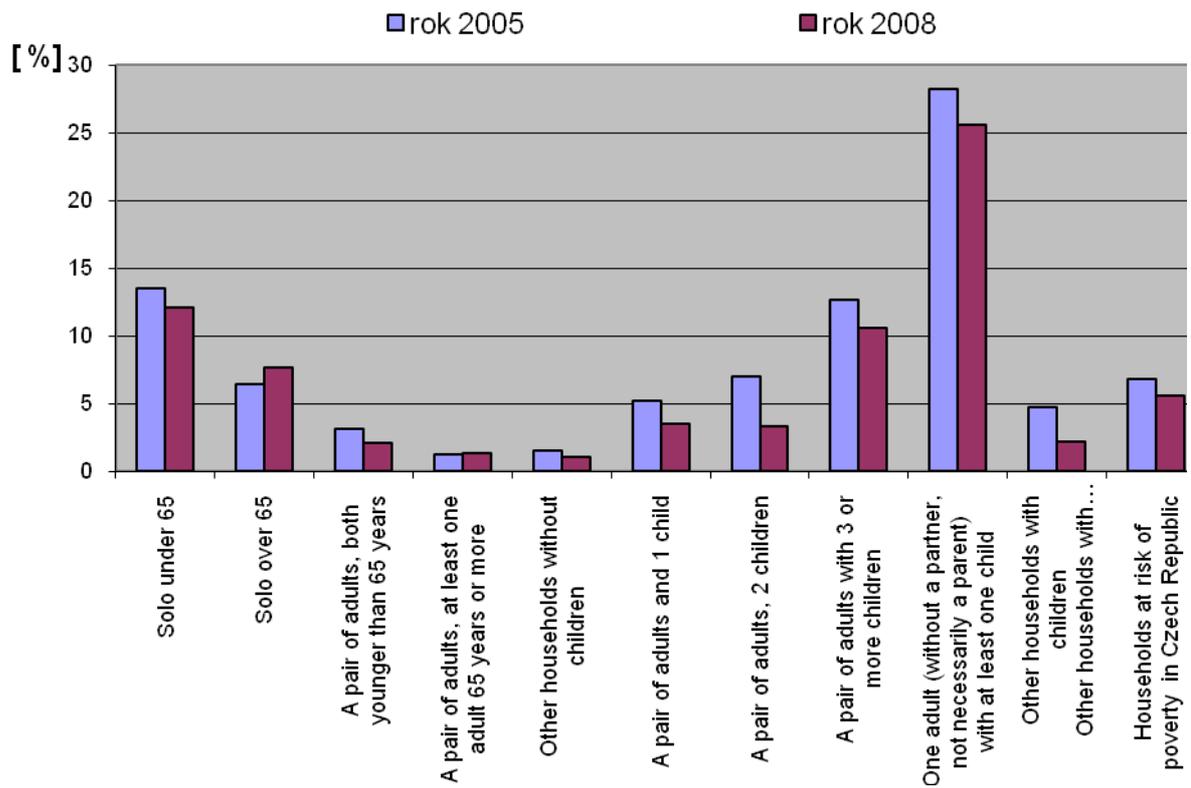
VI: Number of household at-risk-of-poverty according to the number of household member

Number of household member	2005			2008		
	Absolute number of at-risk-of-poverty households	Total number of surveyed households	Relative number (%)	Absolute number of at-risk-of-poverty households	Total number of surveyed households	Relative number (%)
<b>Person bellow 65 years</b>	82	607	13.51	176	1455	12.10
<b>Person, 65 years and more</b>	40	621	6.44	132	1722	7.67
<b>Two adults, both below 65 years</b>	25	791	3.16	38	1851	2.05
<b>Two adults, at least one 65 years and more</b>	7	554	1.26	22	1681	1.31
<b>Other household without children</b>	6	391	1.53	10	973	1.03
<b>Two adults with one child</b>	19	362	5.25	33	946	3.49
<b>Two adults with two children</b>	37	527	7.02	44	1325	3.32
<b>Two adults with 3 and more children</b>	13	103	12.62	31	292	10.62
<b>Person (without partner, don't have to be parent) with at least one child</b>	58	205	28.29	130	508	25.59
<b>Other household with children</b>	9	190	4.74	12	541	2.22
<b>Total</b>	296	4351	6.80	628	11294	5.56

Source: Calculation of authors

Bellow the poverty threshold there are most frequently households of one adult with at least one child, then person below 65 and two adults with 3 and more children, this results from the Tab. VI. The number of at-risk-of-poverty households within different categories of households hasn't significantly changed. It is necessary to notice the fact that the number of at-risk-of-poverty households declined in category of two adults with one child and two adults with two children (3,5%). These categories are high represented, with very low percentage of at-risk-of-poverty households, which is auspicious for society.

These results indicate of the fact, that factors affecting income inequality are becoming more and more social and economic character. Category of pensioners has another status in redistribution, because, according to some authors [Roženský, 2009], pension don't fulfill the purpose of redistribution. The situation is clearly shown in Fig. 3.



3: Number of at-risk-of-poverty households divided by the number of household members

Part of undertaken analysis of income differentiation is monitoring of indicators of material deprivation. The first monitored indicator of material deprivation is the quality of housing. Results of the survey are shown in Tab. VII.

VII: Quality of housing

Number of households	Problems with state of a flat, a house in %							
	Dark flat		Noise		Dirt		Vandalism, crime	
	2005	2008	2005	2008	2005	2008	2005	2008
<b>Total</b>	5,33	3,83	20,45	16,81	18,57	15,68	16,16	13,12
<b>Living below the poverty threshold</b>	12,16	9,24	23,65	17,52	17,91	17,99	19,59	17,04

Source: Calculation of authors

In 2005 the households which mention problems with housing, mostly complain about noise (20,45 %), dirt around (18,57 %), vandalism a crime (16,16 %) and 5,33 % complain about darkness of the flat. In 2008 as results from Tab.VII there was decline in frequency of all indicators of housing problems. The households at-risk-of-poverty suffer from housing problems which particularly perspicuous from the Tab. VII.

Determination of subjective opinions of perception of housing costs was also included into this survey. There was shown that housing costs are for most the households “certain burden”. In 2005 the housing cost meant for 23,49% of households high burden. In 2008 that meant high burden for 21,91% of household. The number of households which didn’t consider the costs of housing as any burden decreased from 12,09 to 9,6%. But for the households which are at-risk-of-poverty the housing costs signify high burden. In 2005 47,64% of households had housing costs that signified

high burden. But in 2008 this number increased to 53,34%. In 2008 the number of households for which the housing costs didn't signify any burden declined from 10,47% to 5,57%. Tab. VIII.

VIII: Costs of housing

Number of households	Costs of housing (in %)					
	High burden		Certain burden		No burden	
	2005	2008	2005	2008	2005	2008
<b>Total</b>	23,49	21,91	64,42	68,49	12,09	9,60
<b>Living below the poverty threshold</b>	47,64	53,34	41,89	41,08	10,47	5,57

Source: Calculation of authors

The second indicator of material deprivation is state of financial problems of households, Tab.IX.

IX: Perception of financial situation by households

Number of households	Household live with income in %											
	With great difficulties		With difficulties		With some difficulty		Fairly easily		Easily		Very easily	
	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008
<b>Total</b>	8,96	7,10	19,63	21,60	38,68	38,94	22,32	23,76	8,99	7,74	1,42	0,87
<b>Living below the poverty threshold</b>	36,49	33,44	30,07	32,01	21,28	22,93	8,78	8,92	3,38	2,39	0	0,32

Source: Calculation of authors

For formulation of subjective opinion, how households are able to live with their actual income, the scale of 6 level was used, its classification is shown in Tab. IX . The table shows that in 2005 and 2008 almost 28% of households lived with their income with

great difficulties or with difficulties, 39% lived with their income with less difficulties and only 23% of households lived with income fairly easily. There is a clear answer for question about living of at-risk-of-poverty households, poor households live with their income with great difficulties. Even if there was a decline from 36,49% to 33,44% in 2008 in opposite of 2005, but it is still a high percentage of all levels to live with income with difficulties. The number of poor households which lived with difficulties increased from 36,07% to 32,01% compared to 2005. In 2005 12,16% lived with their income quite easily. In 2008 this number of vulnerable households decreased to 11,63%. Similarly high numbers of households were found in context of questions related to ability to pay unexpected expenses. The repayment of loans is a high burden for most of households in both years. The negative phenomenon is the fact that the number of household for which the repayment of loan is high burden increased to 85,74%, that is growth 6,49% in comparison with 2005. The households at-risk-of-poverty have difficulties in repayment of loans, but the percentage is not high (10%), because more than 80% stated that this is not their problem, they can not afford loans.

X: Repayment of loans

Repayment of loans, %								
Number of households	High burden		Certain burden		No burden		Besides (do not repay)	
	2005	2008	2005	2008	2005	2008	2005	2008
<b>Total</b>	79,25	85,74	6,46	4,07	12,30	9,07	2,00	1,12
<b>Living bellow the poverty threshold</b>	10,47	7,80	9,46	4,30	1,01	0,64	79,05	87,26

Source: Calculation of authors

The third of indicators of material deprivation is equipment of households. The results of the survey are shown in Tab. XI.

XI: Equipment if households

<b>Material deprivation – equipment of subjects of long-term use (%)</b>										
<b>Number of households</b>	<b>Ownership of a washing machine</b>		<b>Ownership of a telephone</b>		<b>Ownership of a computer</b>		<b>Owner ship of a color TV</b>		<b>Ownership of a personal car</b>	
	2005	2008	2005	2008	2005	2008	2005	2008	2005	2008
<b>Total</b>	94,53	96,49	91,45	96,27	37,74	50,14	97,12	98,80	56,70	61,38
<b>Living bellow the poverty threshold</b>	83,11	89,49	77,36	88,38	23,31	32,32	89,19	96,34	26,35	27,55

Source: Calculation of authors

In 2005 more than 91% of households owned a washing machine, telephone, color TV. IN 2008 more than 96% of households owned above-mentioned subjects. In 2005 56,7% of households owned a car and in 2008 it was even 61,38% of households. The biggest increase was represented by ownership of computer, in 2005 the computer was owned by 37,74% of households and in 2008 it was owned by 50,14%. Among at-risk-of-poverty household there is most owners of color TV (96,34%). Then most of households own washing machine and then the telephone. In 2008 32,32% of these households owned a computer and a personal car (27,55%). We can deduce from the information above, that objective finding about ownership of the defined subjects may not be fully consistent with subjective expression of financial situation of household.

For the fourth indicator – basic needs – the results of survey are shown in Tab. XII.

XII: Basic needs

<b>Material deprivation – basic needs, %</b>								
<b>Number of households</b>	<b>Week holiday</b>		<b>Meat, fish, poultry every other day</b>		<b>Sufficient heating of a flat</b>		<b>New clothes</b>	
	2005	2008	2005	2008	2005	2008	2005	2008
<b>Total</b>	57,02	58,29	80,83	86,08	89,20	92,72	65,85	x
<b>Living bellow the poverty threshold</b>	22,97	23,57	58,45	67,04	79,39	81,69	40,54	x

Source: Calculation of authors

In 2005 57,02% of households could afford week holiday away from home, in 2008 the number increased to 58,29%. In 2005 meat was eaten every other day by 80,83% of households and also in this category there is increase to 86,08%. Within the question about basic needs, the most positive answers were found for fulfilling the need “sufficient heating of a flat”, in 2005 it was 89,20% of households and in 2008 this value increased to 92,72%.

At-risk-of-poverty households could afford week holiday away from home in 23% in both years. There was a positive development for these households in the field of food, compared to 2005 there was increase to 67,04%, which is 8,59%. About 80% of at-risk-of-poverty households is content with sufficient heating in both years.

To mitigate impacts of unequal distribution of income the social transfers are implemented. The structure of provided social transfers in 2005 and 2008 in the Czech

Republic is shown in Tab. XIII.

XIII: Structure of social transfers ( %)

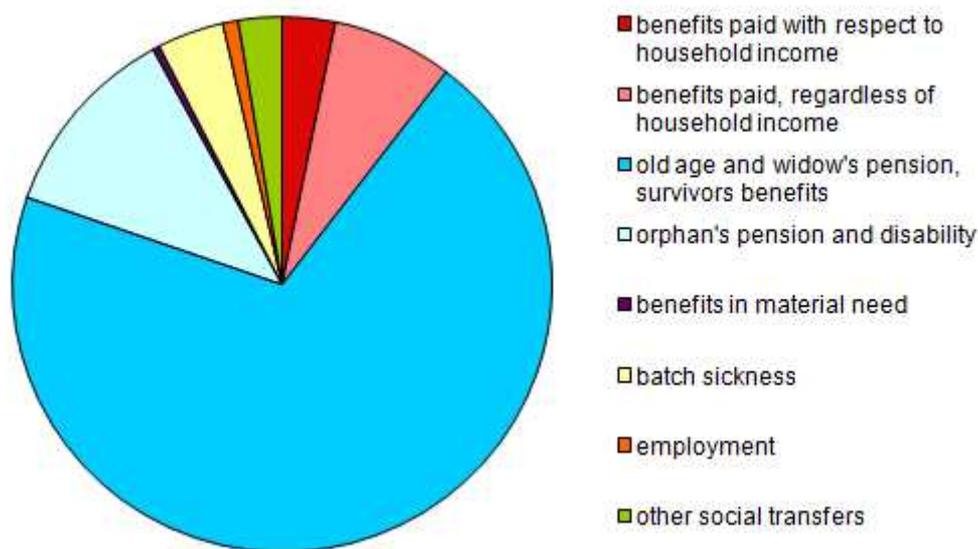
<b>Social transfers</b>	<b>2005</b>	<b>2008</b>
<b>1. State social support</b>	9,79	10,46
<b>1.1. Benefits paid with regard to household income (child allowance, social allowance, housing allowance)</b>	6,21	3,18
<b>1.2. Benefits paid without regard to household income (parental allowance, foster care, maternity, funeral expenses)</b>	3,65	7,28
<b>2. Pension insurance</b>	81,45	82,09
<b>2.1. Old age pensions and widow's benefit</b>	70,46	70,25
<b>2.2. Disability and orphan's benefits</b>	10,99	11,84
<b>3. Benefits in material need</b>	1,53	0,41
<b>4. Sick insurance</b>	4,02	4,02
<b>5. Employment (unemployment)</b>	1,64	0,92
<b>6. Other social transfers</b>	1,50	2,63

Source: SILC

State social support which includes benefits that are paid with regard to household income, for example the child allowance, social allowance and housing allowance. In 2008 it decreased from 6.21% to 3.18%. On the contrary, benefits paid regardless of household income, for example parental allowance, foster care, maternal and funeral allowances increased from 3.65% to 7.28%. This increase could be justified only in situation of some items, such as foster care. Some items are very difficult to be justified. Other items such as benefits in material need declined (from 1.53 to 0.41), similar to unemployment benefits (from 1.64 to 0.92). Only for other social transfers an increase was registered (from 1.5 to 2.63). System of sick insurance was same in both years.

Pension insurance is formed by old age pensions, disability, widow's and orphan's benefits. The pensions had in 2005 the largest share of social income in the Czech

Republic, the share was 81.45%, others social made the share 18,49%. In 2008 the share of pensions of total social income increased marginally to 82.09% and because of that there was a decline in other social transfers to 17.91%. The situation of growth of pensions' proportion in total social income is evident according to demographic development. In 2005 the share of social transfers in disposable income that is defined by the EU was 31.51%. In 2008 the share of social transfers in disposable income was 32.57%. Social transfers were in 2005 received by 3480 households from the total amount 4351, which is 79,98%. In 2008 social transfers were received by 9135 households from the total amount 11294 households, it was 81,04%.



4: Structure of social transfers in 2008

## Summary

Analysis of income differentiation revealed the improvement in income situation of households in surveyed years. Average income per household member increased by 19,5%, the median value increased by 21,9%. This indicates more frequent values around the average. When the poverty threshold increased from 6300 CZK to 7679 CZK, the number of at-risk-of-poverty households declined from 6,8% to 5,56%. The value of Gini coefficient declined from 0,25 to 0,23, which also indicates reduction of income differences. Factors influencing this situation are evident from results of the survey of segmented households. The influence of demographical factors declines (number of household members, age) in behalf of socio-economic factors (unemployment). Indicators of material deprivation indicate discrepancy of objective survey about ownership of mentioned subjects and subjective opinion about material and financial situation of household. Society provided in objective period social income in the structure – 18,49% other social income and 81,45% pension insurance, this results from the structure of social transfers to mitigate the impact of unequal income distribution. In 2008 this ratio changed from 17,91% and 82,09%. Social transfers were received by 79,98% of household and in 2008 it was received by 81,04% in the Czech Republic. There is a obligation for society in form of share of social income in disposable income of households increased from 31,51% in 2005 to 32,57% in 2008. The results show that redistribution, i.e. the influence of tax income and social expenses has deeper context. The financial economic problem becomes more and more social and political problem. The influence of social income demonstrably contributes to restriction of income inequality, but the following facts are also shown, at first not all items of social transfers work always positively and then they aren't always reversibly properly targeted. With regard to complexity of income differentiation of households

and the use of all instruments to remove income inequalities, all analysis of empiric data, which inform not only about development of income but also about impacts of redistribution, are substantiated and useful. They contribute to fiscal consolidation of society.

## References

BOHÁČOVÁ, T., 2007: *Materiální deprivace a chudoba domácností v ČR*. [on-line]. [cit. 10. 11. 2010]. Dostupné z: <[http://is.muni.cz/th/102755/fss\\_b/BKL-Bohacova\\_102755.doc](http://is.muni.cz/th/102755/fss_b/BKL-Bohacova_102755.doc)>

FÖRSTER, M. F., 2002: *Trends and driving factors in income distribution and poverty in the OECD area Labour Market and Social Policy Occasional Papers. No 42, Paris*

MACÁKOVÁ, L. a kol., 2007: *Mikroekonomie – Základní kurz*. 10. vydání. Slaný, Melandrium

ROŽENSKÝ, V., 2009: *Snižují skutečně sociální transfery nerovnost?*. Praha, VŠE

STEJSKAL, L., STÁVKOVÁ, J., 2010: *Living conditions of Czech farmers according to EU statistics on income. Agricultural Economics: Zemědělská ekonomika.. č. 1, ISSN 0139-570X.*

STEJSKAL, L. PUSTINOVÁ, J., STÁVKOVÁ, J., 2010: *Příjmová situace domácností ČR podle statistiky EU SILC. Acta Universitatis agriculturae et silviculturae Mendeliana Brunensis : Acta of Mendel University of agriculture and forestry Brno = Acta Mendelovy zemědělské a lesnické univerzity v Brně.. sv. 58/2010, č. 3, s. 251--259. ISSN 1211-8516.*

VEČEREK, J., 2001: *Mzdová a příjmová diferenciacie v České republice v transformačním období*. Sociological Papers SP 01:5

## Contact address

prof. Ing. Jana Stávková, CSc., Department of Marketing and Trade, Faculty of Business and Economics, Mendel University in Brno, 613 00 Brno, Czech Republic, e-mail: [jana.stavkova@mendelu.cz](mailto:jana.stavkova@mendelu.cz)

Ing. Ladislav Stejskal, Ph.D., Department of Marketing and Trade, Faculty of Business and Economics, Mendel University in Brno, 613 00 Brno, Czech Republic, e-mail: [ladislav.stejskal@mendelu.cz](mailto:ladislav.stejskal@mendelu.cz)

prof. Ing. Ľudmila Nagyová, PhD, Department of Marketing, Faculty, Faculty of Economics and Management, Slovak University of Agriculture in Nitra, e-mail: [Ludmila.Nagyova@fem.uniag.sk](mailto:Ludmila.Nagyova@fem.uniag.sk)