

QUANTIFICATION OF FACTORS INFLUENCING THE DIFFERENCE IN HOUSEHOLD INCOME IN THE CZECH REPUBLIC

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Abstract

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Income inequalities, resulting from different income of economic entities and the level of redistribution (especially the amount and structure of taxes on one hand and transfer payments on the other) and peculiarities of the market economy, have been increasing.

Within the context of the economic crisis, the pressure (proved by election results in many countries) to alleviate such differences, or at least to stop their deepening has been strengthening. The analysis of the increased income differentiation gets into attention of the theory of public finance.

The paper theoretically deals with the ways of measuring such inequalities and then it focuses on the factors that may be regarded as significant for increasing income differences in particular conditions of the Czech Republic within the years 2006–2011 for the selected types of households. Based on the preliminary description, deduction and induction, the research objective was to determine, using the mathematic and statistical methods, the relevancy and -where appropriate- the level of dependence of the analyzed effects on particular elements of household income.

finance, income inequality, redistribution, Lorenz curve, Gini coefficient, household income, unemployment

1 INTRODUCTION

Inequalities in the distribution of income and wealth are an imminent part of a democratic society.

The differences in incomes have been deepening in the course of time, and this development is confirmed in both traditional market economies (most recently Stiglitz, 2012) and former Eastern Bloc countries, where this process was accelerated along with the transformation of economy (e.g. Jahoda, 2006; Vitek, 2008; or, in particular Večerník, 2002).

Factors causing inequalities are diverse and often operate simultaneously. The state tries to mitigate the emerging inequalities through appropriate tools. Income inequalities can be evaluated and measured on the basis of different tools. Among the best-known there are: the Lorenz curve, Gini coefficient, degree of inequality, income quintile share ratio S80/S20, Atkinson index, Theil index,

Robin Hood index, and the coefficient of variation (the ways of measuring stated by e.g. Lapáček, 2008).

The paper analyses the situation in the area of income inequality in the Czech Republic in the period 2006–2011, using selected tools. The aim of the paper is to assess the factors influencing the income inequalities and particular components of household incomes (the income structure).

The aim of the research, the paper is based on, is neither a comparison of nations (interesting from another view, e.g. Caplan, Silva, 2011) nor a comprehensive analysis of households according to the number of household members. Thanks to the decile description, a single household may belong to different decile groups in different years.

2 MATERIALS AND METHODS

The research of inequalities, results of which are presented in this paper, was based on the

use of the Lorenz curve. When creating Lorenz curves, the identification of particular household deciles was used, where the income structures and their changes in a particular period of time were analysed. A possible correlation between the income inequality and indicators of the economic growth, unemployment, and inflation was studied. While identifying possible dependencies, the chain and base indices were also used. The values of the Gini coefficient, which generally follows the Lorenz curve, were also used during the analyses, the assumption being increasing values of the Gini coefficient. This tool was chosen, because it is often used in time as well as international comparison of the equivalence of wealth and income.

The scientific hypotheses, the authors worked with, were:

- Changes of the development of the gross domestic product (GDP growth, resp. in the time of the economic crisis, the stagnation or decline of GDP) had a significant influence on the income structure of individual household types (deciles).
- Changes in unemployment had a significant influence on the income structure of individual household types (deciles).
- Changes in price level did not have any significant influence on the income structure of individual household types (deciles).

When determining the hypotheses, the authors worked on the assumption of consistency (resp. non-consistency) of the studied phenomena. Economic growth should help to reduce the volume of claiming social benefits and vice versa. It can also be predicted that the economic growth will contribute to a further differentiation of the income range (Kotlikoff, 2002). Growing unemployment should reflect its consequences in the raise of demands on social income. Inflation with its features should stay neutral in all its interactions in income distribution in the environment of the Czech Republic in the period in question (not very significant progression of the personal income tax and relatively low growth of price level).

The paper uses the data gathered by the Czech Statistical Office in the framework of the survey Living Conditions in 2006–2011, which is carried out annually in accordance with the survey on household income and living conditions EU-SILC, and the selection plan of which is based on a random two-stage selection for each region and uses a sample of over 10,000 households (CSO, 2012).

2.1 Lorenz curve

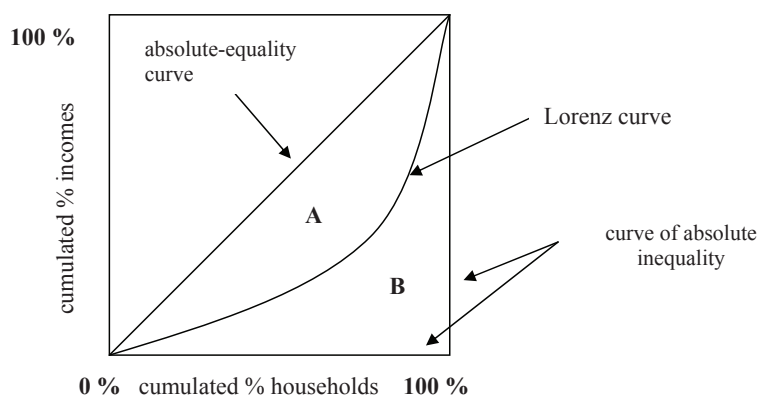
The Lorenz curve graphically portrays the inequalities in the distribution of income. Fig. 1 shows the Lorenz curve by means of the so-called box diagram. The diagonal of the diagram shows a curve of an absolutely equal distribution. The sides of the diagram depict a curve of an absolutely unequal distribution. The actual Lorenz curve is located between these two lines.

Mathematically, the Lorenz curve can be put down by using the distribution function $F(x)$ of the given income distribution in society or the probability density $f(x)$, which is the first derivation of the distribution function, as shown in (1).

$$L(F) = \frac{\int_{-\infty}^{x(F)} x \times f(x) \times dx}{\int_{-\infty}^{\infty} x \times f(x) \times dx} = \frac{\int_0^F x(F') \times dF'}{\int_0^1 x(F') \times dF'} \quad (1)$$

2.2 Gini coefficient

The Gini coefficient can be defined either from the graphical representation of the Lorenz curve or mathematically (detailed ways of calculation given by Gonzáles, Morente, Gavilán Ruiz, Sánchez-Reyes Fernández, 2010). With the help of the Lorenz curve, the Gini coefficient represents the ratio of the area between the curve of an absolutely equal distribution of income and the real Lorenz curve and of the area between the curve of an absolutely equal and the curve of absolutely unequal distribution of income. These areas are depicted in



1: Lorenz curve
Source: self-made

Fig. 2 and the Gini coefficient may be calculated as shown in (2)

$$G = \frac{A}{A+B} \quad (2)$$

The Gini coefficient can also be calculated as an average of the difference in the income of all possible household couples as shown in (3).

$$G = \frac{\sum_{i=1}^n \sum_{j=1}^n |x_i - x_j|}{2 \cdot n^2 \cdot \bar{x}}, \quad (3)$$

where:

x_{ij}means the income of two randomly chosen households,

nmeans the number of households,

\bar{x}means the average income of a household.

For the calculation of the Gini coefficient, the Brown formula is also used, according to which it is calculated as shown in (4).

$$G = |1 - \sum_{i=1}^n (x_i - x_{i-1}) \cdot (y_i + y_{i-1})|, \quad (4)$$

where:

x_1means the cumulative ratio of income recipients, where $x_0 = 0$ and $x_n = 1$,

y_1means the cumulative income ratio, where $y_0 = 0$ and $y_n = 1$.

The Gini coefficient may reach the values in the interval $<0; 1>$, where 0 means an absolutely equal distribution of income in society and 1 means an absolutely inequal distribution of income.

The values of the Gini coefficient in the Czech Republic did not change very significantly in the period in question, as shown in Tab. I. This means that there was no significant change in the area of income distribution in society. International comparisons show that the Czech Republic still belongs to egalitarian countries in terms of income (e. g. Brandolini and Smeeding, 2008). No changes occurred even through the influence of the adjustment in the tax area, especially in the income tax. The income tax, unlike contributions to compulsory insurance, has an influence on reducing income inequality. The introduction of the so-called flat tax in 2008 along with other reforms did not project into deepening of income inequality (Malá, Červená, 2012), which may also be caused by the fact that the flat tax is in reality a progressive tax.

In the Czech Republic, with the exception of a few fluctuations, the value of the Gini coefficient is stable. The increase of the Gini coefficient, according to the statistical data, was most evident in the 1990s (e. g. in 1996 it was 0,23 and in 1999 0,25, see Marek, 2010). Since 2000, only small deviations

have occurred. The values of the Gini coefficient differ a little in different databases (OECD, CIA), but the trend is always the same (Marek, 2010).

2.3 Development of the net monetary income structure per person in a decile division

When constructing the Lorenz curve, the decile division of household income usually forms the base, which was also used by the authors of this paper.

Net monetary income of households (gross income after subtracting taxes and contributions to social and health insurance) is, according to the Czech Statistical Office, divided as follows:

- income from dependent activity (defined according to Act No. 586/1992 Coll., on income taxes, as amended),
- income from entrepreneurship (including income from trades, forestry and water resource management, from agricultural production, from business according to special regulations, from freelancing, from copyrights),
- social income (the parts being: retirement benefits, state social benefits, health insurance benefits, and other social income adjusted on the basis of the Acts No. 115/1995 Coll., on pension insurance, as amended, No. 187/2006 Coll., on health insurance, as amended, No. 117/1995 Coll., on social benefits, as amended, No. 589/1992 Coll., on social security insurance, as amended, No. 111/2006 Coll. on assistance in material need, as amended) and
- other income (including the income from capital assets and other income).

3 RESULTS AND DISCUSSION

3.1 The Lorenz curve and the Gini coefficient for the Czech Republic

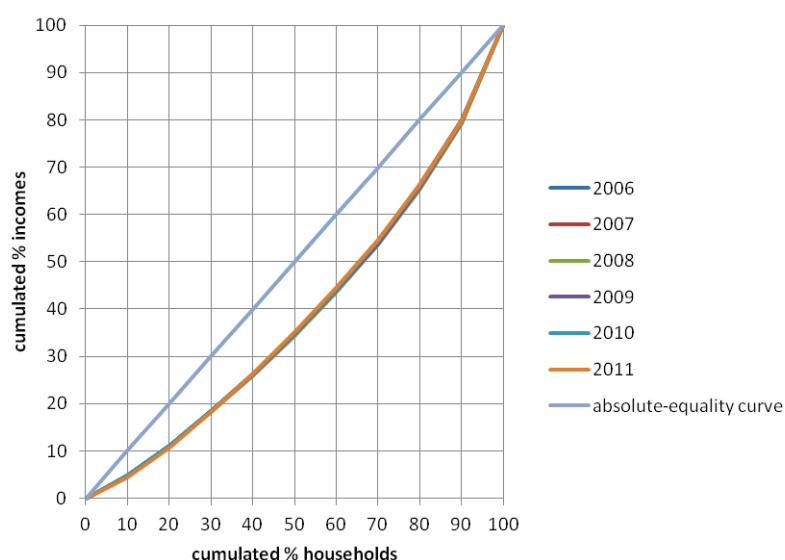
Fig. 2 shows the Lorenz curve for the Czech Republic in a six-year period and compares it with the curve of the absolutely equal distribution. In the studied period, no significant change in the equality in distribution of income in society is to be seen in the graphical representation. It is necessary to point out that the decile division of households is carried out according to the income per person, which enables to take into account neither the savings from the range of multi-member households nor the age structure of their members.

Tab. II shows the breakdown of the decile household division according to the income. In the first decile of households, where the biggest part of the income is formed by the income from dependant activities, there was a gradual increase of this item

I: Development of the Gini coefficient in 2006–2011

Year	2006	2007	2008	2009	2010	2011
Gini coefficient	0.253	0.253	0.247	0.251	0.249	0.252

Source: Czech Statistical Office



2: Lorenz curve for the Czech Republic in 2006–2011
Source: Own calculations

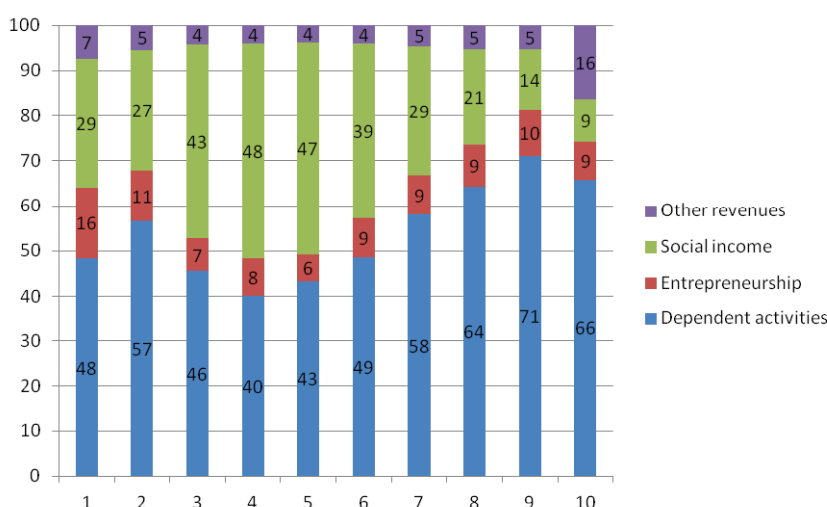
II: Income structure of households in decile division (%)

Year	Type of income	Decile division of households									
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
2006	dependant activities	45.1	55.4	45.7	40.8	44.4	49.1	59.7	65.2	73.1	67.0
	entrepreneurship	16.4	11.8	6.9	8.7	7.1	9.8	8.5	10.6	9.7	8.6
	social income	31.6	27.9	43.3	46.9	45.1	36.7	27.6	19.5	12.1	8.3
	other income	6.8	4.9	4.0	3.6	3.4	4.3	4.3	4.6	5.0	16.2
2007	dependant activities	42.9	57.1	42.7	38.4	44.7	49.2	64.1	62.1	71.2	64.8
	entrepreneurship	16.0	10.4	7.6	8.9	6.3	9.0	6.8	11.1	10.8	8.9
	social income	34.2	27.7	45.8	49.1	45.6	38.3	24.9	22.1	12.6	9.4
	other income	6.8	4.9	3.8	3.6	3.5	3.5	4.3	4.6	5.3	16.9
2008	dependant activities	48.9	52.2	40.0	41.1	47.4	54.0	60.2	66.2	72.7	61.6
	entrepreneurship	15.5	10.4	6.9	8.5	5.6	10.9	9.4	11.0	8.9	9.5
	social income	28.4	33.0	48.4	46.0	43.1	31.0	25.3	17.6	12.9	9.6
	other income	7.2	4.4	4.7	4.4	4.0	4.2	5.1	5.3	5.4	19.2
2009	dependant activities	49.2	57.2	40.4	42.2	39.3	51.4	59.0	66.1	71.7	68.0
	entrepreneurship	16.2	9.4	7.3	7.8	6.5	8.1	9.8	8.9	9.9	9.2
	social income	26.9	27.0	48.8	45.0	49.6	36.1	26.8	20.0	13.2	8.7
	other income	7.7	6.4	3.5	5.0	4.6	4.4	4.3	4.9	5.2	14.1
2010	dependant activities	53.0	56.6	49.0	39.5	44.8	46.2	56.4	65.1	70.0	68.1
	entrepreneurship	16.8	11.1	5.8	7.5	6.0	9.0	9.0	6.9	10.5	7.3
	social income	23.5	26.7	40.9	49.1	45.5	41.2	29.5	22.2	14.4	8.8
	other income	6.7	5.6	4.4	3.9	3.6	3.6	5.1	5.9	5.0	15.8
2011	dependant activities	50.9	61.5	55.3	38.7	39.2	41.3	48.8	60.4	67.6	65.2
	entrepreneurship	13.8	14.3	8.8	7.5	3.8	5.4	8.5	8.2	10.7	7.6
	social income	26.5	18.2	31.6	50.5	53.5	49.5	38.2	25.4	16.2	11.2
	other income	8.9	6.1	4.3	3.2	3.5	3.8	4.4	6.0	5.5	15.9

Source: Own calculation according to the Czech Statistical Office

since 2008 at the expense of the social income. The social income of the households in the second decile, the most significant income part of which is

the income from dependant activities, decreased significantly in 2011. As far as households in the third decile are concerned, two items influence the



3: Average income structure in decile division
Source: Own calculation

total amount of income the most – income from dependant activities and social income. Since 2010, it has come to a significant increase of the first item when compared to the second one. In the fourth and fifth household deciles, social transfers are the most significant part of the income. While in the fourth decile, the development of all the items is relatively stable, in the fifth decile, the share of social income increased in 2011 at the expense of the income from dependant activities and from entrepreneurship. The sixth, seventh, eighth and ninth deciles show a similar trend. In 2011 there was a decrease of the income share from dependant activities and an increase of the social income share at the same time. While in the sixth household decile, the income from dependant activities and social income still contribute to the total amount of income in a similar proportion, the income from dependant activities starts to prevail significantly from the seventh decile. The structure of net monetary income in the tenth decile can be evaluated as the most stable. Here, the share of individual components did not change very much.

From Fig. 3 it is clear that the income from entrepreneurship and other incomes form a similar part in all the deciles (the exception being only the income from the entrepreneurship in the first decile and other income in the tenth decile). The final structure is predominantly influenced by the result of income from dependant activities and social transfers, which are in the inverse relationship. The biggest share of social income is evident between the third and the fifth decile, while the lowest share in the last three deciles.

3.2 Factors influencing the structure of the net monetary income

The structure of the net monetary income changes in time. Its development may be influenced by a number of factors. These factors can include:

- macroeconomic development (given by the phase of the economic cycle, economic growth, and the level of unemployment),
- social politics (given by the level of social income and conditions for its acquisition),
- labour legislations,
- current distribution of wealth,
- other factors.

3.2.1 Factors of the economic development

Thanks to the calculation of the correlation coefficient, the correlation between economic indicators (the development of the real GDP, unemployment rate, and inflation rate are shown in Fig. 4) and the development of individual parts of household income was studied.

Index of correlation (denoted by r_{xy}) measures the strength of dependence between two numerical variables. It is calculated by the formula:

$$r_{xy} = \frac{\sigma_{xy}}{\sigma_x + \sigma_y}, \quad (4)$$

where:

- r_{xy} is index of correlation,
- σ_{xy} is covariance between x and y,
- σ_x is standard deviation of the variable x,
- σ_y is standard deviation of the variable y.

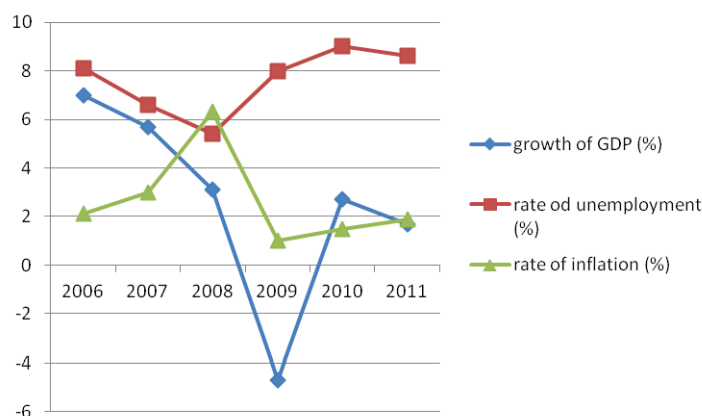
The economic growth connected with increasing of the production capacity of a state has a significant impact on the population of a particular country. No significant tightness between these two values was discovered. A significant decrease of the economic growth as an impact of the global economic crisis occurred in 2009. However, in this year, there were no significant changes in the structure of household income.

Unemployment, measured by the indication of the registered unemployment rate, is an inseparable part of the labour market (in more detail Filo

III: *Development of the real GDP, unemployment rate and inflation rate*

	2006	2007	2008	2009	2010	2011
Growth of real product (%)	7.0	5.7	3.1	-4.7	2.7	1.7
Rate of unemployment (%)	8.1	6.6	5.4	8.0	9.0	8.6
Rate of inflation (%)	2.1	3.0	6.3	1.0	1.5	1.9

Source: Czech Statistical Office

4: *Development of the real GDP and the unemployment and inflation rate (%)*

Source: Czech Statistical Office

and Buchtová, 2010, or Brožová, 2012). Even in case of examination of the relation between the unemployment rate and the development of household income structures, no significant dependency was found out.

The increase of the price level depicted by the inflation rate and influencing the whole population cannot be labeled as significant in relation to the structure of household income on the basis of the calculation.

3.3.2 Factor of social politics

One of the most significant changes to be observed in the development of the structure of monetary income in the period in question are the changes in the area of social income. The common trend for the fifth to the tenth decile is the increase of this component in 2011 at the expense of the income from the dependant activity. Since 2011, a whole range of measures has come into force in the area of reduction of social expenditures of the state (mainly because of the reduction of the pressure on public budgets). For example: changes in the structure of receiving parental allowances and in the options of claiming them, equalizing of conditions for the calculation of maternity benefits for employees and self-employed persons, restriction of the entitlement to social benefits, restriction of the payment of childbirth allowances, stricter conditions for the entitlement to unemployment benefits, or an introduction of a bridging allowance as a tool of active employment politics.

3.3 Changes of the household income structure according to base and chain indices

Individual parts of the household disposable income were further studied by means of the chain and base indices. When calculating the base indices, the year 2006, i. e. the period of a stable economic growth, was chosen as a starting point. The Tab. IV depicts the values of these indices converted to symbols.

More significant changes are evident in 2008, where, in the area of entrepreneurial income, it came to a rise of more than 20% when compared with the previous year and of more than 30% when compared with the starting year of households from the sixth and seventh decile. In 2008, we can also notice the changes in the share of other income. This category increases them significantly between the third and fifth decile, on the contrary, the reduction is evident in the seventh and eighth household decile.

Other increases in the category of other income took place in 2009. The share of other income increased again between the fourth and fifth decile (compared to the previous and the starting year) and in the second household decile.

It is evident that the most significant changes occurred mainly in 2011 in both types of the studied indices. Changes of more than 30% are depicted in the category of social income share in the sixth as well as the tenth decile. On the contrary, the reduction of this area by 30% occurred in the second decile, in the third decile it was a reduction of more than 20%. Other significant changes are evident in the entrepreneurship category. In the fifth and sixth decile, the decrease of the share is more than 40% when compared to the previous period.

IV: ¹Changes in income structures of households according to base and chain indices

Year	Income type	Decile household division									
		1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
2006	dependant activities	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	entrepreneurship	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	social income	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	other income	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
2007	dependant activities	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	entrepreneurship	0/0	-/-	+/+	0/0	-/-	0/0	--/--	0/0	+/+	0/0
	social income	0/0	0/0	0/0	0/0	0/0	0/0	0/0	+/+	0/0	+/+
	other income	0/0	0/0	0/0	0/0	0/0	-/-	0/0	0/0	0/0	0/0
2008	dependant activities	0/+	0/0	-/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0
	entrepreneurship	0/0	-/0	0/0	0/0	--/-	+/++	++++	0/0	0/-	+/0
	social income	-/-	+/+	+/0	0/0	0/0	--	0/0	-/--	0/0	+/0
	other income	0/0	-/0	+/++	+/++	+/+	0/+	+/++	+/+	0/0	+/+
2009	dependant activities	0/0	0/0	-/0	0/0	-/-	0/0	0/0	0/0	0/0	0/+
	entrepreneurship	0/0	--/0	0/0	0/0	0/+	-/--	+/0	-/-	0/+	0/0
	social income	-/0	0/-	+/0	0/0	+/+	0/+	0/0	0/+	0/0	0/0
	other income	+/0	+++ /++++	-/--	+++ /+	+++ /+	0/0	0/-	0/0	0/0	-/--
2010	dependant activities	+/0	0/0	0/++	0/0	0/+	0/-	0/0	0/0	0/0	0/0
	entrepreneurship	0/0	0/+	-/--	-/0	-/0	0/+	0/0	--- /---	0/0	-/--
	social income	--/-	0/0	0/-	0/0	0/0	+/+	0/0	+/+	+/0	0/0
	other income	0/-	+/-	0/++	+/-	0/--	-/-	+/+	+/+	0/0	0/+
2011	dependant activities	+/0	+/0	+/+	0/0	--	-/-	-/-	0/0	0/0	0/0
	entrepreneurship	-/-	+/++	+/+++++	-/0	--- /---	--- /---	0/0	--/+	+/0	-/0
	social income	-/+	--- /---	-- /--	0/0	+/+	+++ /++	+++ /++	+++ /+	+++ /+	+++ /++
	other income	+++ /+++	+ /0	0/0	0/-	0/0	-/0	0 /-	++ /0	0/0	0/0

Source: Own calculation

Peripheral deciles (first, second, ninth, and tenth) seem to be more stable than the others. From the point of view of the income structure, minimal changes occurred in the income from dependant activities.

3.4 Relationship of the Gini coefficient and selected macroeconomic variables

Assuming that the Gini coefficient is influenced by the development of the given economic variables, it is possible to express their relationship in this way:

$$\text{GINI} = f(\text{GDP}, \text{UN}, \text{INF}), \text{ where:}$$

GINI...the Gini coefficient,
GDP ...the gross domestic product,
UN.....unemployment,
INFinflation.

GDP is expressed by the growth of a real product, unemployment by the unemployment rate, and inflation by the inflation rate (all in percentage).

As far as individual parameters are concerned, the following relationship towards the Gini coefficient is expected:

- positive influence of the GDP growth on the income inequality, because a high economic growth is considered to be a possible source of increasing income inequality and on the contrary the effort to increase egalitarianism to be the economic growth brake,
- positive influence of unemployment growth on income inequality because of the greater impact of unemployment increase on low-income inhabitants,
- neutral influence of inflation on income inequality, because inflation affects the whole population.

The relation of the selected variables and the Gini coefficient was studied by means the correlation analysis, the results of which are summarized in Tab. V.

The assumption of a positive relation of the product growth and unemployment and the Gini

1 0...change up to 10%, + (-)...change up to 20%, ++ (--)...change up to 30%, +++ (---)change up to 40%, ++++ (----)...change up to 50%, +++++ (-----)...change up to 60%.

V: Correlation coefficient values between the economic variables and the Gini coefficient

	correlation coefficient	confidence level
GDP	0.242	0.95
UNEMPLOYMENT	0.370	0.95
INFLATION	0.573	0.95

Source: Own calculation

coefficient was not confirmed. The highest value of the correlation coefficient (though not very high) was noticed in the relationship to inflation. Therefore, we cannot claim that the development of the studied macroeconomic indicators was in a relationship to the development of the Gini coefficient in the period in question. While the values of the Gini coefficient fluctuated only slightly, the growth of the product acquired significant changes (in particular its negative value in 2009). The unemployment rate and the inflation rate showed a significant fluctuation in 2008 (unemployment – decrease to 5.4%, inflation – increase to 6.3%).

CONCLUSIONS

For western democratic societies it is characteristic that, along with their development, household income inequalities deepen as well. This process was typical even for newly emerged democracies in the late 1980s.

In the Czech Republic, an acceleration of income differentiation occurred especially at the beginning of the transformation into the market-type economy.

In the studied period, however, this trend is not so obvious any longer; from the results it can be deduced that between 2006 and 2011 neither the Lorenz curve nor the Gini coefficient values varied a lot.

In terms of impact on changes in household income structures, the factor of the GDP growth change, the changes of unemployment, and inflation changes were monitored. The hypotheses (i), (ii) were not confirmed by the results, on the contrary, the hypothesis (iii) was.

The research borders lie in abstracting from savings or tax changes (they notice the income only, in more detail Sandmo, 2007, or Slemrod, Kopczuk, 2000).

From the logic of the decile arrangement, it is also evident that individual households can move among the deciles during the analysed period, according to the change of their income.

Therefore it is evident from the results that legislative changes, which took place mainly between 2010 and 2011, had the biggest influence on the change of the income structure.

SUMMARY

The income distribution in society is a significant indicator depicting the character of redistributive politics of a state and is determined by the historical development of a country to a large extent. The Czech Republic along with the majority of European countries shows a considerable egalitarianism in this area as compared with e. g. the countries of the North and South America. This trend simultaneously proves the fact that there is a pressure on public finance, thanks to which the equality in society is regulated.

In the Czech Republic, the total income distribution in society did not change significantly in the period 2006–2011, as shown by the values of the Gini coefficient. The Gini coefficient was not even influenced by the change of macroeconomic indicators in the period of crisis after 2008. What did change, however, was the income structure in division into income groups from dependant activities, entrepreneurship income, social income, and other income. The development of the income structure, which was studied by means of the calculation of chain and base indices, shows changes mainly at the end of the studied period – in the share of income from dependant activities and social income. The entrepreneurship income and other income may be considered stable. From the analysed factors it is evident that legislation changes in the social area have the biggest influence on this development. Achieved results show that the analysed issue deserves a more detailed research in future as well. The results are important information for possible changes in the area of financial instruments (social benefits, taxes, redistribution processes) as instruments of economic policy.

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