

## LIVING CONDITIONS AND INCOME INEQUALITY IN THE NUTS 2 REGIONS IN THE CZECH REPUBLIC AND THE SLOVAK REPUBLIC

<sup>a</sup>KATARÍNA ŠKROVÁNKOVÁ, <sup>b</sup>EVA KOIŠOVÁ, <sup>c</sup>EVA GRMANOVÁ

Alexander Dubček University of Trenčín, Študentská 3, 911 01 Trenčín

email: <sup>a</sup>katarina.skrovankova@tuni.sk, <sup>b</sup>eva.koisova@tuni.sk, <sup>c</sup>eva.grmanova@tuni.sk

The paper is the part of the output of project VEGA 1/0233/16 "Dimensions and factors related to social and economic development of V4 regions". Authors would like to thank to all partners of this research for their cooperation. We would like to thank also Alexander Dubček University of Trenčín, for favourable conditions creation for our research.

**Abstract:** Inequalities in the wealth of the population are part of every society's life. The unequal distribution of household incomes is considered to be one of the main causes of socio-economic disparities, not only from a social but also a territorial point of view. Household income disparities and their impact on economic growth are therefore a highly debated topic. We live in a modern society, whose living standards are constantly growing, however today we also meet groups of people who are still at risk of poverty, despite growing living standards. The main objective of the contribution is to analyze and evaluate the living conditions of the population in the regions NUTS 2 in the Czech and Slovak Republics in the interest of the design of measures to effectively reduce social inclusion poverty, or inclusion of marginalized population groups into society.

**Key words:** living conditions, income inequality, poverty, region

### Introduction

In 2004, the Czech Republic together with Slovakia became part of an important community of the European Union. However, this important step required a number of pre-accession measures. Today, the Czech Republic, together with the Slovak Republic, is part of an important community already in the second programming period 2014-2020, with the aim of "Supporting social inclusion, combating poverty and any discrimination". The European Union, with the support of the member states in the conflict against poverty, social exclusion and discrimination, seeks to strengthen the inclusive nature and cohesion of European society, in order to allow all citizens equal access to available resources and resources. Given the continuing poverty that currently affects up to 80 million community citizens, the European Union is also supporting this idea in its Europe 2020 strategy. As part of this strategy, the Czech Republic and Slovakia, as Member States, have set a national target of excluding up to 200,000 people from the risk of poverty. In view of the ever-increasing number of people at risk of poverty or social inclusion, measures must be taken not only to permanently reduce the unfavorable economic situation of the population but also to increase the quality of life and access to the opportunities offered by modern society (Pauhofová, 2016; Európa 2020).

### Objective and Methodology

The main objective of the contribution is to evaluate and compare the living conditions of the population in the Czech Republic and the Slovak Republic from the point of view of NUTS 2 regions. The contribution focuses in its essence on assessing socio-economic indicators in order to identify the causes that lead to the deepening of poverty and social inclusion of the population. The purpose of the contribution is to propose objective measures to reduce the number of people at risk of poverty and social inclusion, as well as measures aimed at removing socio-economic disparities between regions. The benefit of examining this issue is, above all, the need to point out the persistent differences in society with the need to find solutions to help vulnerable groups.

In addition to the main goal, we also set a number of partial goals that will contribute by:

a) analyzing demographic and socio-economic factors affecting the level and quality of life of households in the individual regions of the Czech and Slovak Republics,

- b) processing statistical data for the need to perform calculations,  
 c) processing of results and the identification of causes and problems related to the emergence of disparities,  
 d) subjective evaluation of the obtained results and by designing effective measures for their solution.

In order to meet the main objective, together with its partial objectives, it was necessary to choose appropriate techniques and methodologies that include the application of statistical methods and techniques for efficient data processing and the interpretation of the obtained results.

The methodology of post-processing consists of the following steps:

- a) analysis of theoretical and empirical surveys, scientific articles and monographs focusing on the issues of social inclusion, poverty and living conditions of the population,  
 b) analysis, acquisition and processing of statistical data and data from demography, labor market and social conditions,  
 c) processing, analysis and evaluation of statistical indicators and results of mathematical and statistical methods such as:

#### 1. Unemployment rate

$$u = \frac{U}{L} \cdot 100 \quad (1)$$

(U – Number of unemployed, L – Number of employed)

#### 2. Total disposable income

$$yE, i = \frac{yH, i}{S_i} \quad (2)$$

(yH, i – Total Income, S<sub>i</sub> – Equivalent Income)

#### 3. Risk of poverty rate

$$H(z) = \frac{q}{n} \cdot 100 \quad (3)$$

(q – Number of persons with income below the border 60%, n – Number of Inhabitants.)

#### 4. Gini coefficient

$$G = \frac{1}{n} (n + 1 - 2 \frac{\sum_{i=1}^n (n+1-i)y_i}{\sum_{i=1}^n y_i}) \quad (4)$$

((n+1-i)·y<sub>i</sub>) – Number of Inhabitants with degree of Income, y<sub>i</sub> – Average disposable Income)

#### 5. Lorenz curve

$$L(p) = \frac{1}{E(X)} \int_0^{F^{-1}(p)} p \cdot x f(x) dx \quad (5)$$

(f(x) – Income density/cost sharing, p – Cumulative Number of Individuals, - Corresponding Cumulative Value). E(X) = Average expected value of Incomes)

#### 6. Scoring method

$$uLM = \frac{Us}{Umax} \quad (6)$$

(Us – Real value in row, Umax – Maximum value in row)

#### 7. β convergence

$$\frac{1}{T} \log \left( \frac{y_{it_0+T}}{y_{it_0}} \right) = \alpha - \left( \frac{1-e^{-\beta T}}{T} \right) \log(y_{it_0}) + u_{it_0+T} \quad (7)$$

(α – Constant, t – Lower index (year), i – Lower index (Region), y<sub>it</sub> – (Income) in Reg. At the beg. of the year, y<sub>it+T</sub> – (Income) in Reg. at the end, u<sub>it</sub> – Variation)

- d) comparison of processed data with the application of graphical methods,  
 e) recapitulation of the results obtained, suggestions and recommendations using the method of induction and deduction.

## 1 Living conditions and income inequality

Living conditions are among the main indicators of social group characters in society. Different approaches of social groups to wealth sources create inequalities. Inequality belongs to the socio-economic aspect that determines the way and quality of life of an individual or group, but also the position in society (Marger, 2011).

The term "living conditions" can also be understood as a set of factors and circumstances that directly affect the way and quality of life of the individual or group. From a theoretical point of view, however, several authors prefer the concept notion of "living standards" (Constanza, 2007).

Tuček (2003) defines the standard of living as the satisfaction rate of material and non-material needs, or the desire of the individual. These are a number of factors that relate to income levels, quality of employment, level of education, availability and quality of housing.

Recently, the concept of quality of life in social sciences has also been applied in relation to the question of living standards. The term quality of life characterizes the way of life, which is related to the qualitative aspect and the standard of satisfaction of the material and non-material needs of the people. Quality of life is the result of living standards, i.e. the interaction of health, social, economic, or environmental conditions related to human life (Kahneman, Krueger 2006).

One of the conditions determining the level of human quality of life is income. Income not only enables the satisfaction of needs, but also defines the very standing of a person in society. Income is a variable that indicates the total amount of household or individual income over a certain period of time (Constanza, 2007).

However, in professional papers (e.g. Gerbera 2012), it also refers to income criticism as an indicator of poverty and relies on known facts. For example, the current income does not capture all the resources available to the household (savings) or that it might have available (the ability to borrow). It does not say anything about how the household spends income, what consumption patterns it has, and possibly liabilities that affect them (debts). In addition, the currently measured low income may be a temporary, atypical situation that does not fundamentally occur in the standard of living. As Perry (2002) notes, the relationship between actual income and living standards is not straightforward. Hold generally is a well-known fact that the living standards of two households with the same income may (fundamentally) differ.

Income inequality has increased significantly since the late 1970s, but currently available evidence of inequality between assets is mixed (Saez, Zucman, 2016). Income inequality is due to differences in the economic activity of the society. For this reason, income inequality is understood as a different position in the level of money and wealth distribution. It pertains not only the individual, but also groups of individuals or regions (Charles – Coll, 2011).

The unequal distribution of wealth in society is also due to historical developments. Terms such as wealth or poverty have been used in antique and Roman culture. Already during this period, people defined their property and attributed value to material goods. These terms have begun to be applied by recognizing the differences in the developmental assumptions of the territory, but also the differences in education and the ability to use resources or diversity in the development of ethnic culture or the emergence of inventions (Brady, Burton, 2016).

Defining wealth is very demanding, and that is why there are several approaches to identifying it. Under material appreciation of wealth can be understood as the amount of money or tangible property; on the contrary, from the non-material point of view, it

is possible to define such as non-material or spiritual property (Barro, 2000).

Wealth, therefore, provides a form of social security, protection against a sudden decline in the standard of living, in case of loss of employment. Wealth represents a certain amount of resource accumulation, it differs not only between companies, but also within individual layers and regions (Barro, 2000).

On the contrary, poverty is defined as the lack of resources of an individual or a group. Poverty can be perceived as a socially constructed category and not as something that can be determined by an external observer, regardless of the conditions and values of society (Van den Bosch et al 1993). In this sense, poverty is considered a social problem. It is, however, known that poverty as a negative social phenomenon does not threaten all groups of the population equally. There are many social strata that are at risk of poverty much more than others. Among the most vulnerable layers are low-skilled labor, incomplete families, long-term unemployed, Roma ethnicity and others (Námešný a kol., 2012).

However, if poverty is considered a situation of absolute deprivation, the poverty line will usually be defined as being independent of the general style of life in society (Holtfreter, 2006).

Smith et al. (2010), define in relation to poverty also social inclusion as a process that provides opportunities and the necessary resources for those at risk of poverty in order to increase living standards and participate actively in economic, social and cultural life in society.

Increasing inequality can lead to rising relative poverty, which as Gerbry (2010) points out, one of the commonly-used indicators of living standards.

According to experts from the Social Situation Observatory (2009), the interest in income inequality also derives from the assumption that large inequalities can be reflected in the weakening of social cohesion, increased income inequality in the next generation or even weaker economic growth. This fact that societal differences in wealth distributions occur in individual population groups has prompted many scientists to reflect on the origins of their causes. One of the most popular indicators of measuring the inequality of wealth distribution in society is the Gini coefficient developed by Italian statistician and demographer Corrado Gini. Apart from the Italian demographer, however, also other scientists have been investigating income inequality. Among the most famous were the American economist Max O. Lorenz with his Lorenz curve, Henri Theil, but also many others (Veselovská, 2015).

## 2 Living conditions and income inequality in the Czech Republic and the Slovak Republic

The Czech Republic and the Slovak Republic have, in addition to their common history, very similar social conditions and development assumptions, but have since passed through great political and economic changes that have led to differences in the living standards and wealth of the population. Both countries are currently fighting the persistent socio-economic disparities between the regions. The living standards and income levels of the head regions is several times higher than in the other regions. The problem remains that the number of people at risk of poverty remains rising. For this reason, countries in their development strategies are also striving for their permanent reduction.

Table 1: Territorial breakdown of the Czech Republic and the Slovak Republic by NUTS 2

NUTS 2 REGIONS	
CZECH REPUBLIC	SLOVAK REPUBLIC
Praha	Bratislava
Střední Čechy	
Jihozápad	Západné Slovensko
Severozápad	
Severovýchod	Stredné Slovensko
Jihovýchod	
Střední Morava	Východné Slovensko
Moravskoslezsko	

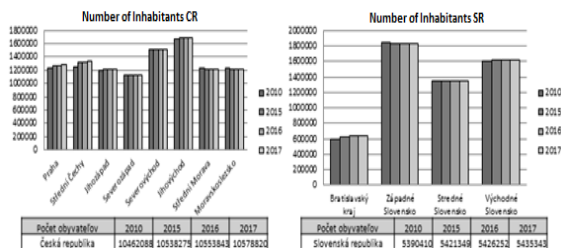
Source: Own processing based on EUROSTAT data

Table 1 shows the territorial - administrative breakdown of the Czech Republic and the Slovak Republic from the point of view of the administrative - administrative division NUTS 2. This breakdown is the basis for the definition of statistical territorial units. Under the conditions of the European Union, we distinguish a total of 5 levels of administrative-territorial division from NUTS 1 (state) to NUTS 5 (cities and municipalities).

Chart 1 demonstrates population growth in the Czech Republic and the Slovak Republic. Under the conditions of the Czech Republic, the number of inhabitants grew slightly during the monitored period. Among the most populous regions in the Czech Republic are the South-East and the Northeast.

In the conditions of Slovakia, as in the case of the Czech Republic, there was a slight increase in the population, with Western and Eastern Slovakia among the most populous regions.

Chart 1: Population development in the Czech Republic and the Slovak Republic

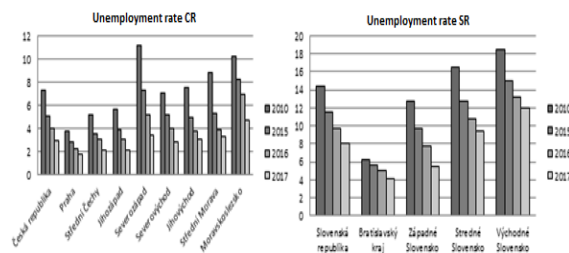


Source: Own processing based on EUROSTAT data

Chart 2 demonstrates the development of the unemployment rate in the NUTS 2 regions in the Czech Republic and the Slovak Republic. In the conditions of the Czech Republic, unemployment rates declined throughout the period under review in all NUTS 2 regions. The long-term lowest unemployment rate was identified in the Prague region of 2.9%, while the highest level of unemployment was identified in the Moravian-Silesian region of 4.7%.

In the Slovak Republic, the same trend was observed in the drop in the unemployment rate, but compared to the Czech Republic, Slovakia is significantly behind in unemployment. The unemployment rate in the regions of Slovakia is twice as high as in the case of the Czech Republic. The long-term lowest unemployment rate has been identified in the Bratislava region of 4.2%, on the contrary, East Slovakia is, despite the gradual decrease of the unemployment rate in the long-term at 12%.

Chart 2: Unemployment rate in the Czech Republic and the Slovak Republic in %



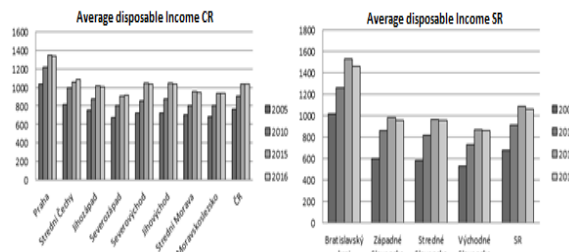
Source: Own processing based on EUROSTAT data

Chart 3 Total disposable income of households shows the development of household incomes in individual NUTS 2 regions.

The household income available in the Czech Republic had an increasing tendency over the monitored period, with a slight decrease at the end of the monitored period. The total disposable income in the Czech Republic currently stands at €1,000. The highest level of income was identified in the households of the Prague region of 1300 € on the other side the lowest level of income was identified in the Northwest region of 850 €

In the conditions of the Slovak Republic there was a slight increase in household income over the period under review. While at the beginning of the monitored period, the total disposable household income reached €700, reaching €1000 at the end of the monitored period. The highest income is achieved by the inhabitants of the region of Bratislava region and the lowest level of income achieved was identified in the region of Central Slovakia during the monitored period.

Chart 3: Total Disposable Income of Households in the Czech Republic and Slovakia in €

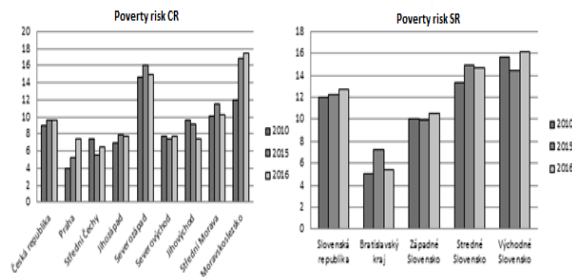


Source: Own processing based on EUROSTAT data

Chart 4 shows the development of the poverty rate of the population in the regions of the Czech and Slovak Republics. In the conditions of the Czech Republic, the rate of poverty increased, with the exception of the Southwest Region, the Southeast Region and the Central Moravia region, where the rate of poverty risk was decreasing. The highest share of the population at risk of poverty was recorded in the Northwest Region of 14.7% and in the Moravian-Silesian Region 17.8%, while the lowest share of the population threatened by poverty was recorded in the region of Central Bohemia 6.3% and in the region of Prague 7.6%.

In the Slovak Republic, the increase in the share of the population at risk of poverty was somewhat milder. In the Bratislava region, the lowest level of risk of poverty, along with a decreasing trend, was recorded during the monitored period. On the contrary, the highest share of the population at risk of poverty was identified in Slovakia in the region of Eastern Slovakia 16%.

Chart 4: Poverty risk in the Czech Republic and the Slovak Republic in eastern regions in %



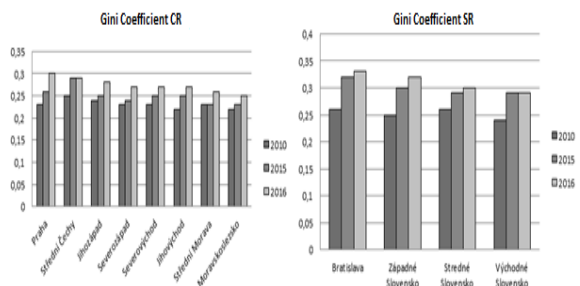
Source: Own processing based on EU SILC data

Chart 5 shows income inequality between NUTS 2 regions in the Czech Republic and the Slovak Republic. The income inequality is expressed in this case using the Gini coefficient. The Gini coefficient values are expressed in a range from 0 to 1, with the value 0 representing the absolute equality in incomes, while the value 1 represents the maximum differential in the income of the population.

When comparing the Czech Republic and the Slovak Republic as a whole, we identify the widening differences in household income. In the Czech Republic, the highest level of income differentiation was found in Prague, while the lowest differences in household income were identified in the Moravian-Silesian Region.

In the Slovak Republic, income differences are somewhat deeper. The highest income inequality was recorded in the Bratislava region during the monitored period, while the lowest level of income differentiation of households was identified in the Eastern Slovakia Region.

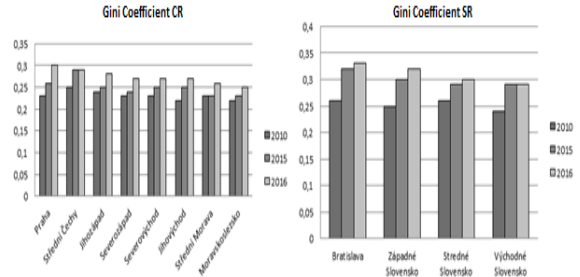
Chart 5: Gini coefficient - income inequality in the Czech and Slovak Republics



Source: Own processing based on EU SILC data

Chart 6 shows income inequality expressed through the Lorenz curve, with the horizontal axis capturing the cumulative shares of the population divided into intervals according to the equivalent income, and the vertical axis captures the cumulative share of their total wealth according to the cumulative sums of their equivalent disposable income. The situation regarding the distribution of wealth in the Czech and Slovak Republics is very similar. In the conditions of the Czech Republic, lower differences in household incomes were identified than in the Slovak Republic, which can also be noticed by the shape of the curves. While 40% of revenue in the Czech Republic is accounted for by 60% of households in the Slovak Republic, 40% of the income accounted for 65% of households. The income inequality is somewhat higher in the conditions of the Slovak Republic than in the Czech Republic.

Chart 6: Lorenz curve (income inequality in Czech Republic and Slovak Republic 2016)



Source: Own processing based on EU SILC data

Figure 1 shows the results of the scoring method, which was applied as an indirect method of measuring and comparing the economic level of the regions. In its applications, we have selected NUTS 2 regions as a comparison of spatial units, and we have identified a set of indicators to help us characterize their level of development. For our needs, we chose indicators of unemployment, average disposable income, and poverty risk. We have assigned the appropriate number of points in each region to the value of these indicators, and we chose the highest score in any of the regions as a basis for comparing each indicator. We then assigned 100 points to the highest value. At the same time, this value serves to compare with other evaluated regions and stands out as the basic variable. This value will, therefore, be compared with the values achieved for each indicator in the regions. By evaluating the level of the indicators in each region and adding the points of their evaluation we achieved an overall score, on the basis of which the regions can be further sorted, either in a simple order according to the total point value, or sort by certain categories according to the selected score points (Belajová, Fáziková, 2005).

Based on the 3 rated indicators (year 2016), a maximum of 300 points could be achieved. After evaluating and comparing the results, the region Praha with a total of 261 points were identified as economically the most developed region, the Central Bohemia region with 252 points gained second place and the Bratislava region with 247 points is on the third place. On the other hand, the regions of Slovakia were identified as the least economically developed regions, namely the Eastern Slovakia with a total of 104 points, the Central Slovakia region with a score of 120 points, and the three regions of the least economically developed regions, the Czech Moravian-Silesian Region with a score of 142.

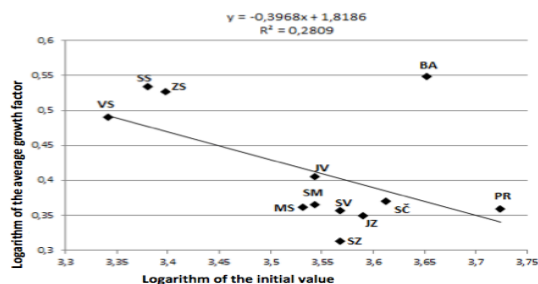
Figure 1: Pointing method for measuring and comparing the economic level of the regions



Source: Own processing

Chart 7 shows the result of a regression analysis that suggests that the regression function has a decreasing course. The confidence equation is as follows:  $y = -0,3968x + 1,8186$  at the determination coefficient  $R^2 = 0,2809$ .

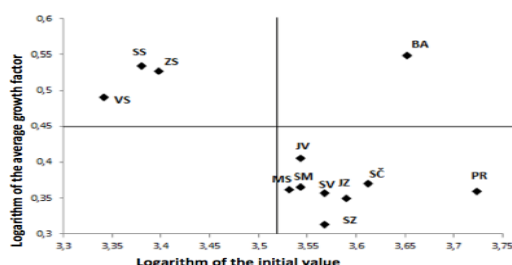
Chart 7: Average Growth Coefficient Logarithm



Source: Own processing

The overall conclusion of beta convergence is that in the monitored period of time, the twelve regions of the Czech and Slovak Republic tended towards convergence, as the regression line development was negative or the line has a decreasing slope. It can be said that the calculated value of the determination coefficient does not exceed the 50% threshold, which is the low level of demonstrativeness of the data being evaluated.

Chart 8: Correlation diagram



Source: Own processing

Chart no 8 is a convergence chart where the regions are divided into four quadrants. In the first quadrant there is the Region of Bratislava with an excessive initial value of income and an excessive growth rate. It tends to move away from of value from other regions. In the second quadrant there are the regions of Western Slovakia, Central Slovakia and Eastern Slovakia. In this section of the diagram, there are regions with below average beginning value of income and with above average growth rate of income. They tend to move into the space of the first quadrant. In the third quadrant there are regions with lower average initial value and with lower average growth rate of income. In our case, none of the regions surveyed is in the third quadrant. In the fourth quadrant all regions of the Czech Republic are located, which shows above average initial income values, but also a below-average growth rate. It can also be noted that income inequality between regions in the Czech Republic is lower in comparison with regions of the Slovak Republic.

## Conclusion

One of the current phenomena of society is the ever-increasing differences between the rich and the poor. Despite many efforts we still do not reduce social differences. These differences take on an increasingly broader territorial dimension. On the basis of analyzes of the data obtained, it is only possible to confirm the statements of scientists who fear that the society does not try to reduce differences to support equality, but the contrary. Of course, the society is moving forward, raising living standards, increasing income, declining unemployment, but the problem is that these conditions are not equally accessible for everyone across the regions. Particularly in the central regions, there is a rapid economic growth associated with job and income growth, while in peripheral and less developed regions, people have a shortage of job opportunities and they lose their income. There are several ways to reinforce efforts to eliminate income inequalities. Several experts in this field, therefore, recommend that they focus their efforts on:

- ensuring an effective system of taxation,
- ensuring a more equal access to education and improving learning outcomes,
- raising employment rates by motivating and accessing jobs with higher financial ratings,
- creating a global financial register to prevent wealthy people from hiding their wealth in tax havens.

## Literature:

1. BARRO, R. J. (2000). Inequality and Growth in a Panel of Countries. In *Journal of Economic Growth*. Vol. 5. Issue 1. 15 – 28 p. ISSN 1381 - 4338.
2. BELAJOVÁ, A. – FÁZIKOVÁ, M. (2005). *Regionálna ekonomika*. Nitra: Vydavateľstvo SPU. 117-118 s. ISBN 80-8069-513-X.
3. BRADY, D. - BURTON, L. (2016). *The Oxford Handbook of Social science of poverty*. Oxford: Oxford University Press. 84 – 116 p. ISBN 978 – 0 – 1999 – 14 – 050.
4. CONSTANZA, A. (2007). Quality of life: An approach integrating opportunities, human needs, and subjective well – being. 276 p. [on-line] [cit.2018-12-05]. Available: <<http://www.sciencedirect.com/science/article/pii/S0921800906000966>>.
5. Eurostat Database – EU SILC. 2018 . [on-line] [cit.2018-12-05]. Available: <http://www.europa.eu>.
6. Eurostat Database – EU SILC. 2018 . [on-line] [cit.2018-12-05]. Available: [http://ec.europa.eu/regional\\_policy/en/information/maps/regional\\_competitiveness/](http://ec.europa.eu/regional_policy/en/information/maps/regional_competitiveness/).
7. Eurostat Database – EU SILC. 2018 . [on-line] [cit.2018-12-05]. Available: <http://ec.europa.eu/eurostat/web/microdata/euro-pean-union-statistics-on-income-and-living-conditions>.
8. Eurostat Database – EU SILC. 2018 . [on-line] [cit.2018-12-05]. Available: <http://ec.europa.eu/eurostat/data/database>.
9. CHARLES-COLL, J. A. (2011). Understanding Income Inequality. Concept, Causes and Measurement. In *International Journal of Economics and Management Sciences*. New York: Management Journals. 15 p. ISSN 2162 - 6359.
10. GERBERY, D. (2010). Prijmová nerovnosť v SR. Bratislava: Inštitút pre výskum práce a rodiny. 23 s. [on-line] [cit.2018-12-05]. Available: <[https://www.ceit.sk/IVPR/images/IVPR/vyskum/2010/Gerbery/Prijmova\\_nerovnost.pdf](https://www.ceit.sk/IVPR/images/IVPR/vyskum/2010/Gerbery/Prijmova_nerovnost.pdf)>.
11. GERBERY, D. (2012). Vybrané aspekty materiálnej deprivácie. Bratislava: Inštitút pre výskum práce a rodiny. p. 43.
12. HOLTFRETER, K. – REISIG, M. D. – MORASH, M. (2006). Poverty state capital, and recidivism among women offenders. [on-line] [cit.2018-08-08]. Available on: <https://doi.org/10.1111/j.1745-9133.2004.tb00035.x>
13. KAHNEMAN, D. – KRUEGER, A. B. (2006). Developments in the Measurement of Subjective Well – Being. In *Journal of Economic Perspective*. Vol. 20. No 1. 14 s. ISSN 0895 – 3309.
14. MARGER, N. (2011). *Social inequality*. New York: Michigan State University. 13 p. ISBN 978 – 0 – 07 – 352830 – 4.
15. NÁMEŠNÝ, L. – ĎURČEK, P. – ROCHOVSKÁ, A. (2012). Vzťah nezamestnanosti a chudoby pracujúcich – skúmanie geografickej nerovnomernosti pomocou Theilovho indexu. In *Geographia Cassoviensis*. Vol. 62. 142 s.
16. PAUHOFVÁ, I. (2016). *Súvislosti príjmovej polarizácie na Slovensku*. Bratislava: Ekonomický ústav Slovenskej akadémie vied. 14 s. ISBN 978 – 80 – 7144 – 259 – 2.
17. PERRY, B., 2002: The mismatch between income measures and direct outcome measures of poverty. In: *Social Policy Journal of New Zealand* (19), s. 101-127.
18. SAEZ, E. – ZUCMAN, G. (2016). Wealth Inequality in the United States since 1913: Evidence from Capitalized Income Tax Data. [on-line] [cit.2018-08-08]. Available: <https://academic.oup.com/qje/article/131/2/519/2607097>.
19. SMITH, A. et. al. (2010). The emergence of working poor. Labour markets, neoliberalisation and diverse economies in post – socialist cities. In *Antipode*. Vol. 40. Issue 2. 292 p.
20. Social Situation Observatory (2009). *Income Distribution and Living Conditions. Annual Monitoring Report 2009*. European Commission.



21. TUČEK, M. (2003). Dynamika české společnosti a osudy lidí na přelomu tisíciletí. Praha: SLON. 428 s. ISBN 80 – 86429-22-9.
22. VAN DEN BOSCH, K, CALLAN, T., ESTIVILL, J. , HAUSMAN, P., JEANDIDIER, B., MUFFELS, R. YFANTOPOULOS, J. (1993) A comparison of poverty in seven European countries and regions using subjective and relative measures. In Journal of Population Economics (6), pp. 235-259.
23. VESELOVSKÁ, Z. (2015). Sociálne nerovnosti a možnosti ich merania. In Geographia Cassoviensis. Vol. 1/2015. 69 – 79 s. ISSN 1337-6748.

**Primary Paper Section:** A

**Secondary Paper Section:** AO, AP