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Measuring poverty

Measurement of poverty and available data sources

Note by the Statistical Office of the Slovak Republic

Summary

In Slovakia, measurement of poverty is primarily based on the concept of income poverty and on a multidimensional approach to poverty, which includes poverty and social exclusion. The European Union Statistics on Income and Living Conditions survey has been carried out since 2005, and is the data source for many national poverty indicators. The Household Budget Survey has a longer tradition since 1957, and is also used for the calculation of at-risk-of-poverty rates. The Household Finance and Consumption Survey is the third main source of data for poverty measurement, and the Statistical Office and the National Bank conduct it in active collaboration. This document compares these three sources using a set of indicators and suggesting possible areas for further improvement in poverty measurement, especially at national level.

The document is presented to the Conference of European Statisticians' seminar on "Measuring poverty" for discussion.

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I. Introduction

1. 'Relative deprivation' is an approach which considers a threshold in each dimension of poverty, according to prevailing social norms, below which withdrawal or exclusion from active membership of society is common, as defined in the draft *Guide on Poverty Measurement*, (see p.20), developed by the United Nations Economic Commission for Europe (UNECE). Relative measures are most frequently used in wealthier societies" (Guide, p.21).

2. Poverty measurement in Slovakia is based on regular production of European social indicators (comparable dashboards) and is fully in accordance with the *UNECE Guide on Poverty Measurement*. (Guide, p.110-111). The main indicator at national and European level is also at-risk-of-poverty or social exclusion rate and its sub indicators: at-risk-of-poverty rate, severe material deprivation rate and population living in very low work intensity households.

3. The poverty profile reveals that in Slovakia poor people predominantly are unemployed persons, single-parent households (parent, the most often woman with child or children) and individuals in households comprised of two adults and more than three children.

4. To complete the picture of poverty in Slovakia existing statistical sources need to be used to the maximum extent possible. In addition, it is necessary to link poverty indicators with the Agenda 2030 and Sustainable Development Goals, in particular the SDG 1 aiming to end of poverty in all its forms everywhere. Fulfilling global indicators for the European region should not be problematic considering the existence of relevant, comparable sources and system of indicators. There are more challenges at national level, as the identification of nationally relevant SDGs and related indicators are still at initial phases. The regular production of a set of regional indicators at least at the third level of detail in the Classification of Territorial Units for Statistics (NUTS). Focus on ethnicity and effective using of existing sources is a priority.

II. Sources of data

5. The Household Budget Survey (HBS) is the oldest sample survey of households in Slovakia and is a source of data on the amount, structure and evolution of monetary and non-monetary expenditures and incomes in different types of households. The office has conducted HBS regularly for more than 50 years. It has made only two modifications during the existence of the survey. The most significant modification happened in 2013 on the base of system redesign, as a reaction to growing survey costs. HBS had become the most expensive survey carried out by the Statistical Office of the Slovak Republic, given its modernisation requirements. It required mainly standardization and harmonization with other household surveys, taking into account user needs and reducing the burden for respondents. Changes were introduced to the questionnaires, mode of data collection (mixed mode was introduced), calibration and weighting and frequency of fieldwork in data collection. The periodicity of the survey was changed from conducting the survey annually to once every 3 years. For the years when the survey is not taken, data on income and expenditures result from a micro simulation model.

6. The Statistics on Income and Living Conditions (EU-SILC) are compiled in full harmonization with the European Statistical System. EU-SILC is the most

frequently used data source for academic analyses and policy purposes. Data are also used as input for simulation of social benefits, especially in relation to material need benefit. EU-SILC is the primary source of data on poverty and a set of indicators for Slovakia for measuring income poverty and social exclusion. The results are presented annually at a press conference. These press conferences are stimuli for public debate about poverty in all its forms.

7.   The Household Finance and Consumption Survey (HFCS) is a harmonized survey in countries of the Euro area. The aim is to gain reliable data on assets, liabilities, income and expenditures of households. The European Central Bank coordinates the survey taking and typically, national banks conduct the survey. The National Bank of Slovakia has conducted HFCS since 2010 and, with exception of the first year, it is compiled every three years in collaboration with the Statistical Office. The Statistical Office of the Slovak Republic is responsible for data collection and initial data processing, and participates in the compilation for instance by performing weighting and data calibration. The survey is also the source of detailed information on the structure of wealth of Slovak households.

III.   Statistical results of poverty measurement

8.   The poverty rate and at-risk-of-poverty or social exclusion rate (AROPE) were significantly decreasing up to 2009. Then, rates have slightly increased until 2013, when a decreasing trend appeared again. Until 2007, the growth of gross domestic product (GDP) was accompanied with a decrease of at-risk-of-poverty or social exclusion rate. Poverty reduction stopped in the period of the financial crisis and, in 2010, poverty rates slightly increased. Figure 1 shows that the period of the financial crisis had a stronger impact on the GDP growth rate. Since 2012, again the GDP growth rate is increasing and at-risk-of-poverty or social exclusion rate is decreasing.

Figure 1
**GDP growth rate and poverty dynamics (AROPE) in Slovakia 2005 - 2015**
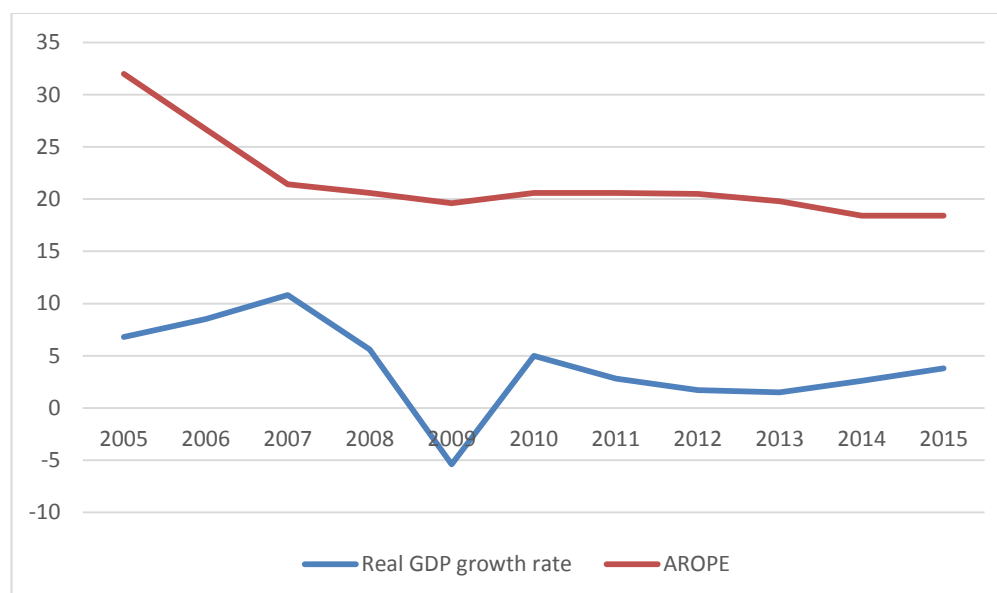
9.   Unemployment, single-parent households and households with multiple children had in 2015 the higher AROPE rates: 59.1 per cent of unemployed individuals, 39.1 per cent of single-parent households with child and 37.9 per cent of

households with children at 3+ years were at-risk-of-poverty or social exclusion The age profile indicates that children are more likely to be poor than adults.

10.   Slovakia experiences regional disparity both in the case of income inequality and in the case of poverty or social exclusion rate. Looking at the poverty profile, one region - Banska Bystrica - has the highest at-risk-of-poverty or social exclusion rate for all population groups with exception of single parent households (Figure 2).

Figure 2
Poverty profile by regions of Slovakia - 2015
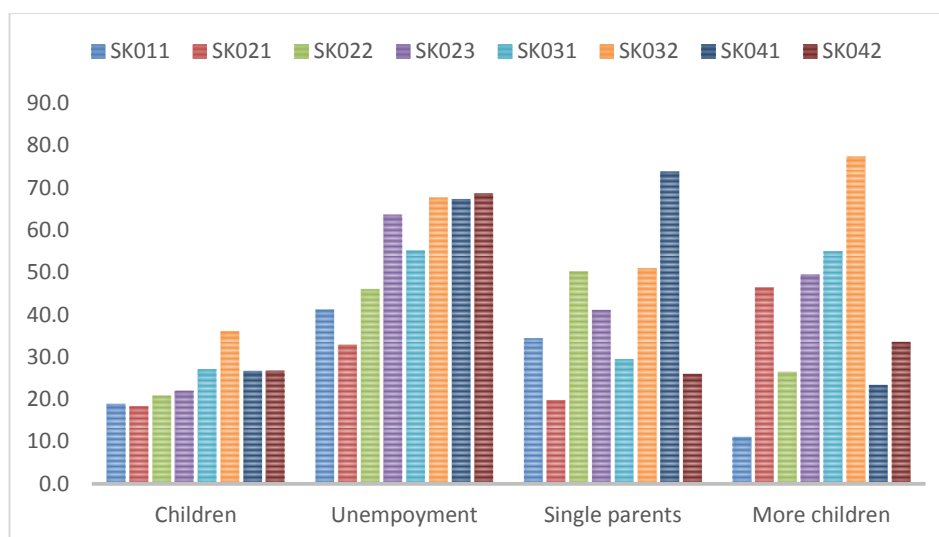
11.   To increase harmonization and standardization across surveys, the same concept of income measurement is recommended for Household Budget Statistics as for Statistics on Income and Living Conditions. Therefore, the Statistical Office compares data on income poverty calculated from both of these sources. According to HBS, the poverty threshold was €4,409 per capita annually (from EU-SILC 2015 it was €4,158). According to HBS, at-risk-of-poverty rate is lower in general than that calculated from EU-SILC, even when using the common international concept defined for EU-SILC.

12.   The concepts used for income and economic activity may cause some of these differences. EU-SILC collects total income for previous year, while HBS includes actual monthly household income recalculated to the whole year. EU-SILC defines economic activity by main (prevailing) economic activity of persons during the previous year, while HBS considers the economic activity of persons at the time of interview. Despite of the existing differences, the same groups of people were the most affected. Children (up to 18 years old) are in EU-SILC 1.6 times more affected than the average nationwide, and in HBS they are 1.5 times more affected. For unemployed persons, this ratio is in EU-SILC 3.7 times and in HBS 4.1 times.

13.   The *UNECE Guide on Poverty Measurement* (Draft Guide, p.68) recommends that "while wealth is an important factor to consider alongside income or consumption in assessing poverty it cannot be used as a measure of poverty on its own (…) distribution of income, consumption and wealth provides a complete picture of individuals´ economic well-being". In our opinion, the concept of asset poverty indicates rather tendency to poverty than poverty itself.

14.   For purpose of analysis, asset poverty was defined as having wealth sufficient to cover basic needs for a period of three months. The assets value represented either

all real and financial wealth and liabilities of households (NW) or net wealth adjust for value of main dwelling of real wealth of households (NH-HE) or liquid wealth (LW), which expresses value of cash or other easy monetized property.[1]

Table 1
Assets poverty rate – 2010, 2014

		in %
	2010	2014
Net Wealth (NW)	4.9	7.1
NW minus HE	33.8	40.0
Liquid wealth (LW)	44.9	43.0

Source: Calculations based on EU SILC 2010, HFCS 201O, EU SILC 2014, HFCS 2014

15.   Table 1 shows that while in 2010 the net value of assets would not cover the basic needs for the period of three months for nearly 5 per cent of households, in 2014 the corresponding figure was for 7 per cent. The net property adjusted for value of main dwelling would not cover the basic needs of more than one third of households in 2010 and 40 per cent of households in 2014.

III.   Conclusions

16.   The *UNECE Guide on Poverty Measurement* continues the work of the Rio Group in the area of mapping data sources, methodological concepts and good practice. This Guide updates the knowledge on poverty measurement to the current practice and possibilities, and fills the gap in this area. It considers the present requirements concerning measurement of poverty and the possibility to find the most comparable method taking into account national (or regional and local) specifications. To this end, it is fundamental to consider the available statistical sources.

17.   Disaggregated statistical information is necessary for solving inequalities, for example based on ethnicity. At present the comprehensive concept for monitoring and evaluation of the Roma Integration Strategy till 2020 is missing. For this purpose, the Statistical Office of the Slovak Republic works with the Plenipotentiary Office for Roma on a specific national project called 'Monitoring and evaluation of policy focused on social integration of marginalized Roma Population'. EU-SILC provides an important tool with the relevant data on inhabitants of marginalized Roma communities. This project should cover the increased costs of EU-SILC, which resulted from a change of sampling methodology and enlarged sample to include the marginalized Roma communities. Continuation of this type of data collection in 2018 and 2020 depends on an agreement with the Ministry of Interior.

18.   The methods applied for covering wealthy population in HFCS, such as the use of data on locality inhabited by households with higher income and identified on the base of tax returns, were also incorporated in HBS and EU-SILC.

19.   Another area of interest, which we intend to ideal with in compliance with the *UNECE Guide* (Draft Guide, p. 68), is to widen the measurement of poverty by integrating above-mentioned, existing data sources and implementing statistical matching methods for HBS and EU-SILC. More complex and rich data sources are needed for a more detailed assessment of life situation of individuals. Ideally, these

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[1] Detailed description of methodology is available in Ludmila Ivančíková, Róbert Vlačuha (2012).

data sources would combine information on income, consumption and wealth. To have more detailed breakdowns into lower territorial units, such as regions, the Statistical Office is planning to integrate income data sources with data from census and use methods of 'small area estimation'.

20.   These conclusions will be subject to discussions in the process of developing poverty statistics to fulfil the tasks of the Statistical Office of the Slovak Republic, in particular related to the production of SDG indicators for the monitoring of the Agenda 2030.

IV. References

- Economic Commission for Europe (2017): Guide on poverty measurement, ECE/CES/2017/5

- Ludmila Ivančíková, Róbert Vlačuha (2012): Možnosti merania majetkovej chudoby na Slovensku, In: Iveta Pauhofová, Tomáš Želinský (edit.): Nerovnosť a chudoba v Európskej únii a na Slovensku, Košice, ISBN 978-80-553-1225-5

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