

INCOME DISTRIBUTION DATA REVIEW – SLOVAK REPUBLIC

1. Available data sources used for reporting on income inequality and poverty

1.1. OECD reporting:

The OECD is using data computed from the *EU-Survey of Income and Living Conditions* (EU-SILC). In the OECD database, income inequality and poverty data are currently available for 2004, 2006, 2007, 2008 and 2009. In the past, the estimates were provided by the Statistical Office of the Slovak Republic (Štatistický úrad Slovenskej Republiky). Since 2011 (5th data wave), the OECD Secretariat is calculating the indicators in-house while sending the results for verification to the Slovak Statistical Office.

1.2. National reporting and reporting in other international agencies:

1.2.1 National reporting:

The number of available reporting on income inequalities and poverty in Slovak Republic is very limited at the national level. We can mention the following:

- The *Household and Budget Survey* (HBS) is the main survey in Slovak Republic to find data on living conditions and social development. The *Statistical Office of the Slovak Republic* launched the first Survey in 1957 but data are not available on-line.
- The *Microcensus* has been used for reporting on household incomes mainly in the 1990s (a microcensus survey took place in 1992 and another one in 1996) though the last microcensus seem to have taken place in 2003 (http://www.statistics.sk/webdata/slov/mikrocen/def_v/zak_v.pdf)

1.2.2 International reporting:

At the international level, we can mention the following reporting:

- *EUROSTAT* has been computing indicators on inequalities and poverty for Slovak Republic from 2005 (income year: 2004) onwards. Indeed, Slovak Republic entered the European Union in 2004.
- As a consequence, Slovak Republic has been included in the *EU-SILC (Statistics on Income and Living Conditions)* survey from 2005 onwards (income year: 2004). The EU-SILC is a representative survey of households in Switzerland. This instrument aims at studying poverty, social exclusion and living conditions on the basis of indicators that can be compared at the European level.
- The *Luxembourg Income Study Database (LIS)* included data for the Slovak Republic for the years 1992 and 1996 only. It is based on the *Microcensus* survey that is presented in more details in the below table. As data are not available after 1996, the relevance and the interest of this survey for this European country are limited.
- The *World Bank* data published on *PovcalNet*, the on-line tool for poverty measurement developed by the Development Research Group of the World Bank (website: <http://iresearch.worldbank.org/PovcalNet/index.htm>) also includes data for the Slovak Republic. The producer of the data is the Slovak Statistical Office and the survey of reference is the Micro

census-Population and Housing Census (except for 1992 – Integrated survey labelled Living Standard Measurement Survey).

The below table presents the main characteristics of those datasets:

Table 30. Characteristics of dataset, Slovak Republic

Name	Microcensus(Luxembourg Income Study)	Household Budget survey (HBS)	EU-SILC from EUROSTAT
Responsible	<i>Microcensus - Statistical Office of the Slovak Republic</i>	<i>Statistical Office of the Slovak Republic</i>	<i>Eurostat</i>
Goal	<i>Slovak Microcensus To measure the income of the various types of households and to get social and demographic information of the population. The main source of funding comes from the State budget.</i>	<i>To provide information for analyses of living standard and social situation of private households, especially information on development and structure of their expenditures and incomes.</i>	<i>To study poverty, social exclusion and living conditions on the basis of indicators that can be compared at the European level.</i>
Year	<i>Since 1958 with an irregular frequency. Provided only for years 1992 and 1996 in the Luxembourg Income Survey (LIS) for Slovak Republic.</i>	<i>Since 1958 (income year – 1957)</i>	<i>Since 2005 (income year:2004)</i>
Data collecting	<i>In March (based on incomes from the previous year) Data are collected through personal interviews.</i>		<i>Interviews in households using paper questionnaires</i>
Covered population	<i>Wave 1992 - The sampling frame for the survey was the Population Census File 1991. The sampling frame includes the total population of household heads. People living in institutions are also included. Unoccupied units were excluded. The sample frame includes all geographic areas in the country. Region and district information is available in the survey. Wave 1996 – Entire Slovak population and territory (1% of all households).</i>	<i>Nationals excluding people from remote or inaccessible areas. The following types of households are excluded in the data collection: those in collective housing (such as long term hospitals, prisons, monasteries, military quarters), non-resident households of nationals (households of nationals located abroad), diplomatic households in the country, households of other foreigners in the country, armed forces residing in private housing within military base, armed forces residing in private housing outside military base.</i>	<i>Private Households.</i>
Sample size	<i>17714 unweighted households (no data was obtained for 1115 households - wave 1992) 16336 households with 50906 individuals (wave 1996 – Approx. 1% of all households in Slovak Republic).</i>	<i>Not provided</i>	<i>Minimum sample size is 4250 households containing 11000 individuals (2011 operations). 6068 households (wave 2010).</i>
Sampling method	<i>Two-stage stratified sample Some population groups had a higher probability of selection than others; this depends on the size of the “counting district” and the size of the community.</i>	<i>Stratified sample</i>	<i>One-stage stratified sampling was used in EU SILC 2010. The proportional number of households was selected by simple random sampling in individual strata (In the first year of survey, households were selected in to the 4 rotational group on the fact that in each subsequent year of survey one rotational</i>

			<i>group was excluded and new one was added.)</i>
Sampling unit	<i>Households</i>	<i>Households</i>	<i>Households and Individuals</i>
Response rates	<i>Non response rate was 6.8 % (wave 1992) Not provided (wave 1996)</i>	<i>Not provided</i>	<i>Not provided</i>
Remark		<i>Data are not available on line</i>	<i>Annual income of the year prior to the survey</i>
Websource	<i>http://www.lisdatacenter.org/our-data/lis-database/by-country/slovak-republic-2/</i>	<i>http://portal.statistics.sk/showdoc.do?docid=3025 http://laborsta.ilo.org/applv8/data/SSM6/E/462A.html</i>	<i>http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/introduction</i>

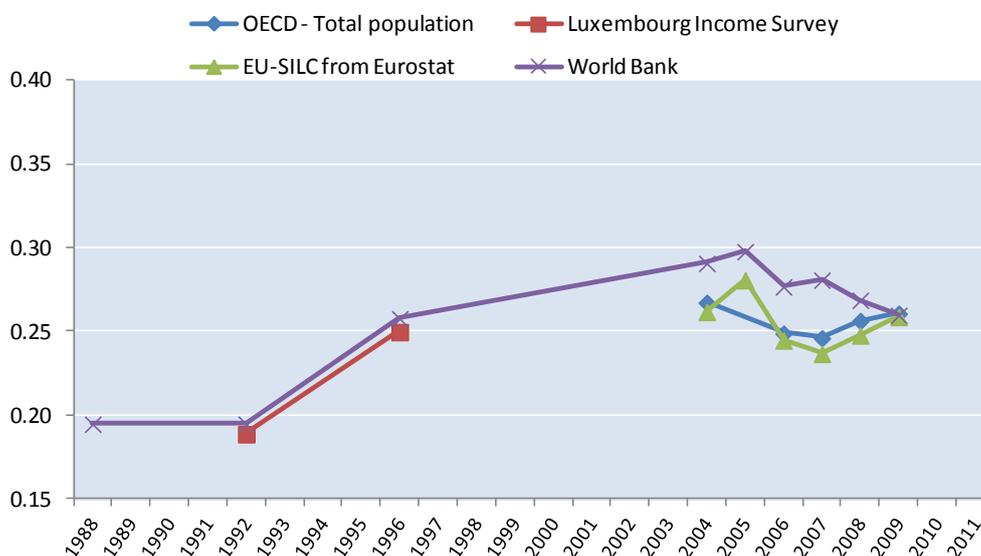
2. Comparison of main results derived from sources used for OECD indicators with alternative sources

2.1 Income

2.1.1 Time series of Gini coefficients and other inequality indicators

The below graph is showing the evolution of Gini coefficients since 1988 as reported by the OECD, the Luxembourg Income Survey, the EU-SILC from Eurostat and the World Bank.

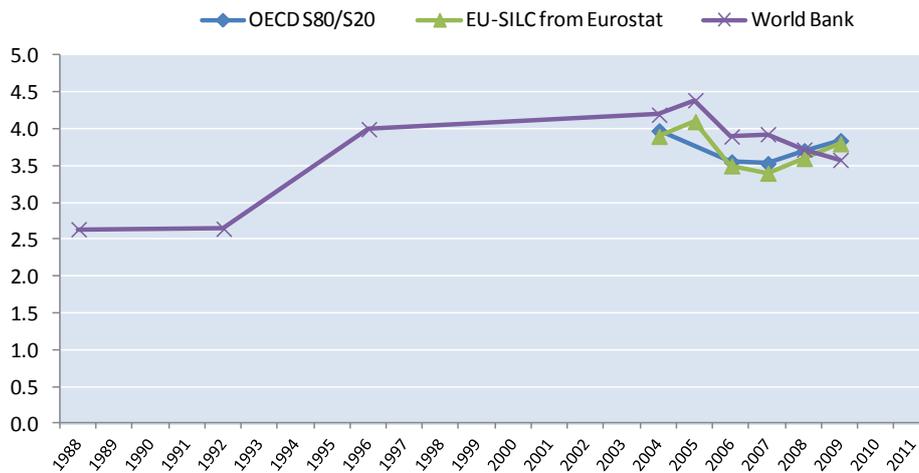
Figure 51. Trends in Gini coefficients at disposal income, Slovak Republic (1988 – 2009)



The general trend is that Gini coefficients increased in the 1990s until the mid-2000s (especially in the early 1990s) and slightly decreased between 2005 and 2007. Between 2007 and 2009, trend estimates differ: the Gini increased according to the OECD series and Eurostat, but it decreased according to the World Bank data. That said, all three sources report a similar level in 2009 which is the latest available date. More precisely, Gini coefficients are respectively estimated at 0.246 by the OECD, at 0.259 by the EU-SILC and at 0.26 by the World Bank.

The patterns of the share income ratio (S80/S20) trend are broadly similar with the Gini coefficients one. Income distribution equality has increased in the Slovak Republic from 1992 to 2005 as highlighted by the S80/S20 ratios which increased from 2.64 up to 4.39 (World Bank). Afterwards, the trend shows a u-shaped pattern (OECD and Eurostat) or a continuously declining trend. In 2009, latest available data, the 20% of the richest households in Slovak Republic earn 3.8 times more than the 20% of the lowest households (ratio is the same for EU-SILC and OECD). The World Bank is recording a somewhat lower figure with a S80/S20 ratio estimated at 3.58 in 2009. The data of this latter are indeed not marking the recent increase of income inequalities (from 2007).

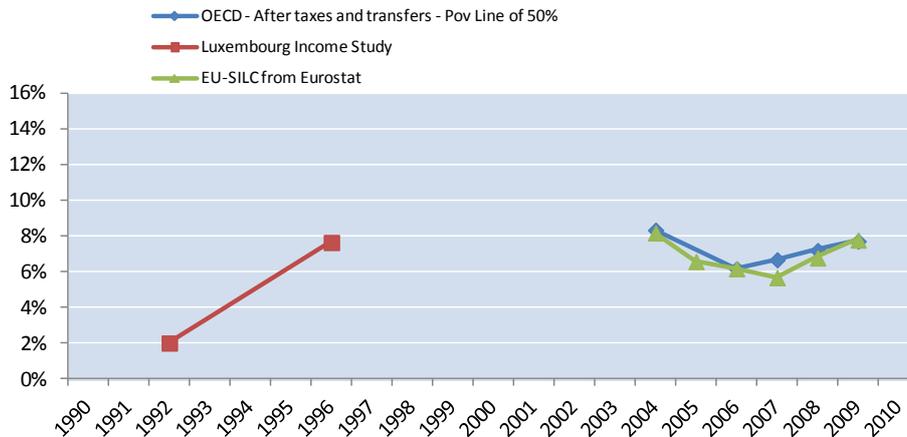
Figure 52. Trends in S80/S20, Slovak Republic (1988 – 2009)



2.1.2 Time series of poverty rates, poverty composition

The below graph shows the poverty rates for the Slovak citizens living with less than 50% of the median equivalised income from 1992 to 2009.

Figure 53. Trends in Poverty rates at 50% median income threshold, Slovak Republic (1992 – 2009)

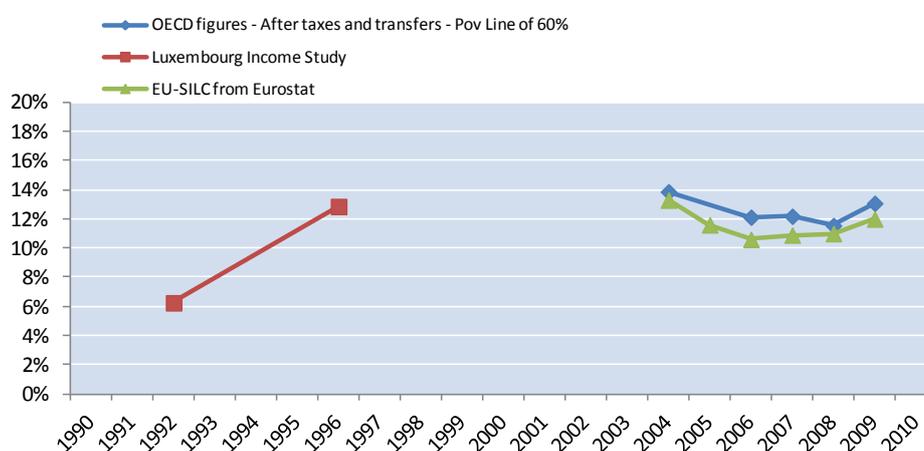


Data on poverty rates can be described and compared only from 2004 onwards. Before this data, poverty rates are available in 1992 and in 1996 and have been only estimated by the *Luxembourg Income Study*. The World Bank data do not include relative but only absolute poverty estimates.

From 2004 onwards, the OECD data are following the same trend that the EU-SILC ones. The poverty rates with a 50% threshold declined from 8.36% in 2004 (OECD data) down to 6.20% in 2006 (same figures for both the OECD and the EU-SILC). Since 2006 (or 2007 given the fact that EU-SILC is recording a lower poverty rate at 5.60% in 2006), the situation of poverty seems to have worsened. In 2009, 7.7% of Slovaks are living with less than 50% of the median income. Both OECD and EU-SILC point lines are confirming this increase of poverty.

The patterns of the graph regarding poverty rates with a 60% median income threshold are similar to the one here above.

Figure 54. Trends in Poverty rates at 60% median income threshold, Slovak Republic (1992 – 2009)



As explained previously, data on poverty rates can be described and compared only from 2004 onwards. Before this data, poverty rates are available in 1992 and in 1996 and have been only estimated by the *Luxembourg Income Survey*.

From 2004 onwards, the poverty rates with a 60% threshold are following the same trend than the ones with a 50% threshold but the trend is less pronounced. Indeed, the OECD and the EU-SILC point lines seem to have remained pretty stable from 2004 to 2009, respectively from 13.88% to 13.08% for the OECD and from 13.30% to 12.00% for EU-SILC.

From 2008 to 2009, poverty rates, calculated both by the OECD and by the EU-SILC, have worsened. Poverty rates gained approximately one percentage point: between 12% (OECD figure) to 13% (EU-SILC figure) of the total Slovak population is living with less than 60% of the median income in 2009.

2.2. Wages

See Part II of the present Quality Review.

3. Consistency of income components shares with alternative data sources

3.1. Comparison of main aggregates: earnings, self-employment income, capital income, transfers and direct taxes

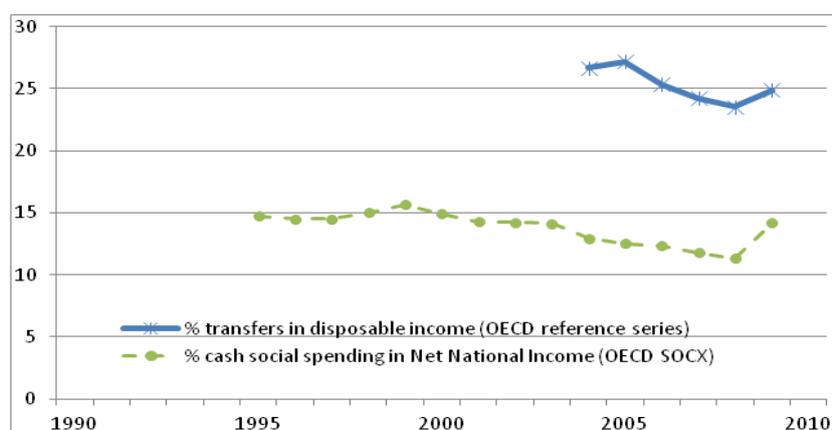
Table 2 shows shares of income components for the latest available year, according to the OECD benchmark series. Unfortunately, such information is not available for the other data sources described in table 1.

Table 2. Shares of income components in total disposable income, OECD reference series

Survey	Year	Unit	Average income			K	SE	TR	TA	HDI	
			EH	ES	EO						
			Wages	Capital	Self Employment	Transfers	Taxes	Disposable income (HDI)			
OECD reference survey	2009	natcur	4137	2016	0	6153	59	671	1964	-916	7931
		% av HDI	52.2%			77.6%	0.7%	8.5%	24.8%	-11.6%	

Figure 5 compares the trend in shares of public cash transfers in equivalised disposable income from the OECD reference series with the share of total cash social spending in net national income, reported from the OECD Social Expenditure database (OECD SOCX). OECD SOCX series include pensions, incapacity, family, unemployment, social assistance. Both series show similar trends throughout the period.

Figure 5 Trends in shares of public social transfers



4. Metadata of data sources which should explain differences and inconsistencies

There are no major discrepancies to underline. However, we can still mention the following:

- The high increase of poverty rates between 1992 and 1996 as defined by the Luxembourg Income Survey is a bit surprising. With a 50% threshold, the poverty rates has more than tripled (from 2.05% to 7.67%) whereas the poverty rates with a 60% threshold doubled (from 6.25% to 12.86%) between 1992 and 1996. However, no other data are available at these dates to enable comparisons.
- As already mentioned for some other European countries, the S80/S20 ratios as calculated by the Luxembourg Income Survey do not enable comparisons because of a different methodology.

- The World Bank is not providing the poverty rates below national poverty lines for Slovak Republic conversely to other countries dashboards on the World Bank database.

5. Summary evaluation

Broadly speaking, all the different indicators for Slovak Republic available from OECD, Eurostat and the World Bank are following the same trends between 2004 and 2006-2007. Income inequality and poverty decreased from 2004 to 2006-2007. The last available figures are showing that this trend is reversing between 2007 and 2009 and that Slovak Republic has been facing an increase of income inequalities and of poverty as of today. This latest trend is suggested by OECD and Eurostat data but not by the world Bank data who report a continuous decline.

Beyond the data analysis, the major concerns rely on the too short track record and on the lack of comparative datasets which prevent from undertaking significant data comparisons. The following reasons can be highlighted:

- The availability of data sources for Slovak Republic is very limited. Basically, since 2004 there is only the EU-SILC data available;
- The OECD has been compiled statistics for the Slovak Republic since 2004 only and the last available data is 2009. Therefore, the reference period is very short;
- The National Office of Statistics is not providing national statistics on social and living conditions in Slovak Republic.