

## INCOME DISTRIBUTION DATA REVIEW – HUNGARY

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

#### 1.1. OECD reporting:

The OECD is using data from the Hungarian Household Panel and subsequently from the Household Monitor Survey provided by the Tarki Social Research Institute. In the OECD database, income inequality and poverty rates are currently available for the years 1991, 1995, 2000, 2005, 2007 and 2009.

#### 1.2. National reporting and reporting in other international agencies:

- EUROSTAT has been computing indicators on inequalities and poverty rates for Hungary from 2000 (income year 1999) onwards.
- Hungary has been included in the EU-SILC (Statistics on Income and Living Conditions) survey since 2000 onwards (income year 1999). EU-SILC is a multi-dimensional instrument focused on the income and the living conditions of different types of households. It is collecting, on an annual basis, timely and comparable multidimensional micro-data on income, material deprivation, housing condition, labour, education, health and subjective well-being. Every year, both cross-sectional data (pertaining to a given time or a certain time period) and longitudinal data (pertaining to individual-level changes over time, observed periodically over a four year period) are collected.
- The Luxembourg Income Study Database (LIS) includes Hungary in years 1990, 1993, 1998 and 2004. It is based on the Household Monitor Survey that is presented in more details in the below table.
- Unfortunately, data on inequality and poverty indicators from the Hungarian Central Statistical Office is unavailable at this time.

The below table presents the main characteristics of those three datasets:

**Table 13. Characteristics of datasets used for income reporting, Hungary**

	OECD reference series income distribution database (TARKI)	Eurostat (EU-SILC)	LIS database
Name	Household Monitor Survey (2007 + 2009) Hungarian Household Panel (1991 – 1995)	EU-SILC	Household Monitor Survey
Name of the responsible agency	Tarki Social Research Institute	Eurostat	Tarki Social Research Centre
Year (survey and income/wage)	1991-2009 (missing 2001, 2002, 2004, 2006 and 2008)	2000-2003 and 2005-2010 representing 1999-2002 and 2004-2009 income	1991, 1994, 1999, 2005 representing 1990, 1993, 1998 and 2004 income years.
Period over which income is assessed	For most income types respondents report the number of months they had the specific income type during the 12 month period before the survey, and the average amount in those months. In case of more are income types (eg. bonuses, premiums at work, capital incomes) annual amount is reported.	Annual income for the all year N-1	Annual income for the all year N-1
Covered population	Agricultural and general government workers are EXCLUDED		
Sample size	Unweighted sample size 2024 households.	For 2010 survey: Actual sample size of 11500 households, with an achieved sample size of 9813 households.	For 2005 survey: 2,058 interviewed households containing 5,284 individuals (of which 3,808 adult individuals who completed the interview, 639 adult individuals who did not complete the interview, and 837 children under 16 years old).
Sample procedure	Longitudinal (HHP) and cross-sectional (HMS)	Stratified sampling according to different design by rotational group	Cross-sectional
Response rate	44.6% (2007 income survey)	85%	72%
Imputation of missing values	Missing data on specific income types are not imputed.		Imputation of zero and missing values of total personal current income for employed, self-employed and pensioners. Imputed values based on collected data.
Unit for data collection	Household	Household	Mostly at the individual level, except for income from household farms/enterprises, rental income, investment income, childrelated benefits, and support payments from government and other households as well as the irregular lump -sums (prizes and premiums).
Break in series	Data for 1981, 1983 and 1990 are estimations by INSEE. Earnings are net of employee social security contributions but not of income tax.		
Web source:	<a href="http://www.oecd.org/els/socialpoliciesanddata/incomedistributionandpovertydatafiguresmethodsandconcepts.htm">http://www.oecd.org/els/socialpoliciesanddata/incomedistributionandpovertydatafiguresmethodsandconcepts.htm</a>	<a href="http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/quality/national_quality_reports">http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/quality/national_quality_reports</a>	<a href="http://www.lisdatacenter.org/wp-content/uploads/our-lis-documentation-by-hu05-survey.pdf">http://www.lisdatacenter.org/wp-content/uploads/our-lis-documentation-by-hu05-survey.pdf</a>

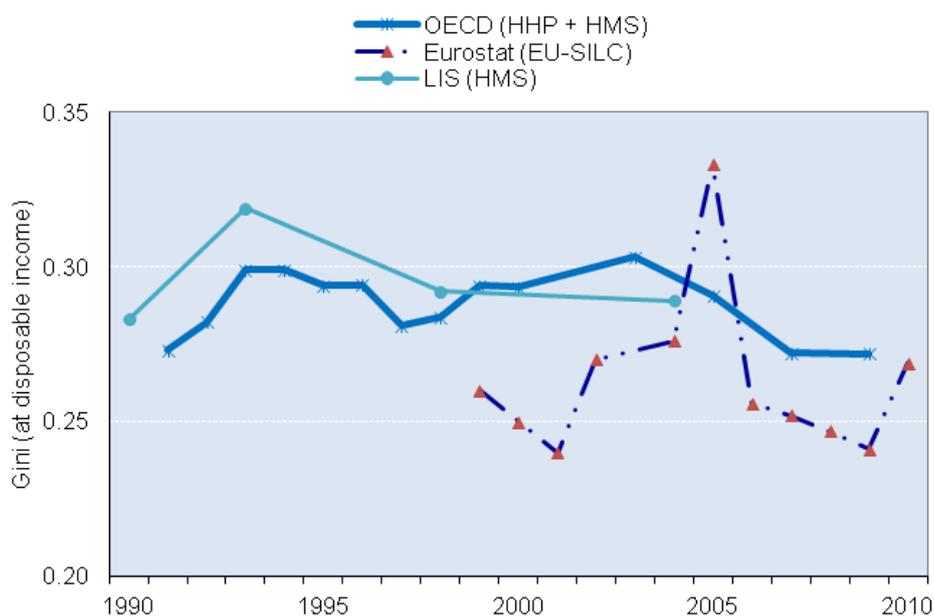
## 2. Comparison of main results derived from sources used for OECD indicators with alternative sources

### 2.1 Income

#### 2.1.1 Time series of Gini coefficients and other inequality indicators

The below figure shows the evolution of Gini coefficients for Hungary from 1990 to 2010, as reported by the OECD, the EU-SILC and LIS.

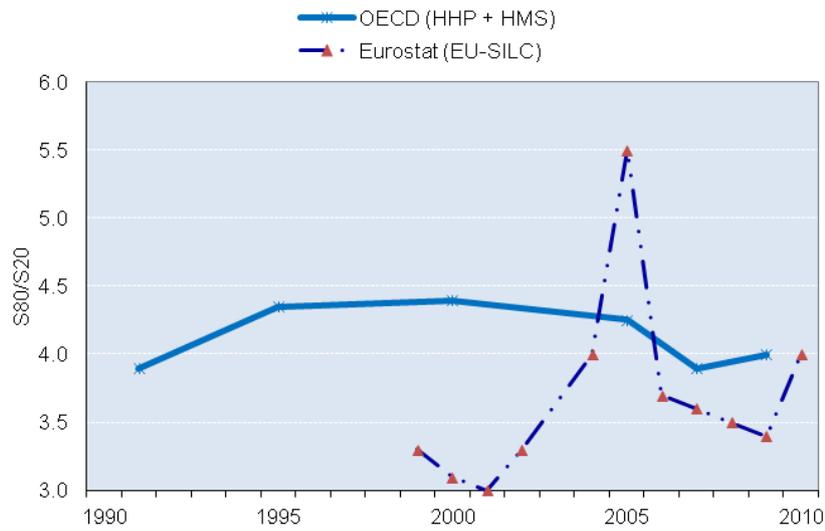
**Figure 1.1 Trends in Gini coefficient (disposable income)**



According to the OECD reference series, income inequality in Hungary was broadly stable over the last twenty years, with a Gini between 0.27 and 0.30.

The OECD reference series and the Eurostat series show contrasting levels and trends. The OECD reference series shows a rather steady trend throughout, whereas the Eurostat series in particular show a peak in 2005 with the Gini reaching 0.333 before falling down below levels recorded by the OECD series at 0.241 in 2009. This peak remains unexplained. However, in 2010 the Eurostat series is similar in level to the OECD reference series in both poverty and inequality indicators.

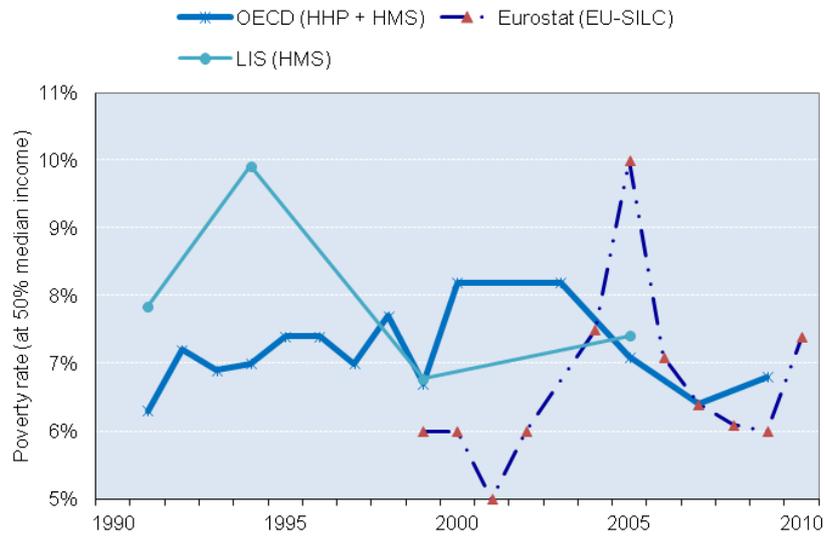
**Figure 17.2 S80/S20**

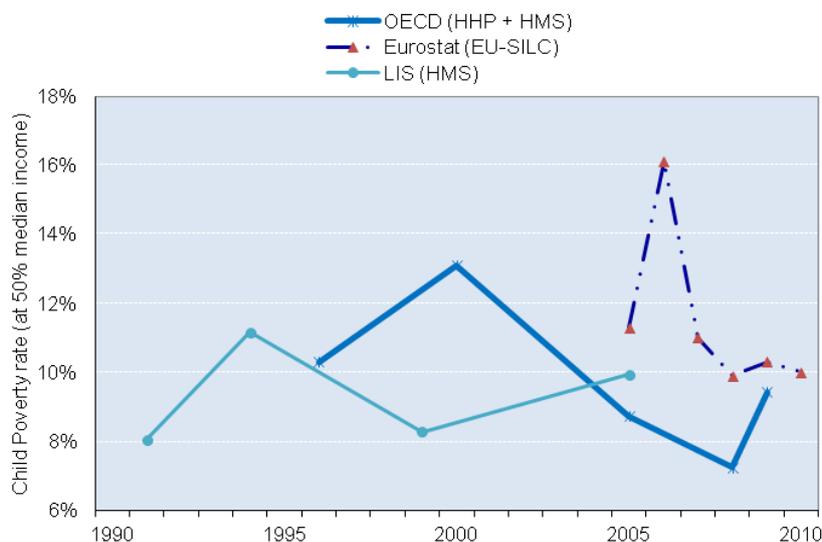


*2.1.2 Time series of poverty rates*

According to the OECD series, where data on poverty rates is available from 1991 to 2009, levels have remained stable from 6.3% in 1991 to 6.8% in 2009. However, levels for Child poverty rates have slightly dropped from 10.3% in 1996 to 9.4% in 2009. Again, the Eurostat series peaks remarkably in 2005 before dropping to levels close to the OECD reference series.

**Figure 18.1 Trends in poverty rates**



**Figure 2.2 Trends in Child poverty rates**

## 2.2 Wages

See Part II of the present Quality Review

## 3. Consistency of income components shares with alternative data sources

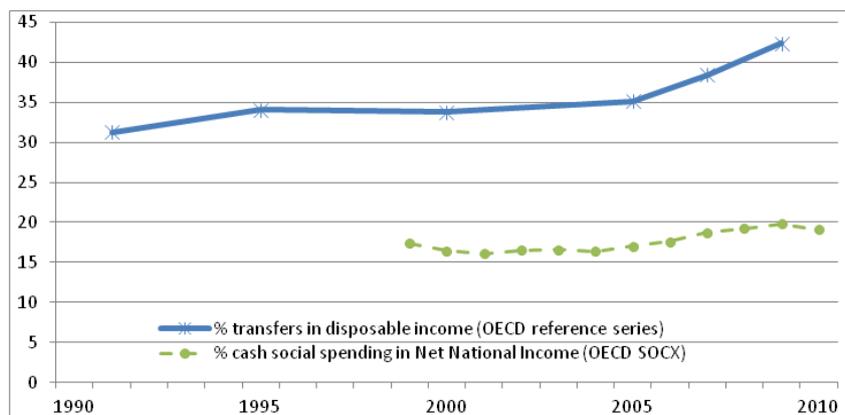
### 3.1. Comparison of main aggregates: earnings, self-employment income, capital income, transfers and direct taxes

Table 2 shows shares of income components for 2008, according to the OECD benchmark series (GSOEP) and according to EU-SILC. Those are not comparable to the shares computed on the basis of EU-SILC. Indeed, HBS data report incomes net of taxes while EU-SILC reports income taxes.

**Table 14. Shares of income components in total disposable income, OECD reference series**

Survey	Year	Unit	Wages	Capital	Self Employment	Transfers	Taxes	Disposable income (HDI)
OECD reference survey	2007	natcur	682,205	70,311	105,615	535,279	0	1,393,410
		% av HDI	49%	5%	8%	38%	0%	
EU-SILC (OECD-ELS)	2007	natcur	1,076,710	27,146	147,739	513,273	-399,370	1,365,832
		% av HDI	79%	2%	11%	38%	-29%	

Figure 3 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 19. Trends in shares of public social transfers**

#### 4. Metadata of data sources which could explain differences and inconsistencies

##### *Definitions, methodology, data treatment*

##### *Methodological differences between the OECD reference series and other sources*

The OECD reference series uses the square root of household size, whereas the EU-SILC series use the OECD modified equivalence scale (1.0 to the first adult, 0.5 to the second and each subsequent person aged 14 and over, 0.3 to each child aged under 14).

Hungary is one of the few OECD countries included in the database for which income estimates only on a basis net of taxes are available. This does not impede on the indicators shown above based on disposable income but disallows some redistributive analysis.

#### 5. Summary evaluation

The different indicators for Hungary based on HSM and on EU-SILC are generally quite dissimilar, in particular in one year (2005). This discrepancy cannot be accounted for.