INCOME DISTRIBUTION DATA REVIEW – BELGIUM

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

1.1. OECD reporting:

OECD income distribution and poverty indicators for Belgium are computed on the basis of three different data series, depending on the period:

- For the years 1983 and 1995, tax records mainly from IPCAL data, i.e. all tax units filing tax declarations (ca. 86% of total population), provided by the Ministry of Finance
- For the years 1995 and 2000: the European Community Household Panel (ECHP), provided by the University of Antwerp
- For the years 2005 and annually since 2008: EU-SILC 2005/2009

Due to the change in source in 1995, data for 1983 have been interpolated ("spliced") and the OECD Datacube provides series for both the original and the adjusted values. However, there is a strict break in series due to the change in source to EU-SILC in 2004, with no overlapping year with two data sources available. Data prior to 2004 are strictly not comparable with data from the 2004 onwards. Note that this break is shown in the Figures below between 2000 and 2004.

1.2. National reporting and reporting in other international agencies:

Income distribution and poverty indicators for Belgium are also available from

- The Eurostat’s database on income and living conditions (based on ECHP and EU-SILC annual surveys since 2000 (survey year 2002 missing), see http://epp.eurostat.ec.europa.eu/portal/page/portal/income_social_inclusion_living_conditions/data/database .
- The Luxembourg Income Study Database (LIS), using surveys from the University of Antwerp and University of Liege for 1985, 1988, 1992, 1995, 1997 and 2000, the PSBH (Panel Study on Belgian Households) and SEP (Socio-Economic Panel).
- STATBEL using annual data from the ‘Direction générale Statistique et Information économique de la SPF Economie’ from 1990 to 2008.

The below table presents the main characteristics of those four datasets:
Table 2. Characteristics of datasets used for income reporting, Belgium

<table>
<thead>
<tr>
<th>Name</th>
<th>OECD reference series since 2005 (EU-SILC)</th>
<th>National survey (Income)</th>
<th>LIS database</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>EU-SILC 2005/2009</td>
<td>Direction générale Statistique et Information économique de la SPF Economie, Revenus fiscaux</td>
<td>Panel Study on Belgian Households (PSBH)</td>
</tr>
<tr>
<td>Name of the responsible agency</td>
<td>Eurostat</td>
<td>STATBEL</td>
<td>Universiteit Antwerpen (UA) / Université de Liège (ULg)</td>
</tr>
<tr>
<td>Period over which income is assessed</td>
<td>Annual income for the all year N-1</td>
<td>Annual income for the all year N-2 (need verification)</td>
<td>Annual income for the all year N-1</td>
</tr>
<tr>
<td>Covered population</td>
<td>All households in Belgium, except those in collective households and institutions</td>
<td>All private households in the whole national territory (incl. collective households but excl. institutional ones)</td>
<td></td>
</tr>
<tr>
<td>Sample size</td>
<td>6132 households (in SILC 2010)</td>
<td>3,067 completed household interviews out of 3,672 in initial sample + 7,850 individuals in completed households, of which 7,367 interviewed (5,810 16+)</td>
<td></td>
</tr>
<tr>
<td>Sample procedure</td>
<td>stratified survey, rotating since 2005</td>
<td>cross-sectional survey broken down by 8 waves during one year - from a random uniform sample on 1999 census</td>
<td></td>
</tr>
<tr>
<td>Response rate</td>
<td>About 66%</td>
<td>Around 60% of households contacted finalised all 3 questionnaires and individual diaries</td>
<td></td>
</tr>
<tr>
<td>Imputation of missing values</td>
<td>No missing values, negative values treated as suggested in the terms of references</td>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Unit for data collection</td>
<td>Household</td>
<td>Household</td>
<td>Household and individual</td>
</tr>
<tr>
<td>Break in series</td>
<td>Data prior to 2004 cannot be compared with data from 2004 onwards.</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>
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

According to the OECD income distribution database, income inequality among total population has slightly increased overall in Belgium between 1983 and 2000, and slightly decreased between 2004 and 2009, the two trends cancelling each other out, in contrast to most other OECD countries which have seen a more steady increase throughout.

For the period up to 2000, also the LIS and the STABEL data show a steady increase, although on significantly lower levels. For the period since 2004, there are no LIS data series. The Eurostat data series which are based on EU-SILC show generally similar levels, although more fluctuation. Also, to the difference of the OECD, Eurostat considers the data between 2000 (ECHP) and 2004 (EU-SILC) comparable. In stark contrast to both OECD and Eurostat series, the STATBEL series shows a steady increase in levels of inequality since 1995.

![Figure 6.1 Trends in Gini coefficient (disposable income)](image)

Also, when comparing the income quintile share ratio (S80/S20) from the OECD reference data suggest a slight increase before 2000 and a slight decrease after 2004. This is similar to the Eurostat series, though the latter show much more fluctuation and suggest a double downward leaning “w” trend.
2.1.2 Time series of poverty rates

According to the OECD income distribution database, the share of the Belgian population living with less than 50% of the median equivalised income (11,550 Euros per year in 2008) oscillated between 9 and 10% of the population in the late 2000s. The EU-SILC series from Eurostat, although fluctuating, shows a similar somewhat lower level. Also, for the period between 1995 and 2000, all series (OECD, Eurostat and LIS) suggest a downward trend. No STATBEL data are available on this indicator.

The STATBEL published series measures poverty rates at 60% of median income, as opposed to 50%. Using 60% of median income for unit of measure, the STATBEL and EU-SILC series show similar
trends with both showing a 14.6% poverty rate in 2009, while the OECD reference survey shows a higher level of poverty rate at 16.3%.

Figure 2.2 Trends in poverty rates (at 60% median income)

As for child poverty, the OECD reference series is from 1995 and shows a trend that is generally higher than the LIS series (before 2000) but also the Eurostat series (from 2004).

Figure 2.3 Trends in Child poverty rates (at 50% median income)

2.2 Wages

See Part II of the present Quality Review
3. Consistency of income components with alternative data sources

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

Table 2 shows shares of income components for the latest available year, according to the OECD benchmark series. The average equivalised disposable income of the OECD reference survey and the EU-SILC series are identical since the OECD extracts its data from the EU-SILC database.

<table>
<thead>
<tr>
<th># Year</th>
<th>Unit</th>
<th>Wages</th>
<th>Capital</th>
<th>Self Employment</th>
<th>Transfers</th>
<th>Taxes</th>
<th>Disposable income</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD reference survey</td>
<td>2008</td>
<td>natcur</td>
<td>20,426</td>
<td>1,150</td>
<td>2,233</td>
<td>6,610</td>
<td>-7,503</td>
</tr>
</tbody>
</table>

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 3. Trends in shares of public social transfers

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

Definitions, methodology, data treatment

The OECD reference series, as well as the LIS series, use the square root of household size, whereas the EU-SILC series and STABEL 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).

5. Summary evaluation

The OECD reference series show broadly similar trends than the Eurostat series. OECD reference series based from EU-SILC since 2004 show less variation than the EU-SILC series publish in Eurostat.
This may be due to the different equivalence scales used. Treatment of missing and negative income values should not play a role as these seem treated the same way. By contrast, the STATBEL series based on revenus fiscaux show different trends when it comes to income inequality compared to both other series – notably a steady upwards trend, including in the second half of the 2000s. On the other hand, reported poverty rates are broadly similar.