

## INCOME DISTRIBUTION DATA REVIEW – SWEDEN

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

#### 1.1. OECD reporting:

OECD Income Distribution Data for Sweden are computed by Statistics Sweden and based on the *Income Distribution Survey (IDS)*. Data from IDS is available since 1975. Due to a change in the household definition in 1995 (move from fiscal to demographic household definition), data prior to 1995 have been interpolated for the current definition.

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

##### 1.2.1 National reporting:

Income distribution and poverty indicators for Sweden are also available from *Statistics Sweden* which is also based on the IDS, which is a sample survey carried out every year. The population for the survey consists of all households and people who were registered in the population register in Sweden at some point during the survey year (income year). The Total Population Register is used for the sampling frame. The sample is made up of people aged 18 or over. Up to and including the income year 2000, the sample was coordinated with Statistics Sweden's Longitudinal Individuals Database (LINDA). The coordination with LINDA provides the possibility to follow sample persons and their households over several years.

##### 1.2.2 International reporting:

The *Luxembourg Income Study (LIS)* included Sweden in years 1987, 1992, 1995, 2000 and 2005. It is also based on IDS.

*EUROSTAT* has been computing indicators on inequalities and poverty for Sweden from 2001 (income year 2002) onwards using EU-SILC.

Table 1 presents the main characteristics of the different sources

**Table 34. Characteristics of datasets used for income reporting, Sweden**

|                                      | OECD reference series income distribution database  | LIS database  | Statistics Sweden  | Eurostat  |
|--------------------------------------|---|---|--|---|
| Name                                 | Income Distribution Survey (IDS)  | Income Distribution Survey (IDS)  | Income Distribution Survey (IDS)   | EU-SILC   |
| Name of the responsible agency       | Statistics Sweden (www.scb.se)  | Statistics Sweden (www.scb.se)  | Statistics Sweden (www.scb.se)   | Eurostat  |
| Year (survey and income/wage)        | 1975, 1983, 1991, 1995, 2000, 2004, 2008. Due to a change in the household definition in 1995, data prior to mid 90s have been interpolated for the current definition.   | 1987, 1992, 1995, 2000, 2005  | 1975-2010  | 2002-2011 survey years representing income year for 2001-2010 (2002 income year missing)  |
| Period over which income is assessed | All income data refers to the income earned during the current year. Due to the taxation process data is available with about 18 months delay.  | Annual income   | The population for the survey consists of all households and people who were registered in the population register in Sweden at some point during the survey year (income year). | Annual income N-1   |
| Covered population                   | household   | Individual; most variables are then aggregated to the household level   |  | individual  |
| Sample size                          | 2008: 16197 households  | 16268 households containing 36918 individuals (2005)  |  | 2010: 7173 households   |
| Sample procedure                     | Cross-sectional household survey with integrated register data.   | Cross-sectional   | longitudinal   | one stage systematic sampling design  |
| Response rate                        | In 2008 the non-response rate was 34,5 percent.   |   |  |   |
| Imputation of missing values         | No missing incomes, negative incomes are included.  |   |  |   |
| Unit for data collection             | Household   | Resident population in private households   | Household  | individual  |
| Break in series                      | No  | No  | No   | No  |
| Web source:                          | <a href="http://www.oecd.org/els/socialpoliciesanddata/incomedistributionandpovertydata/figuresmethodsandconcepts.htm">http://www.oecd.org/els/socialpoliciesanddata/incomedistributionandpovertydata/figuresmethodsandconcepts.htm</a> | <a href="http://www.lisdatacenter.org/our-data/lis-database/by-country/">http://www.lisdatacenter.org/our-data/lis-database/by-country/</a> | <a href="http://www.scb.se/Page/163547.aspx">http://www.scb.se/Page/163547.aspx</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> |

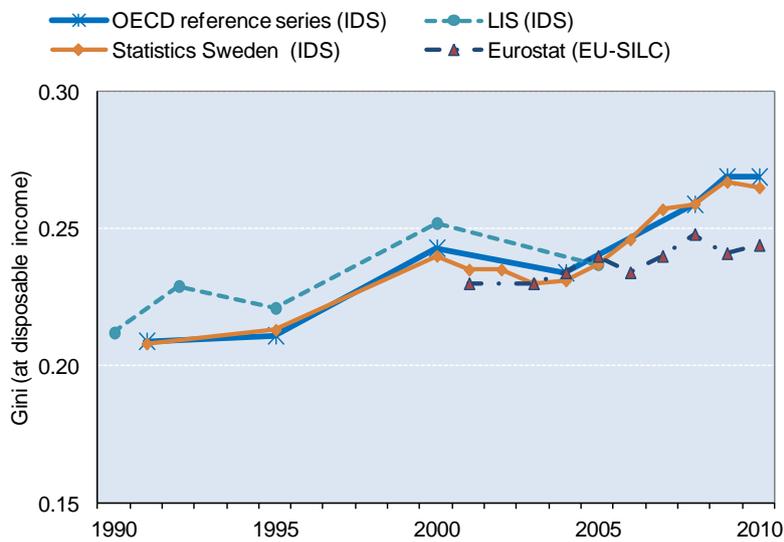
## 2. Comparison of main results derived from sources used for OECD indicators with alternative sources

### 2.1 Income

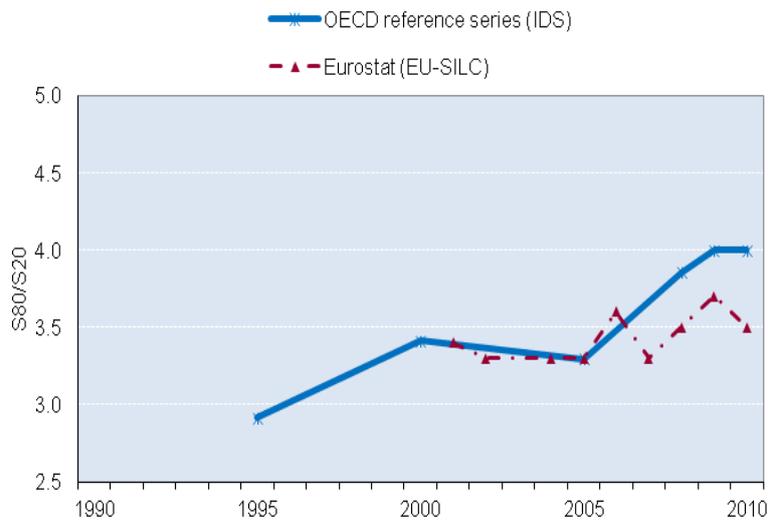
#### 2.1.1 Time series of Gini coefficients and other inequality indicators

The OECD reference series for Gini coefficients of disposable income are quasi identical to the Statistics Sweden series based on IDS. The LIS series, which is also based on IDS, exhibits similar trends although the levels are slightly higher. The EU-SILC series, although similar until 2005, then shows contrasting trends with fluctuating levels, as opposed to a steady increase for the OECD and Statistics Sweden series. The same observation applies to an alternative inequality indicator, the S80/S20 share.

**Figure 61.1. Trends in Gini coefficient (disposable income)**



**Figure 1.2. S80/S20**



2.1.2 Time series of poverty rates

The OECD reference series shows increasing levels of poverty rates and child poverty rates since 2004. The LIS series, despite the fact that it is also based on IDS shows higher levels of poverty rates throughout and even shows a contrasting trend for the total poverty rate between 1995 and 2005, with a slight decline, while the OECD reference series shows a steady and constant increase. The EU-SILC series is more fluctuating and, while the general increase it exhibits is concomitant to the OECD reference series, the year 2010 shows contrasting trends with the EU-SILC showing declining levels of both poverty and child poverty rates while the OECD reference series shows increasing levels. Furthermore, for the EU-SILC series, there is an unexplainable spike in 2006.

Figure 2.1. Trends in poverty rates

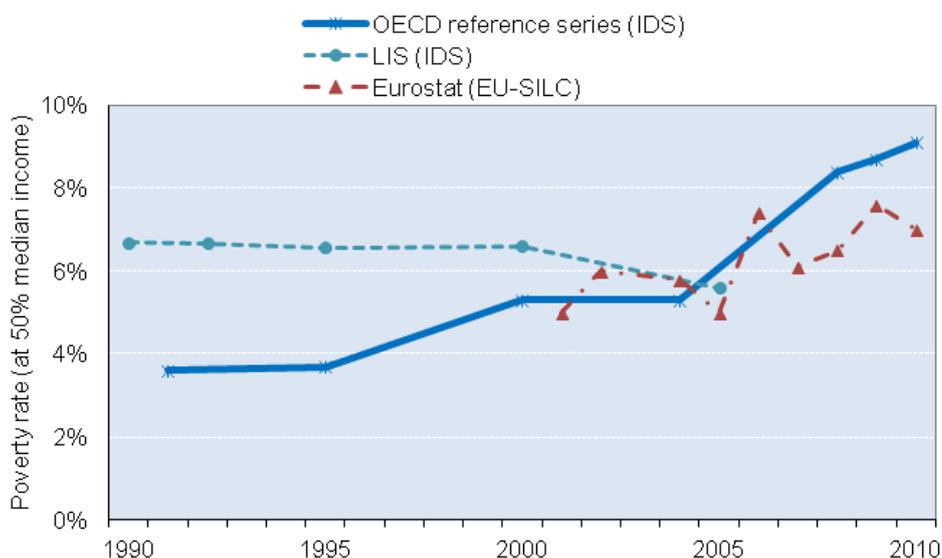
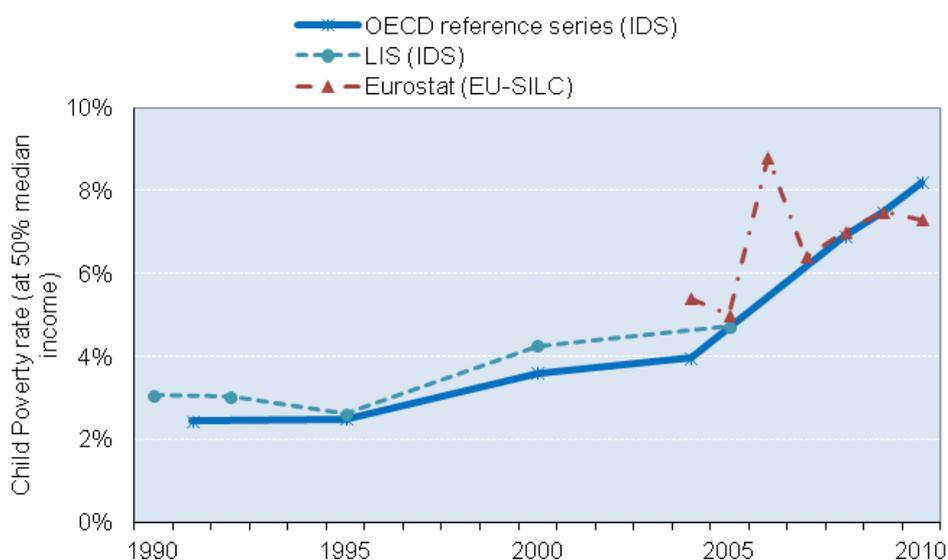


Figure 2.2. Trends in child poverty rates



## 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

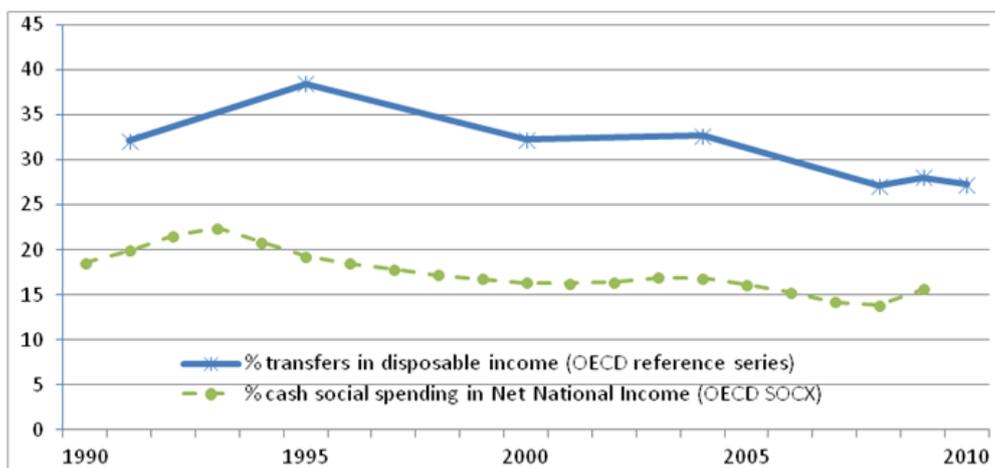
Table 2 shows shares of income components for the latest available year, according to the OECD benchmark series, and for the EU-SILC data. The OECD data have a higher coverage of capital income, at the (proportionate) expense of the shares of all other income sources.

**Table 35. 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 | 2008 | natcur   | 219,604 | 29,397  | 8,368           | 63,334    | -83,255 | 233,820                 |
|                       |      | % av HDI | 94%     | 13%     | 4%              | 27%       | -36%    |                         |
| EU-SILC (OECD-ELS)    | 2008 | natcur   | 224,697 | 14,259  | 11,047          | 69,902    | -89,892 | 232,539                 |
|                       |      | % av HDI | 97%     | 6%      | 5%              | 30%       | -39%    |                         |

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, except for 2009.

**Figure 3. 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 the other income series:*

Equivalence scale: The OECD reference series, as well as the LIS series, use the square root of household size, whereas the EU-SILC series and Statistics Norway 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**

OECD series of income inequality and poverty match well with series published by Statistics Sweden and rather well with the LIS series. The OECD series and EU-SILC series are diverging in the last couple years in both inequality and poverty rates. The remaining and the earlier discrepancy still needs to be explained.