(Revised version: 8th March2013)

# INCOME DISTRIBUTION DATA REVIEW –NETHERLANDS[39]

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

### *1.1. OECD reporting:*

- OECD Income Distribution Data for the Netherlands are provided by Statistics Netherlands and are based on the *Inkomenspanelonderzoek/ Income Panel Survey (IPS):* The Income Panel Survey has been designed to have a picture of the composition and distribution of the income of individuals and households in the Netherlands. In contrast with general panel surveys based on personal interviews, this is a register panel with information from different administrative sources. The advantages are that there is almost no panel attrition and almost no non response; another relies in the large number of the sample. Detailed income and wealth information is recorded by socioeconomic category and region. The IPS outcomes are published on StatLine (the Statistics Netherlands output Database) and used in the Distribution of Wealth Yearbook, the Poverty Monitor and various other articles and press releases. Statistics Netherlands uses the Income Panel Survey as reference for income inequality and poverty indicators. Potential issue: As student households and households without income throughout the year are excluded from the target population in poverty statistics, the data report lower risk on poverty and rates. Results are available yearly from 1989 onwards. In 2000 there was a break in the series due to a revision of Income Statistics. The survey reports on wealth data as well.

- In 2006 there has been a policy change in the system of Health cost insurance. Excluding employers' contributions to social security make the definition for market income different for pre-and post 2006 series.

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

*1.2.1 National reporting:*

- *Inkomenspanelonderzoek/ Income Panel Survey (IPS):see above*

- Sociaal-economisch panelonderzoek/ Socio-Economic Panel Survey: In 1984, Statistics Netherlands has started the Socio Economic Panel survey (SEP). This survey follows approximately 5 000 households through time. For this purpose, all household members aged 16 years and over are periodically interviewed about their socio economic situation with questions on education, labour market participation, income, assets and debts. In addition, one of the household members, preferably the head or the spouse/partner, is asked questions concerning living conditions, ownership of consumer goods and income evaluation for the entire household. Finally, of all household members, including children below 16 years of age, data on gender, date

[39] This revised version of the review benefited from valuable comments from Wim Bos from Central Bureau of Statistics (Netherlands).

of birth, marital status, nationality and household situation are recorded. The last year for which the survey was conducted was 2002.

- *Additional Enquiry on the Use of (Public) Services*: The Additional Enquiry on the Use of (Public) Services is conducted every 4 years. The first year for which the survey was conducted was 1979, and was first made available as microdata in 1979.The main purpose of the AVO is to measure income, household composition, and the use of the following public services: education, health care, housing and social and cultural activities. Services such as public transport are not included. Potential issues: Users of this data should be aware of the following problems regarding the quality of the income data collected in this survey. 1. There are too few self-employed receiving low incomes. 2. Recipients of unemployment and disabled benefits, social assistance, and old age pensions are underrepresented. 3. Income was recorded for weekly, monthly, and annual periods; in some cases these may be incorrect.

*1.2.2 International reporting:*

- Eurostat is also computing some indicators on income distribution and poverty for the Netherlands based on the EU Survey on Income and Living Conditions (EU SILC).

- The Netherlands is also included in the Luxembourg Income Study Database (LIS) using Additional Enquiry on the Use of (Public) Services till 1990, then the Socio-Economic Panel Survey (SEP) and the Survey on Income and Living Conditions/EU-SILC since 2004.

The below table presents the main characteristics of the different sources:

## Table 1. Characteristics of datasets used for income reporting, the Netherlands

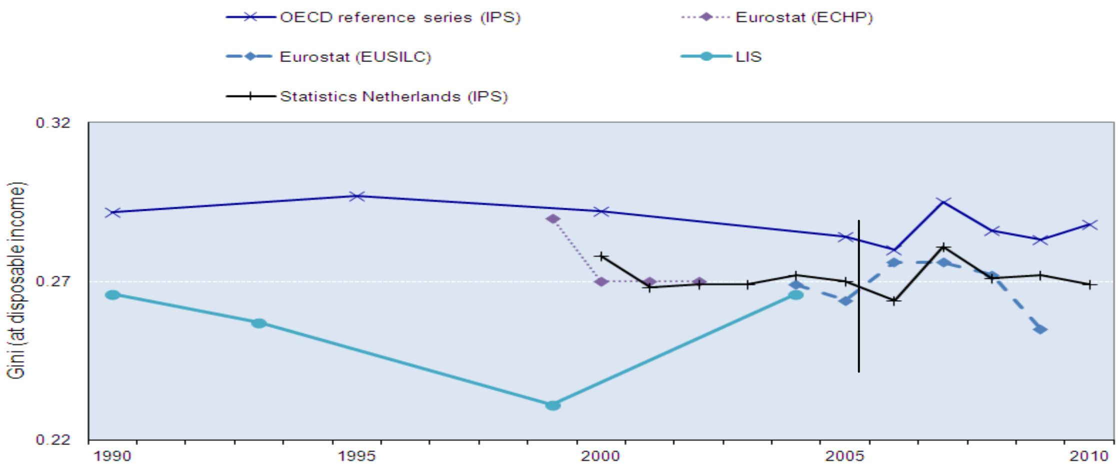
| | OECD income distribution database Inkomenspanelonderzoek/ Income Panel Survey (IPS) | Sociaal-economisch panelonderzoek (Dutch Socio-Economic Panel ) | Additional Enquiry on the Use of (Public) Services (AVO) | Eurostat (EU SILC) |
|---|---|---|---|---|
| Name | Inkomenspanelonderzoek (IPS) | Dutch Socio-Economic Panel / Sociaal-economisch panelonderzoek (SEP) | Aanvullend Voorzieningengebruik Onderzoek | Survey on Income and Living Conditions |
| Name of the responsible agency | CBS, Central Bureau of Statistics | Centraal Bureau voor de Statistiek, Central Bureau of Statistics | Social and Cultural Planning Office (SCP) | Eurostat |
| Year (survey and income/wage) | Every year since 1989 | 1984-2002 Annual in the period April/May. | | Every year from 2003 onwards. |
| Period over which income is assessed | Continuous. | Data collection spread throughout the year | Sources and amounts of income are recorded for weekly, monthly, and annual periods. | Annually around April/May |
| Covered population | Population in private households in the Netherlands on 31 December of the survey year. Excluding persons in institutions, establishments and residential institutions and (persons) households for which no income data could be determined. Furthermore, student households and households without income throughout the year are excluded of the target population in publications on the risk of poverty. | Private households in the whole territory | The sampling frame includes the total population of household heads.People living in institutions or other group situations such as prisons or military installations were included in the sampling frame. Those living in other institutions such as nursing homes for the aged and psychiatric wards were excluded. Once the sample was selected from the sampling frame, all sampling units were eligible for interview. | Territory of Netherlands, excluding oversees territories, all private (non-institutional) households. |
| Sample size | The sample is from the fiscal administration. The information on income is collected for everyone who is part of the household of the persons in the sample. In 2010, the total sample was approximately 271,000 people in over 93,000 households. | 5 000 households | 11 150 households | Minimum sample size: 5 000 households for cross-sectionnal/3 750 for longitudinal; 8 750 individuals for 6 500 for longitudinal. |
| Sample procedure | The IPO is a panel survey which covers a 0.6 percent sample of the population. Each year the sample is refreshed by adding 0.6 percent of all new born babies and immigrants (about 3 to 4 thousands persons a year). | Longitudinal and cross-sectional. | The sampling frame for the survey consists of post office adresses of private housing units. Random selection of adresses. | The sampling frame uses the Geographical Basic Register (GBR). The GBR is a list of all addresses in the Netherlands as assembled by TNT Post. |
| Response rate | The administrative non-response to the Income Panel Survey is approximately 1 percent of the selected sample. Mainly registrations. | 100%, only few administrative omissions | Overall response rate about 60% | |
| Imputation of missing values | | No | Simulations, estimations, or imputations for income or tax values were made in the following cases: Rental value for home owners, children's allowances, taxes, contributions for social security system, and unreported net income. These were calculated using the official rates prevailing in 1987. No other adjustments have been made to the original survey data. | Missing values because of item non-response as well as partial unit non-response are fully imputed. |
| Unit for data collection | Individual and household. | | | Individuals and households. |
| Break in series | Due to a revision in 2000 there is a break in series. | | | |
| Web source: | http://www.cbs.nl/ | http://www.nwo.nl/nwohome.nsf/pages/NWOP_57SDAK | http://www.scp.nl/ | See EU-SILC National and EU comparative Quality assessment via http://circa.europa.eu/Public/irc/dsis/eusilc/library?l=/quality_assessment&vm=detailed&sb=Title |

## 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*

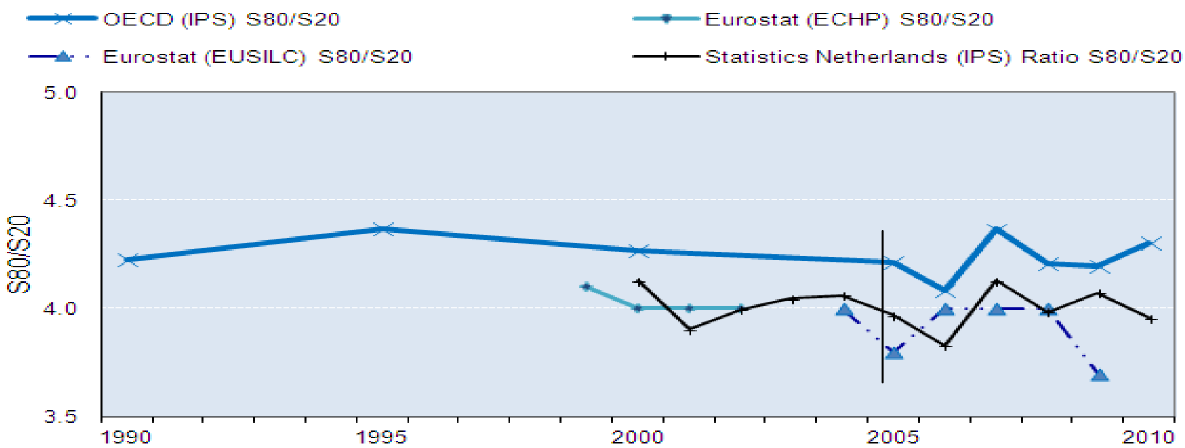
**Figure 1.1 Trends in Gini coefficient (disposable income)**




*Source*: Statistics Netherlands: Inkomenspanelonderzoek/ Income Panel Survey (IPS); Eurostat, European Community Household Panel (ECHP), EU Survey on Income and Living Conditions, (EU SILC), LIS: Cross national data center in Luxembourg http://www.lisdatacenter.org/, Dutch Socio-Economic Panel / Sociaal-economisch panelonderzoek (SEP).

Trends in Gini coefficient are similar between the OECD reference series (IPS) and the data reported by Statistics Netherlands from the Income Panel Survey (IPS). However trends differ more widely for LIS data and Eurostat (EUSILC). Statistics Netherlands IPS reports lower level of income inequality probably because households without income throughout the year are excluded from the target population.

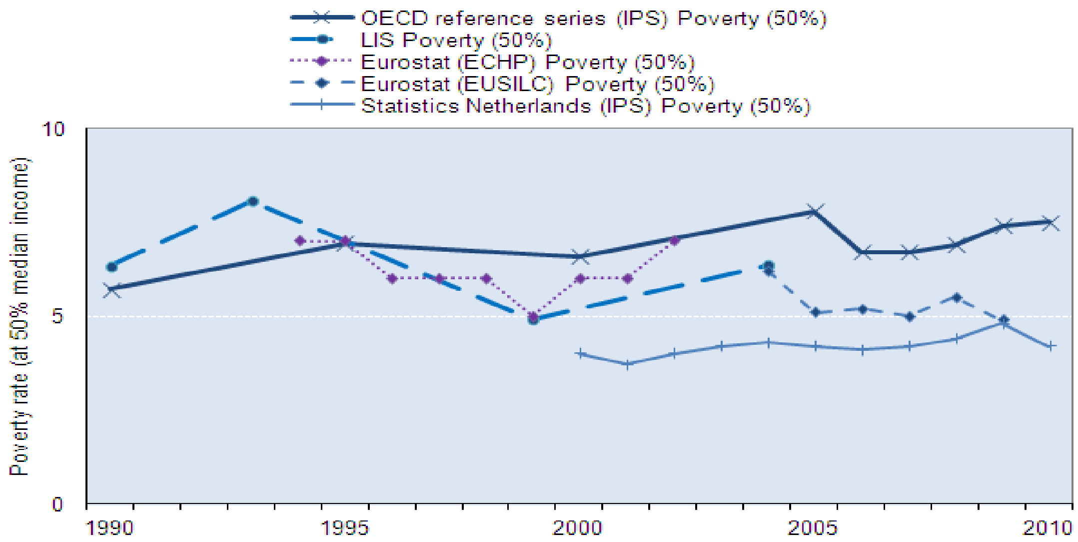
**Figure 1.2 Trends in S80/S20**




*Source*: Statistics Netherlands: Inkomenspanelonderzoek/ Income Panel Survey (IPS); Eurostat, European Community Household Panel (ECHP), EU Survey on Income and Living Conditions, (EU SILC), LIS: Cross national data center in Luxembourg http://www.lisdatacenter.org/, Dutch Socio-Economic Panel / Sociaal-economisch panelonderzoek (SEP).

*2.1.2 Time series of poverty rates*

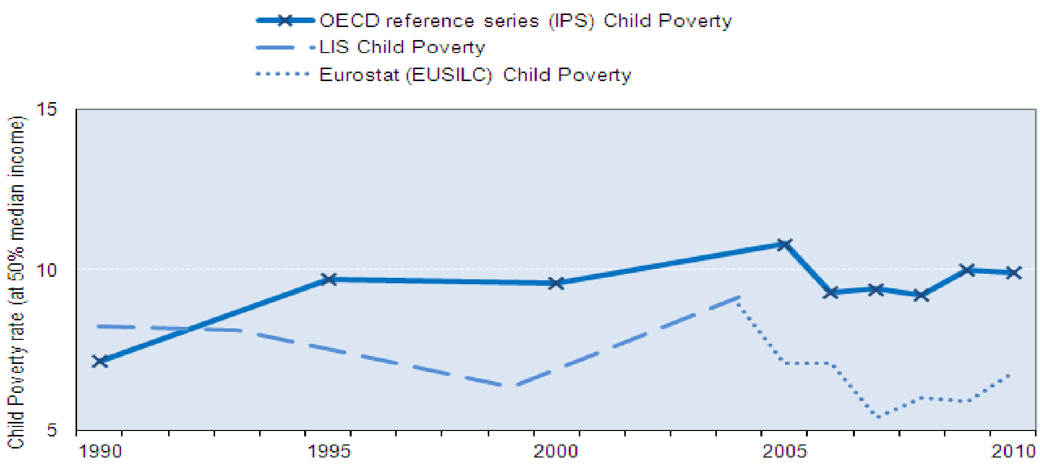
**Figure 2.1 Trends in poverty rates**




*Source*: Statistics Netherlands: Inkomenspanelonderzoek/ Income Panel Survey (IPS); Eurostat, European Community Household Panel (ECHP), EU Survey on Income and Living Conditions, (EU SILC), LIS: Cross national data center in Luxembourg http://www.lisdatacenter.org/, Dutch Socio-Economic Panel / Sociaal-economisch panelonderzoek (SEP).

Trends in poverty rates seem to be more in line between the OECD reference series (IPS) and EUSILC except for the last year. As student households and households without income throughout the year are excluded of the target population in the Income Panel Survey (IPS) reported by Statistics Netherlands, the data report lower poverty rates.

**Figure 2.2 Trends in child poverty rates**




*Source*: Statistics Netherlands: Inkomenspanelonderzoek/ Income Panel Survey (IPS); Eurostat, European Community Household Panel (ECHP), EU Survey on Income and Living Conditions, (EU SILC), LIS: Cross national data center in Luxembourg http://www.lisdatacenter.org/, Dutch Socio-Economic Panel / Sociaal-economisch panelonderzoek (SEP).

### *2.2 Wages*

See Part II of the present Data 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*

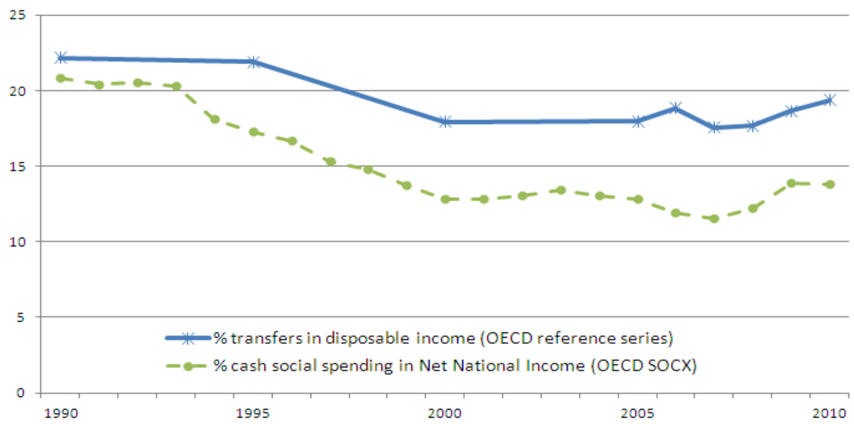
Table 2 shows shares of income components for the latest available year, according to the OECD benchmark series and EU SILC. The two series match relatively well, with the exception of the share of capital incomes which have a higher share in the OECD series and transfers, which have a lower share.

**Table 2. Shares of income components in total disposable income, OECD reference series and EU SILC**

| Survey | Year | Unit | EH | ES | EO | Wages | Capital | Self Employment | Transfers | Taxes | Disposable income (HDI) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| OECD reference series (Income Panel Survey) | 2008 | natcur | 17 524 | 5 636 | 1 742 | 24 903 | 4 407 | 3 279 | 4 509 | -11 580 | 25 518 |
| | | % av HDI | 69% | | | 98% | 17% | 13% | 18% | -45% | |
| EU SILC | 2008 | natcur | 16 910 | 8 392 | 11 | 25 313 | 1 834 | 2 995 | 7 280 | -12 902 | 24 795 |
| | | % av HDI | 68% | | | 102% | 7% | 12% | 29% | -52% | |
| | | natcur | 1.04 | | | 0.98 | 2.40 | 1.09 | 0.62 | 0.90 | 1.03 |
| | | % av HDI | 1.01 | | | 0.96 | 2.34 | 1.06 | 0.60 | 0.87 | |

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 2006 and for the latest year.

**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 Terms of References and the methodology used by national sources:*

A first reason for differences comes from the treatment of negative income. In its own publications Netherlands Statistics do not carry through this treatment. Negative incomes are existent with self employed and also (but rare) with employees and benefit claimants (pay back amounts) whereas in the OECD terms of reference once equivalent household member adjustments are done, all individual components of market income (EH, ES, EO, K, SE) showing negative values should be set to zero.

Difference in the definitions of equivalence scales is also another reason.

*Methodological differences between the OECD reference series based from SEP and the others sources:*

As student households and households without income throughout the year are excluded from the target population in the *Income Panel Survey (IPS)* reported by statistics Netherlands, the data report lower levels of income inequality and poverty.

Also an issue related to Additional Enquiry on the Use of (Public) Services used by LIS relies on the underrepresentation of low income groups which lead to underestimation of income disparities and inequality.

## 5. Summary evaluation

The *Income Panel Survey (IPS)* seems to be the most appropriate source for income distribution and poverty data in the Netherlands due to the quality of the data and the scope of the reference population.

The same source (Income Panel Survey) has been used in national publications and in the OECD reference series. Differences stem from: different definition of income, handling with negative values, different equivalence scale and population (esp. in poverty statistics)

In 2006 there has been a policy change in the system of Health cost insurance. Excluding employers' contributions to social security make the definition for market income different for pre-and post 2006 series.

## Bibliography

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