

INCOME DISTRIBUTION DATA REVIEW - IRELAND

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

1.1 OECD Reportings

The OECD have been using two types of data sources for income reporting on Ireland. First, the OECD was relying on the *Living in Ireland Survey* (LIIS) from the Central Statistics Office which data have been included in the OECD Database for the years 1987, 1994 and 2000. From 2004, the OECD is using data from the *EU Survey of Income and Living Conditions* (EU-SILC) for 2004, 2006, 2007, 2008 and 2009. The change in survey in 2004 was concerning data from 2003. It corresponds to the change of survey within the Central Statistics Office in Ireland from LIIS to EU-SILC.

However, OECD considers that there is a strict break in series due to the change in source to EU-SILC in 2004. Data prior to 2004 are strictly not comparable with data from the 2004 onwards.

1.2 National Reporting and Reporting in other international agencies

1.2.1 National reporting:

Income distribution and poverty indicators for Ireland at the national level are only available from this survey:

- Up to 2003 - All the indicators concerning income inequalities and poverty rates are gathered in the *Living in Ireland Survey* up to 2003. The Living in Ireland Survey is the Irish component of the European Household Panel Survey (EHP) which is coordinated by Eurostat. The Economic and Social Research Institute (ESRI) was responsible for this survey. Some more details on income collection concerning the Living in Ireland Survey: incomes collected are mostly individual, excl. housing allowances, social assistance, rental income and inheritance/lottery winning. Most variables are collected net of taxes and contributions (with the exception of self-employment earnings, and wages which are collected also gross).

1.2.2 International reporting:

In addition to the OECD time-series, the following reportings are available on income inequalities and poverty for Ireland at an international level:

- From 2003 onwards - The Survey on Income and Living Conditions (EU-SILC) of Eurostat is presenting these results. The production of National Statistics for this survey is handled by the Central Statistics Office. Data are available annually from 2003 up to 2010.
- Eurostat is also publishing indicators on income inequalities and poverty for Ireland from 1995 onwards, based on the EHP (itself based on LIIS).
- Ireland is also included in the *Luxembourg Income Study Database (LIS)*. LIS is using the Survey of Income Distribution, Poverty and Usage of State Services in 1987, the Living in Ireland Survey in 1994, 1995, 1996 and 2000. For 2004 (last available year on LIS), the Survey on Income and Living Conditions / EU-SILC has been used.

Table 15. Characteristics of dataset, Ireland

Name	OECD reference series since 2004 (EU-SILC)	Living in Ireland Survey (LIIS)	Luxembourg Income Study Database (LIS)
Name of the responsible	Eurostat / Central Statistics Office (CSO)	Economic and Social Research Institute (ESRI) / European Household Panel Survey (EHP)	LIS
Goal	Official source of data on incomes and living conditions of different types of households. The survey also collects information on poverty and social exclusion.	To provide an up-to-date and comparable data source on personal incomes.	To enable, facilitate, promote, and conduct cross-national comparative research on socio-economic outcomes and on the institutional factors that shape those outcomes.
Year	From 2003 onwards Since 2004, this survey is conducted throughout the European Union	Up to 2003 Wave 1: 1994 Wave 8: 2001 (last one)	1987 - <i>Survey of Income Distribution, Poverty and Usage of State Services</i> 1994, 1995, 1996 and 2000 - <i>the Living in Ireland Survey</i> 2004 – <i>EU SILC</i>
Data collecting frequency	Annually	Annually (from June to December)	Refer to the survey of references according of the concerned year
Covered population	Private households - The sampling frame for the SILC survey was drawn from the 2006 Census of Population	All private households in the national territory (incl. collective households but excl. institutional ones)	Refer to the survey of references according of the concerned year
Sample size	12,641 individuals in 2009 11,587 individuals Minimum sample size: 3750 households for cross-sectional / 2750 for longitudinal; 8000 individuals for cross-sectional / 6000 for longitudinal	4,048 households and 14,589 individuals in 1994 2,865 households and 9,131 individuals in 2001	Refer to the survey of references according of the concerned year
Sampling method	A representative random sample of households throughout the country is approached to provide the required information. The survey is voluntary from a respondents perspective; nobody can be compelled to co-operate.	Two-stage sampling with District Electoral Divisions (DED) selected systematically within each stratum and households of the electors selected within each DED.	Refer to the survey of references according of the concerned year
Dissemination frequency	12 months after the end of the reference year		Refer to the survey of references according of the concerned year
Sampling unit	Individuals and Households	Individuals and Households	Refer to the survey of references according of the concerned year
Response rates	Unknown	Between 57% (1994) and 88 (1997)	Refer to the survey of references according of the concerned year
Remark	The first results for 2003 (published in January 2005) have been revised following the application of improved re-weighting and calibration methods that are in line with EU recommendations. The effect of the revisions has been to lower both the risk of poverty and consistent poverty measures.	In 2000, the Irish sample of individuals and households followed from Wave 1 was supplemented by the addition of 1,500 new households to the total. These additional households, as well as the original sample, were followed in 2001.	Refer to the survey of references according of the concerned year
Websource	http://www.statcentral.ie/viewStat.asp?id=137 http://www.cso.ie/en/index.html	http://www.esri.ie/ http://www.esri.ie/pdf/WP0163%20Living%20in%20Ireland%20Survey.pdf http://www.lisproject.org/techdoc/ie/ie00survey.pdf	http://www.lisdatacenter.org/our-data/lis-database/by-country/ireland-2/

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

2.1. Income

2.1.1 Time series of Gini coefficients and other inequality indicators

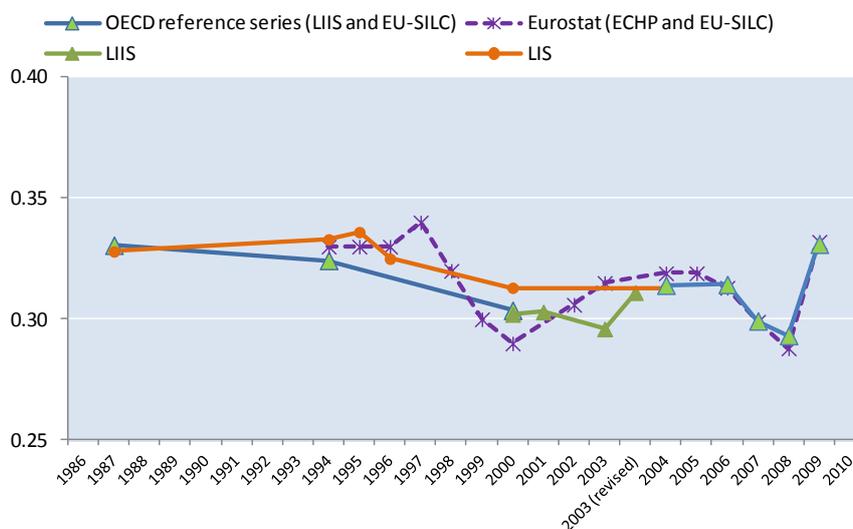
It should be noted that the OECD considers the time series pre- and post EU-SILC for Ireland not comparable. In the different OECD publications (Growing Unequal, Displaced worker Survey, Divided We Stand), the trends are shown from 1987 through 2000, and from 2004 through 2008. 2004 is considered as “break” year. This Data Review is adopting the same approach.

The different series on Gini coefficients for disposal income in Ireland are broadly similar and are showing similar trends. According to the OECD series, Gini coefficients decreased between 1987 and 2000. They also decreased between 2004 and 2008, before a large surge in 2009.

Up to 2004, OECD data can be compared with Eurostat, and with the *Luxembourg Income Survey*. The *Luxembourg Income Survey* was presenting very similar results than the OECD from 1987 to 2004. In addition, even if very few points of reference were found in the *Living in Ireland Survey*, they show levels in the order of magnitude of the OECD data. Please note that the *Living in Ireland Survey* was compiling two different Gini coefficients in 2003 as the methodology of calculation had changed to comply with EU regulation. Concerning Eurostat, its line tends to amplify the moves on Gini coefficients compared to other survey data. In 1997, income inequalities reached a peak with a Gini coefficient of 0.34 before recording a sharp decline down to 0.29 in 2000. Such a big variation is not mentioned with OECD figures which are recording a regular decline from 1994 to 2000, reaching a level at 0.304 in 2000.

From 2004 onwards, the OECD Gini coefficients can be compared with Eurostat. Eurostat series confirms the declining trend as Gini coefficients went down from 0.32 in 2003 to 0.29 in 2008. There were minor variations on these coefficients between the OECD and EU-SILC /Eurostat survey over this period. From 2008 to 2009, the two datasets are recording a sharp increase of inequalities up to 0.331.

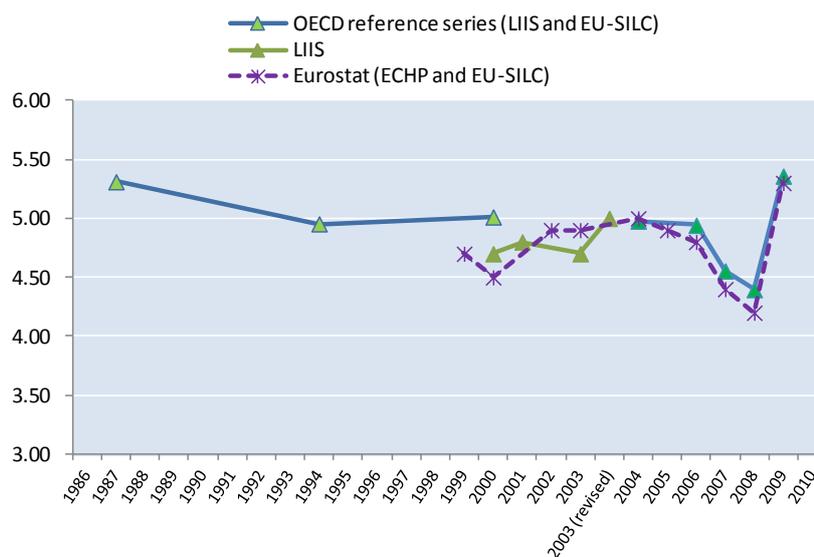
Figure 20. Trends in Gini coefficients, Ireland (1987 – 2010)



The series on the S80/S20 income share ratio are following the same trend than the Gini coefficients after 2004. However, for the years 1994 to 2000, they suggest stability, rather than a decrease.

Please, note that as mentioned previously for the Gini coefficients, the *Living in Ireland Survey* is compiling two slightly different income inequality ratios in 2003 as the methodology of calculation has changed to comply with EU regulation.

Figure 2. Trends in S80/S20, Ireland (1987 – 2010)



From 2004 onwards, the OECD time series are very similar with the ones provided by Eurostat. According to Eurostat series, this ratio remained broadly unchanged before that date, from 1994 to 2004. From 2004 onwards, there was a decreasing trend in the quintile share ratio from 5.0 in 2003/2004 down to 4.3 in 2008. The latest results published by *EU-SILC* (2010 year survey) showed a significant increase of this ratio: the average income of those in the highest income quintile was 5.5 times that of those in the lowest quintile in 2009. The same ratio was 4.3 one year earlier thus signifying greater inequality in the income distribution in 2009. The results calculated by Eurostat are recording the same trend: the ratio increased from 4.2 in 2008 up to 5.3 in 2009. Finally, for 2009, the OECD time series also pointed out an increase of the S80/S20 ratio up to 5.358.

From 2008 to 2009, the two datasets are recording a sharp increase of inequalities, according to both inequality indicators. While national and international observers agree on the plausibility of an increase in inequality, there have been some doubts expressed as to the magnitude of this increase (plus 4.4 points in Gini, plus 1 point in S80/S20 share ratio). One issue may be concern that the sample for the 2009 income data over-represents the better-educated compared with 2008.

2.1.2 Time series of poverty rates, poverty composition

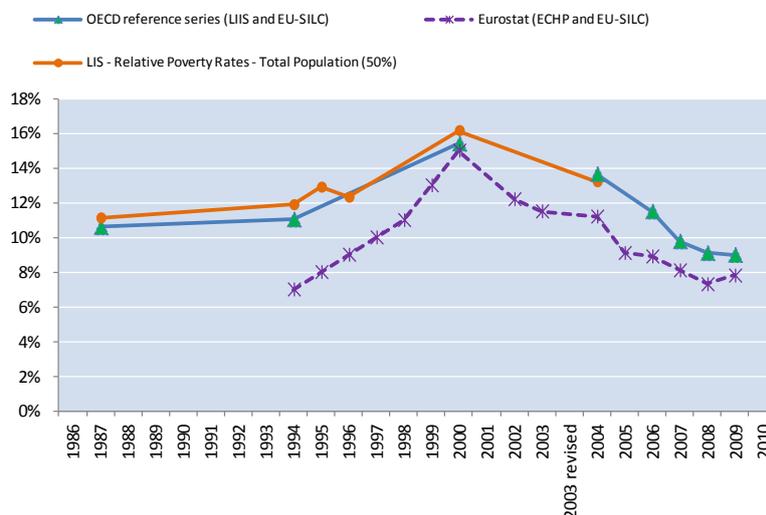
The analysis of the OECD time series on poverty rates is showing an increase in poverty rates from 1987 to 2000 (especially between 1994 and 2000), where a peak is recorded for all databases, and a regular decrease between 2004 and 2009. This can be confirmed by analyzing poverty rates with a 50% threshold of median income and with a 60% threshold of median income.

According to the OECD reference survey, the share of the Irish population living with less than 50% of the median equivalised income increased from 10.6% in 1987 to 15.4 % in 2000. This rate is estimated at 9% in 2009. The *Luxembourg Income Survey* is presenting very similar rates and shares the same patterns up to 2004 (latest year in LIS database).

The Eurostat figures are also showing a similar trend. The share of the Irish population living with less than 50% of the median equivalised income increased from 7% in 1994 to 15% in 2000. Note that for year 1994, the poverty rate as recorded by Eurostat was significantly lower than the OECD one with poverty rates, respectively estimated at 7% (Eurostat) and at 11% (OECD). After the 2000's peak when OECD and Eurostat were recording the same levels, Eurostat had constantly recorded lower poverty rates than the OECD. There was a difference of about 2 points in the years 2005 to 2008.

From 2008 to 2009, Eurostat reported that there was a slight increase of poverty rates (from 7.30% to 7.80%) whereas the OECD recorded a slight decrease on the same indicator (from 9.10% to 8.99%). This divergence of results led to a reduction of spread between Eurostat and OECD on this indicator.

Figure 21. Trends in Poverty rates, 50% threshold, after taxes and transfers, Ireland (1987 – 2010)



The analysis of poverty rates with a 60% threshold is presenting similar features: an increase from 1987 to 2000, then a regular decline from 2004 up to 2008. However, figures from 2008 to 2009 are showing an increase in the rates of poverty according to Eurostat whereas the OECD is confirming a declining trend.

From 1987 to 2000, and according to the OECD time series, the share of the Irish population living with less than 60% of the median equivalised income increased from 19.51% in 1987 to 23.30% in 2000. These rates were very similar to the *Luxembourg Income Survey* ones which recorded a rise from 19.99% to 22.49%. In 2000, the *Living in Ireland Survey* calculated a poverty rate estimated at 20.90% which was relative close to the OECD rates. Eurostat also compiled similar poverty rates. According to Eurostat dataset, poverty rates with a 60% threshold remained broadly unchanged from 1994 to 1999 with a 19% rate before recording an increase of 2% points in 2000.

Please, note from 1995 to 2009, the OECD rates were higher than the ones published by Eurostat. Indeed, from 1995 to 2009, Eurostat published constantly lower poverty rates at a 60% poverty line (with

an approximate spread of 1.5 percentage points) compared to the OECD ones. The recent 2009 results enabled to reduce this spread between OECD and *Eurostat/EU-SILC*.

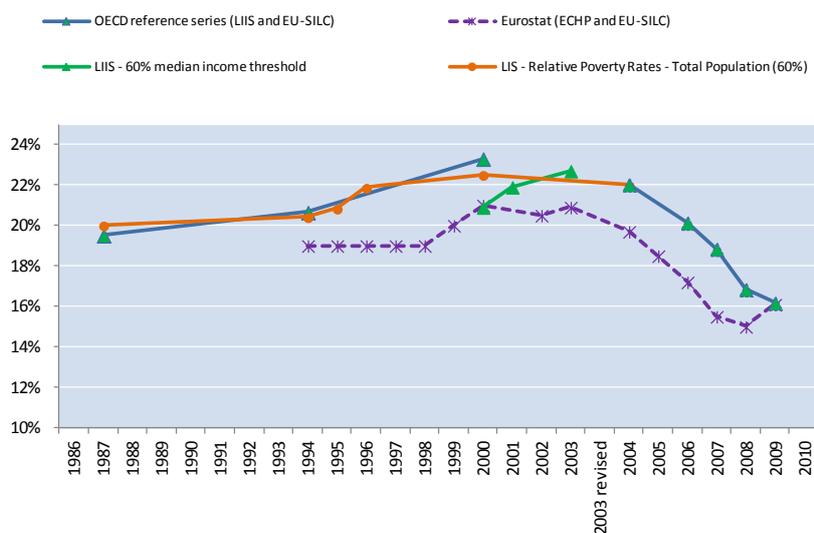
According to Eurostat, the share of the Irish population living with less than 60% of the median equivalised income increased from 2008 to 2009 to reach 16.10%. The 2009 increase did not show up in the OECD time-series which recorded a decrease between 2008 and 2009 (16.85% to 16.18%), following the declining trend from 2000.

Please note that the *Living in Ireland Survey in 2000* published several figures on poverty rates (ie, Percentage of persons below median relative income poverty lines (based on income averaged across individuals) according to different equivalence scales.

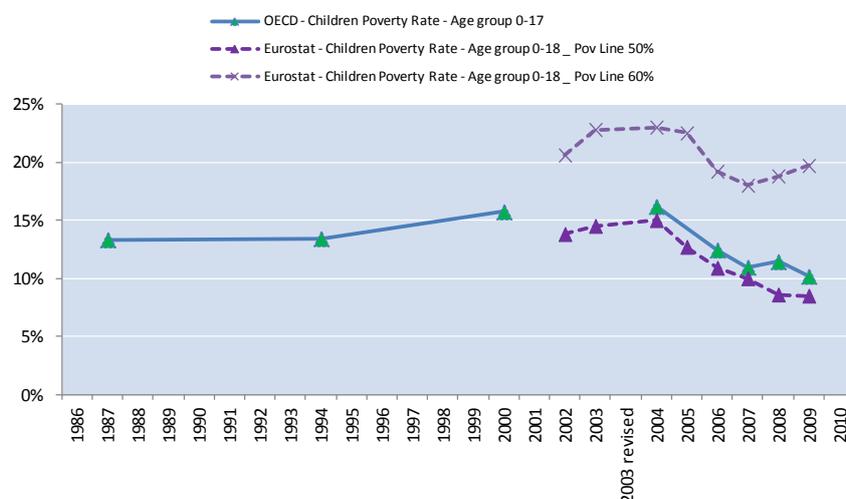
- Equivalence Scale A: 1 for the first adult, 0.66 for each other adult and 0.33 for each child;
- Equivalence Scale B: 1 for the first adult, 0.6 for each other adult and 0.4 for each child;
- Equivalence Scale C : 1 for the first adult, 0.7 for each other adult and 0.5 for each child.

The official figures which are published for Ireland and are also shown in this report are based on Scale A. This scale is slightly different from the one for the OECD and may help explain the fact that inequalities are larger according to the OECD time series.

Figure 22. Trends in Poverty rates, 60% threshold, after taxes and transfers, Ireland (1987 – 2010)



Children are the most vulnerable and affected by poverty in Ireland. According to the EU-SILC 2010 results (for the income year 2009), and using a threshold of 60% of the median, almost one in five children were at risk of poverty in 2009 compared with almost one in ten of the elderly population.

Figure 23. Trends in child poverty rates, after taxes and transfers, Ireland (1987 – 2010)

The OECD figures on poverty rate are calculated with a 50% median income threshold and were very similar to the Eurostat ones since 2004. However, for the year 2008, the OECD and Eurostat presented more diverging results with a difference of 2.8 percentage points: 8.6% for Eurostat versus 11.4% for the OECD. In 2009, OECD recorded a larger decrease than Eurostat : children poverty rate was estimated at 10.2% for the OECD versus 8.50% for Eurostat. Please, note that for the period before and after 2004, the OECD considers figures as not comparable.

2.2. Wages

See Part II of the present Quality Review.

3. Consistency of income components shares with alternative data sources

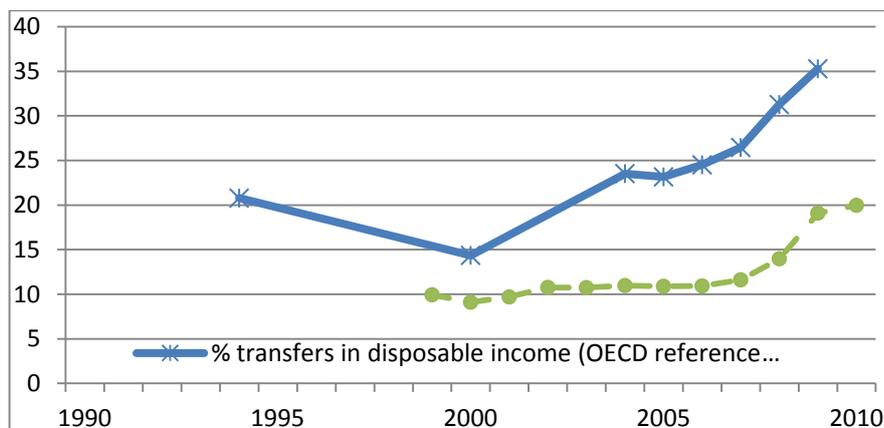
3.1. Comparison of main aggregates: earnings, self-employment income, capital income, transfers and direct taxes

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

				Average income			Average income	K	SE	TR	TA	HDI
Survey	Year	Unit	EH	ES	EO	Wages	Capital	Self Employment	Transfers	Taxes	Disposable income (HDI)	
OECD reference survey	2009	natcur	12600	6335	3	18937	468	2875	9336	-5120	26496	
		% av HDI	47.6%			71.5%	1.8%	10.8%	35.2%	-19.3%		

Figure 6 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 pretty similar trends throughout the period.

Figure 6 Trends in shares of public social transfers

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

OECD reference series match with the other data sources available for income inequalities and poverty rates with a few exceptions:

- For Gini coefficients, Eurostat tends to amplify the move with a larger sensibility both to upward and downward trends than the OECD time-series;
- For poverty rates to 50% and to 60% income thresholds, *Eurostat/EU-SILC* recorded lower levels of poverty rates than the OECD ones for all the period under consideration. On one hand, all the poverty rates with a poverty line of 50% reached the same levels in 2000 while being slightly different before and after (OECD compiling higher levels than *Eurostat/EU-SILC*). On the other hand, considering a poverty line of 60%, the OECD recorded higher rates than *Eurostat/EU-SILC* over all the period under consideration.
- The Eurostat/EU-SILC results presented an increase of poverty rates from 2008 to 2009, reversing the previous declining trend, whereas the OECD continued to record a slight decrease of poverty rates in 2009.

5. Summary evaluation

There is a nearly perfect accordance between the OECD time-series and the other data sources for income inequalities (Gini and S80/S20). Somewhat more divergences can be recorded concerning poverty rates. However, the last results from 2009 led to a reduction of spread between different datasets.

There remain two issues for further clarification:

- Recent results of all databases for the income year 2009 suggest a very sharp increase of income inequality. Careful verification is needed as to the magnitude of this increase (plus 4.4 points in Gini, plus 1 point in S80/S20 share ratio, in one year). There might be an issue of change in the sample design (see above).
- Second, there may be an issue with the estimates for pre-tax and transfers incomes. While, according to the LIIS database (2000), the difference between pre- and post tax/transfer inequality matched the OECD average, the results based on EU-SILC (2004, 2008) suggest a huge redistributive effect of taxes and transfers, higher than in any other OECD country (table 3). As

such changes are very significant and not being confirmed by national studies, OECD is, for the time being, not publishing the pre-tax/transfer inequality estimates. This issue, nevertheless, merits rapid clarification.

Table 3. Estimates of pre- and post-tax/transfer Gini coefficients, total population

	2000	2004	2008
Gini of disposable income	0.304	0.314	0.293
Gini before taxes and transfers	0.434	0.504	0.537
Redistribution (%)	30%	38%	45%