

ANNEX 1.A1

OECD Data on Income Distribution: Key Features

Comparable data on the distribution of household income provide both a point of reference for judging the performance of any country and an opportunity to assess the role of common drivers as well as drivers that are country-specific. They also allow governments to draw on the experience of different countries in order to learn “what works best” in narrowing income disparities and poverty. But achieving comparability in this field is also difficult, as national practices differ widely in terms of concepts, measures, and statistical sources.¹ The OECD has a long association with research on the distribution of household income, which this report pursues based on a new set of data.² The data are collected through a network of national experts, who apply common conventions and definitions to unit record data from different national data sources and supply detailed cross-tabulations to the OECD (Table 1.A1.1 provides country details on the statistical sources used). This method of data collection allows covering a broader range of OECD countries (30, in the present volume), based on information that is both more up-to-date relative to that available through other statistical sources and better suited for assessing changes in income distribution over time. Its disadvantage is that it does not allow accessing the original micro-data, which constrains the analysis that can be performed. For this reason, data from the OECD income distribution questionnaire presented in this report are complemented, when needed, by results based on micro-records of the *Luxembourg Income Study* project (www.lisproject.org).

The data on income distribution presented in this volume have three key features:

- *First*, they refer to cash income – excluding imputed components such as home production and imputed rents – regularly received over the year. Data refer to disposable (i.e. after tax) income and its components: earnings (broken down into those of the household head, of the spouse and of other household members); self-employment income; capital income (rents, dividends and interest); public transfers; and household taxes. Information is presented for various breakdowns: by age of the individual, age of the household head (below and above 65), presence of children (persons aged below 18), presence of other adults, and work status of household members.
- *Second*, the analysis refers to the distribution among individuals, while keeping the household as the unit within which income sources are pooled and equally shared. This implies that the income of the household is attributed to each of its members, irrespectively of who in the household receives that income. The income attributed to each person is “adjusted” for household size based on a common but arbitrary equivalence elasticity (the square root of household size) that does not distinguish

between adults and children and which implies that a household's economic needs increase less than proportionally with its size.³

- *Third*, data for most countries are drawn from household surveys, but in the case of several Nordic countries they come from comprehensive population registers integrated with survey data. The use of household surveys implies that data are affected by various sampling and non-sampling errors, whose importance can vary from country to country. It also implies that the data exclude some people at the bottom of the income distribution, such as those without a regular address (e.g. homeless), irregular residents and people living in institutions. Survey results may also be affected by under-reporting, which may be especially significant at the top and bottom of the distribution.

The data used in this paper, however, differ in certain aspects that escape “standardisation”, and this may affect cross-country comparisons. Some of these features include the following:

- *Differences in the definition of households.* For most countries, a household refers to a group of people living in the same dwelling, but, in some others, having a common provision for essential items is an additional requirement. Countries using more restrictive definitions of households will feature lower household size and equivalised income (and higher poverty rates) relative to other countries. In Sweden until the mid-1990s, children above a given age were considered as a separate household, even if living in their parents' home, and special adjustments (described below) have been used to account for this change in the definition of households.
- *Period over which income is assessed.* Income refers to what is earned in the year preceding the interview, with most countries referring to the previous calendar year, while a few refer to the 12 months preceding the interview. In some countries, however, income or some of its components are assessed over a shorter reference period and then converted to an annual basis.⁴ Countries using shorter reference periods will generally display greater income volatility and are more likely to record periods of temporary income shortfalls.
- *Availability of tax data.* All income components are reported before deduction of direct and payroll taxes (social security contributions) paid by households, but there are some exceptions.⁵ Even for countries where household taxes are separately identified, there may be differences in the way these are computed, with some countries relying on self-reported data (e.g. Japan), others on tax records (e.g. Denmark and several other Nordic countries), and others on values “imputed” through microsimulation models applied to individual records (e.g. Italy, New Zealand, the United States). In the case of estimates based on micro-simulation models, differences in the details and assumptions used (e.g. with respect to tax evasion) may affect the comparability of results.
- *Temporal consistency of the data.* When statistical breaks occur – due to changes in survey methods (Japan in 1995, the Netherlands in 2000), income or household definitions (Italy in 1995, Sweden in 1985), or adoption of different surveys (Belgium, Canada and Spain in 1995; the United Kingdom in 2001) – data are collected on both the “old” and “new” bases so as to allow chain-linking various indicators. However, with the introduction of EU-SILC in 2004, several European countries (Austria, Belgium, the Czech Republic, Ireland, Portugal, Poland and Spain) discontinued the surveys used in this paper for previous years: for these countries, data for the mid-2000s are therefore not comparable with those for earlier years.

Table 1.A1.1. National sources and data adjustments

	Source	Income year	Period over which income is assessed	Sample size and response rate in most recent year	Definition of household and household head	Recorded income	Other data features
Australia	<i>Survey of income and housing</i>	1994/1995, 1999/2000, 2003/2004 June to June	<ul style="list-style-type: none"> • Current weekly income times 52.14 • Usual income in last payment period for earnings and public transfers • Payment period is previous week, fortnight or month for wages, normally fortnight for benefits) 	About 11 000 households and 78% response rate	<ul style="list-style-type: none"> • One or more persons usually resident in the same private dwelling • Household reference chosen by applying to all household members aged 15 years and over different selection criteria • Change in definition of household head in 2003/04 	• Regular and recurring cash receipts	<ul style="list-style-type: none"> • Changes to improve survey quality in 2003-04 may impact on the comparability with earlier data • Capital and self-employment income imputed from previous year for 1994-95 and 1999-2000, based on self-assessment of expected gross income for 2003/04
Austria	<i>Micro census</i> <i>EU survey of income and living conditions</i>	1983, 1993, 1999 2004		67% for income questions		Monthly averages Income data exclude capital and self-employment incomes (if the self-employed person is the household head)	<ul style="list-style-type: none"> • 2004 data not comparable with data for previous years • No data on taxes for all years (<i>i.e.</i> all data for income components recorded net of income and payroll taxes) • Data on income components refer to individuals, with imputation for non-response in 1993 and 1999
Belgium	<i>Tax records</i> <i>European Community household panel</i> <i>EU survey of income and living conditions</i>	1985, 1995 1995, 2000 2004					<ul style="list-style-type: none"> • 2004 data not comparable with data for previous years • Change in source in 2000 (dealt through splicing) • No data on taxes before 2004
Canada	<i>Survey of consumer finances</i> <i>Survey of labour and income dynamics</i>	1975, 1985, 1995 1995, 2000, 2005	Income over calendar year	About 30 000 households and 85% response rate	A person, or group of persons, residing in a dwelling	Market income and government benefits, net of income taxes	<ul style="list-style-type: none"> • Change in source in 2000 (dealt through splicing) • Income items which were coded as non-response in SLID were set to zero • Amounts received through some government transfers derived from other sources. Survey data on taxes are complete and do not require imputation
Czech Republic	<i>Micro census</i> <i>EU survey of income and living conditions</i>	1992, 1996, 2002 2004		About 38 000 dwellings and 76% response rate	Private households	Annual disposable income in each year	<ul style="list-style-type: none"> • Taxes exclude social security contributions • No data on taxes for 1992 • No imputation, no negative incomes
Denmark	<i>Danish law model system</i>	1983, 1994, 2000, 2005	Annual income	About 170 000 persons. For all these persons, income data are based on registers	Couples include both married and cohabitating partners. Children above 17 living at home are considered as separate households	Disposable income net of personal taxes and contributions to private pension schemes	<ul style="list-style-type: none"> • Data based on several tax and benefits registers • Negative incomes set to zero • Private pensions included in capital income

Table 1.A1.1. National sources and data adjustments (cont.)

	Source	Income year	Period over which income is assessed	Sample size and response rate in most recent year	Definition of household and household head	Recorded income	Other data features
Finland	<i>Household budget survey</i>	1976		Around 13 000 households and 75% response rate	Persons living in private households		
	<i>Income distribution survey</i>	1986, 1995, 2000, 2004					
France	<i>Enquête revenus fiscaux</i>	1984, 1989, 1994, 2000, 2005	Annual income in the 12 months preceding the survey (March to March)	Around 10 000 households and 70% response rate	Persons living in the same housing unit	Values for individual income components are aggregated into total income	• Data from EU-SILC are used for cross-country comparison in mid-2000s; those from ERF for assessing trends
	<i>EU survey of income and living conditions</i>	2004	Annual income				
Germany	<i>German Socio Economic Panel</i>	1985, 1990, 1995 (old <i>länder</i>) 1995, 2000, 2004 (all <i>länder</i>)	Annual income in the year preceding the survey	Around 13 000 households, initial response rate over 50%, cross-sectional response rate over 95%	People living together and sharing their income	Self-employment income is included in "earnings", occupational pensions in "current transfers", private pensions in "capital income"	• Income below the social minimum of DM 5 000 per year is excluded • Taxes and social-security contributions paid by workers imputed from micro-simulation models • Only standard tax deductions considered by the micro-simulation model used to generate tax data
Greece	<i>Household budget survey</i>	1974, 1988, 1994, 1999, 2004		84%	Private households	All incomes in cash, net of taxes and social insurance contributions	• No data on taxes for all years • Households not providing income information excluded from the sample
Hungary	<i>Hungarian household panel</i>	1991, 1995	From April of the year in question to following March	About 2 000 households and 67% response rate	Persons living together and sharing living expenses	Incomes in cash, net of taxes and social insurance contributions	• No data on taxes for all years
	<i>Household monitor survey</i>	2000, 2005	May 2000-April 2001; October 2004-September 2005	About 2 000 households and 49% response rate			• No negative incomes. Missing incomes excluded in 1991, partly replaced by imputed values in subsequent years
Iceland	<i>EU survey of income and living conditions</i>	2004	Annual income in the year preceding the interview	About 3 000 households	Private households	Income excluding non-monetary components	
Ireland	<i>Living in Ireland survey</i>	1987, 1994, 2000	Current weekly income	About 3 500 households and 69% response rate	• Persons living together, sharing budget and meeting at least once per week for meals	Income excluding non-monetary components	• 2005 data not comparable with data for previous years
	<i>EU survey of income and living conditions</i>	2005	Annual income in the year preceding the interview; continuous survey	About 6 000 households and 72% response rate	• Persons temporarily absent and living in collective households included		
Italy	<i>ITAXMOD95 MASTRICT (microsimulation models based on Bank of Italy survey of household income and wealth)</i>	1984, 1991, 1993 1995, 2000, 2004	Annual income in the preceding calendar year	About 8 000 households and 36% response rate	• Persons living in the same dwelling and contributing part of their income to the household	Income excluding irregular and non-monetary components	• Income and payroll taxes estimated through microsimulation models • Break in series between 1993 and 1995 (due to change in model and income definition) dealt through splicing • Since 1995 data include income from financial assets and (imputed values of) family cash benefits (<i>assegni familiari</i>)

Table 1.A1.1. National sources and data adjustments (cont.)

	Source	Income year	Period over which income is assessed	Sample size and response rate in most recent year	Definition of household and household head	Recorded income	Other data features
Japan	<i>Comprehensive survey of living condition of the people on health and welfare</i>	1985, 1995, 2000, 2003	Annual income in the year preceding the survey	About 25 000 households and 70% response rate	Persons sharing the same housing unit and livelihood Data exclude households headed by a person aged less than 17, and all individuals whose age is not recorded	All income items as reported in the survey	<ul style="list-style-type: none"> • Break in series in 1995 (persons with income 3 times larger than the standard deviation were excluded before that date) dealt through splicing
Korea	<i>Household income and expenditure survey (combined with farm household economy survey)</i>	2006	Monthly income times 12	About 14 500 households and 83% response rate	Persons sharing the same house and having a common budget Students living away from parental home counted as separate households Data on farm households (not covered by the HIES) based on Farm Household Economy Survey	Gross income All income items as reported in the survey	<ul style="list-style-type: none"> • Household data from the HIES and FHES integrated into a single file • All labour incomes of farm households classified as self-employment income • Data on self-employment income refer to withdrawals made by the self-employed from (net) enterprise income
Luxembourg	<i>Panel socio-economique Liewen zu Lëtzebuerg</i>	1986/87, 1996, 2001, 2004	Annual income	About 2 300 households and 57% response rate		All types of incomes in cash, net of taxes and social insurance contributions	Include all private households in which at least one person belongs to national social security system (around 97% of the population). Negative incomes set to zero
Mexico	<i>Survey of household income and expenditure</i>	1984, 1994, 2000, 2004	Income in the 3rd quarter of each year	About 20 000 households and 85% response rate	Persons normally sharing a housing unit and having common expenditure for food	Quarterly cash income net of direct taxes and soc. security contributions Income items as reported in the survey	<ul style="list-style-type: none"> • No data on taxes for all years (<i>i.e.</i> all data for income components recorded net of income and payroll taxes) • Private pensions (not separately identified) included in public transfers
Netherlands	<i>Income panel survey</i>	1977, 1985, 1990, 1995, 2000, 2004	Annual income in reference year	About 82 000 households and 100% response rate (register data)	<ul style="list-style-type: none"> • Persons living at the same dwelling and with common provisions for food and other essentials of living • Person with self-employed income, or with the higher income, or the eldest person (change in definition since 2004) 	Gross annual income Taxes calculated on income in reference year	<ul style="list-style-type: none"> • Register data with imputation in case of incomplete information • Change in survey weighting and design in 2000 (deal through splicing)
New Zealand	<i>Household economic survey</i>	1986, 1991, 1996, 2001, 2004	April to March in 1986, 1991 and 1996 June to June in 2001 and 2004	About 2 800 households and 73% response rate	Persons sharing a private house and normally spending 4 or more nights a week in it	All receipts received regularly or of a recurring nature	<ul style="list-style-type: none"> • Income and payroll taxes imputed through microsimulation models • Missing incomes are treated as zeros
Norway	<i>Income distribution survey</i>	1986, 1995, 2000, 2004	Calendar year	About 13 000 households and 75% response rate	All individuals in the same dwelling having common housekeeping	Annual disposable income. All income data collected from registers	<ul style="list-style-type: none"> • Survey non-respondents included in sample through register data • Breakdown of earnings (into those of heads, spouse and others) not available

Table 1.A1.1. National sources and data adjustments (cont.)

	Source	Income year	Period over which income is assessed	Sample size and response rate in most recent year	Definition of household and household head	Recorded income	Other data features
Poland	<i>Household budget survey</i> <i>EU survey of income and living conditions</i>	2004, 2000	Monthly income times 12	About 36 000 households and 55% response rate before substitution	Persons having a common budget for essential items	Annual disposable income	<ul style="list-style-type: none"> • 2004 data not comparable with earlier year • No tax data in 2000 (<i>i.e.</i> all income components recorded net of taxes) • Negative income values set to zero
Portugal	<i>Household budget survey</i> <i>EU survey of income and living conditions</i>	1980, 1990, 1995, 2000, 2004	Income in the year preceding the interview	About 10 000 households and response rate close to 100% in all years	Persons living in the same dwelling	Gross income, excluding all non-monetary components	<ul style="list-style-type: none"> • 2004 data not comparable with previous years • Data on taxes not available in 2004
Slovak Republic	<i>EU survey of income and living conditions</i>	2004	Income in previous year	6 016 households and 85.6% response rate	Persons in private dwellings who share basic household costs	Annual disposable income	<ul style="list-style-type: none"> • Deterministic group mean imputation for missing values • Negative income values set at zero
Spain	<i>Continuous survey of household budgets</i> <i>European community household panel</i> <i>EU survey of income and living conditions</i>	1985, 1990, 1995 1995, 2000 2004	Income in the 2nd quarter of each year	About 3 200 households and 90% response rate in 1995	Persons sharing a common budget	Quarterly disposable income	<ul style="list-style-type: none"> • 2004 data not comparable with those for previous years • Change in source in 2000 (dealt through splicing) • No data on taxes in all years • Values of other income components recorded net of taxes
Sweden	<i>Income distribution survey</i>	1975, 1983, 1991, 1995, 2000, 2004	Calendar year	About 14 500 households and 75% response rate Data from tax registers integrated with survey data	All individuals living together and sharing household resources	Annual disposable income. All income data collected from tax records	<ul style="list-style-type: none"> • No missing incomes, negative incomes included, households with negative disposable incomes deleted • Changes in the household definition in 1995 (dealt through splicing)
Switzerland	<i>Income and consumption survey</i>	2000-2001, 2004-2005	Monthly (converted into an annual basis)	About 7 000 households and 30% response rate	Persons living in the same dwelling and sharing part of their budget	Monthly gross and net income	<ul style="list-style-type: none"> • No negative incomes, missing incomes (about 1%) imputed • Data refer to averages of two consecutive years
Turkey	<i>Household income and consumption survey</i>	1984, 1994, 2004		About 8 600	People living in the same house, sharing expenditures and participating in household management and services		<ul style="list-style-type: none"> • No data on taxes for all years (<i>i.e.</i> all data for income components recorded net of income and payroll taxes) • Change in survey weighting in 1994 (dealt through splicing)
United Kingdom	<i>Family expenditure survey</i> <i>Family resources survey</i>	1975, 1985, 1991, 1995, 2000, 2004, 2004	Income at the time of the interview for most items (over the previous 12 months for capital and self-employment income)	About 10 000 households and 60% response rate	Persons living in the same dwelling	Weekly gross income	<ul style="list-style-type: none"> • Data from FRS used for cross-country comparison in mid-2000s; data from FES for assessing trends • Change in source in 2000 (dealt through splicing) • Missing values excluded, negative values included
United States	<i>Annual social and economic supplement to the current population survey</i>	1974, 1984, 1995, 2000, 2005	Year preceding the March interview	About 50 000 households and 95% response rate	Persons occupying a housing unit	Gross annual income	<ul style="list-style-type: none"> • Tabulations based on Census Bureau internal files • Model-based estimates of taxes paid and in-kind public benefits added to survey data of gross annual income • Negative income allowed when below \$10

Notes

1. The most important differences are the income concept and unit of analysis used: most European research has traditionally looked at the distribution of disposable income (i.e. after taxes and transfers) among individuals, while keeping the household (and more rarely the family) as the unit within which income is pooled and shared among its members; conversely, most analyses in the United States have focused on the distribution of pre-tax income among families (and, more rarely, households). For a detailed description of methodological features affecting income distribution statistics, see the report of the Expert Group on Household Income Statistics (2001).
2. The first milestone in OECD work on income distribution is represented by Sawyer (1976) who, in an article for *OECD Economic Outlook*, reviewed the performance of 12 OECD countries in the late 1960s and early 1970s based on the measures that were most commonly used in each country. A second milestone is represented by Atkinson, Rainwater and Smeeding (1995), who presented results referring to 12 OECD countries in the second half of the 1980s based on unit-record data from the *Luxembourg Income Study* (LIS) database, a standardised data environment that allows analysts to apply common definitions to micro records from different national surveys. A third phase began with the regular data collection undertaken by the OECD (at around five-year intervals) through a network of national consultants. The data in the present wave, covering a year as close as possible to 2005, also include revisions (for some countries) relative to the data used by Förster and Mira d'Ercole (2005).
3. The “square root elasticity” implies that the needs of a household composed of four people are twice as large as those of a single (1.4 and 1.7 times those of a single in the case of a childless couple and of a couple with one child). For further details, see www.oecd.org/dataoecd/61/52/35411111.pdf.
4. This is the case of Australia and the United Kingdom (where earnings data refer to the week), Austria (where data before the mid-2000s relate to monthly income) and Spain (where data until mid-1995 relate to quarterly income).
5. Data on household taxes are not available for Austria, Luxembourg and Poland (except in the mid-2000s), Greece, Hungary, Mexico, Poland, Spain and Turkey. In all these cases, data on individual components of household income are recorded on a “net” (i.e. post-tax) basis.