

CONFERENCE OF EUROPEAN STATISTICIANS

For discussion

Second Meeting of the 2007/2008 Bureau
Helsinki (Finland), 18-19 October 2007

Item 2a of the Provisional
Agenda

**STATISTICS ON INCOME DISTRIBUTION, POVERTY AND LIVING CONDITIONS:
RESEARCH PRIORITIES FROM AN OECD PERSPECTIVE**

Note prepared by OECD

INTRODUCTION

1. Statistics on income and living conditions have always played an important role in informing policy discussions. This role is becoming even more critical today as governments in all OECD countries are called upon to confront the possible consequences of "globalization" in widening the gap of economic resources between different groups of people in each country.¹ A strong demand for better statistical information in this field also comes from civil society and the associative world, who often perceive available statistics on income, poverty and living conditions as providing only a partial measure of the growing distress which they confront in their daily activities. Both types of demands – from policy makers and civil society – are increasing the pressure on statistical offices and international organisations to deliver data that are more relevant, comprehensive and timely. Such demand is reflected in the initiatives taken by some OECD countries (e.g. France) to identify the main gaps in the statistical system in this field and to take steps to improve data quality (Freyssinet *et al.*, 2007).

2. This note draws on the experience of the OECD Secretariat with statistics on household income, poverty and living conditions to highlight some of the critical areas where a coordinated initiative by national statistical offices could improve data comparability and allow addressing new policy demands. Data comparability in this area is important, as policy responses will differ if changes in income distribution are country-specific or general across countries, and as governments may learn about "what work best" in reducing poverty of particular groups from the experience of other countries. The note outlines the main phases of the OECD work in this field and identifies some areas where significant progress could be achieved.

**OECD EXPERIENCE WITH COMPARATIVE STATISTICS ON INCOME,
POVERTY AND LIVING CONDITIONS**

3. The OECD has a long association with research on the distribution of household income. This association dates back to the mid-1970s, when the Organisation released its first report comparing countries' performance in terms of income inequality and poverty (Sawyer, 1976). This report relied on the measures most commonly used in each country to compare

¹ This was highlighted, *inter alia*, by the recent discussion by OECD Ministers at the last Council meeting on "globalisation and equity".

trends across 12 OECD countries in the mid-1960s and early 1970s. While the data used were unsuited to compare *levels* of inequality across countries, even the assessment of *changes* turned out to be problematic, as differences in the definitions used in various countries implied that different factors impacted on the evolution of these measures.

4. The major breakthrough in OECD work on income distribution and poverty came in the mid-1990s. The report prepared by Atkinson, Rainwater and Smeeding (1995) presented results for 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 data from different national household surveys. The report was a landmark for the OECD, as it established that solid comparative analysis could be conducted based on LIS. However, the discussion of the report with country delegates also highlighted some problematic aspects. First, coverage of LIS exclude countries (such as Japan) whose statistical laws or practices limit (or forbid) the access to micro-records by international researchers. Second, LIS data are not frequently updated. Third, the LIS data are not always well suited to analyse trends in income distributions over time, in the presence of changes in statistical sources or survey design. Finally, national authorities may face difficulties in validating LIS data and results following the conversion of national data into the framework used by LIS.

5. To overcome these limits, the OECD has undertaken since 1996 its own data collection. The OECD data on the distribution of household income are collected every 5 years through a network of national consultants who apply common conventions (e.g. on the treatment of negative income) and definitions (e.g. on the classification of income sources) to unit record data from national data sources and supply detailed cross-tabulations to the OECD. The OECD has undertaken three waves of data collection (with the latest results referring to 2000 described in Förster and Mira d'Ercole, 2005) and is currently completing the fourth one. The main features of these data is that they refer to *disposable income and its components in cash* (i.e. excluding imputed items such as rental income of home owners) and to the distribution among *people* living in private households, based on an arbitrary but commonly used equivalence scale – the square root of household members – to adjust household needs for differences in household size. The advantage of this method of data collection is that it allows covering a broader range of OECD countries (all, in the ongoing wave) than LIS, based on information that is both more up-to-date and better suited for assessing changes in income distribution over time.² The disadvantage is that it does not allow accessing the original micro-data, which constrains the analysis that can be performed.

6. The widespread use of the LIS classification and approach make LIS an exceptionally valuable resource for the international research community. The OECD – and indeed all other international bodies involved in income distribution analysis – works very closely with LIS experts in order to understand discrepancies in results from different projects and improve data quality and coherence of both collections. Another milestone for more comparable statistics on income, poverty and living conditions is the implementation of EU-SILC (the

² This is achieved by linking data or indicators from different surveys for the same year (e.g. following the shift from the *Survey of Consumer Finances* to the *Survey of Labour and Income Dynamics* in Canada in 1995, the changes in households definitions in the Swedish *Income Distribution Survey* in 1985, and the new population benchmarks used in the Dutch survey since 2000. OECD data, however, will also be affected by statistical breaks following the introduction of EU-SILC and the discontinuation of previous surveys in several European countries (Austria, Belgium, the Czech Republic, Ireland, Spain, Poland and Portugal).

European Community's Statistics on Income and Living Conditions) since 2004. EU-SILC – which currently covers all 27 EU member states plus Iceland, Norway, Switzerland and Turkey – relies on a common “framework”³ rather than on a common “survey”, as was the case with its predecessor – the *European Community Household Panel*. This allows better linking international and national statistics, provides for greater flexibility in country practices – for example, in terms of integrating different surveys and administrative registers⁴ – and allows delivering more timely data.

AREAS FOR IMPROVEMENTS

7. Because of its international perspective, much of the OECD interest is in informing policy discussions through comparisons of countries performance. Comparable data on income, poverty and living conditions play a critical role for such discussions: they provide a point of reference for judging the performance of any country and an opportunity to assess the role of common drivers and country-specific conditions. But achieving comparability in this field is difficult, as statistical practices differ widely across countries in terms of concepts, measures, and statistical sources.⁵ While significant progress has been achieved over the past few decades through the adoption of common measures and statistical conventions that closely follow the recommendations of the Canberra Group (2001), several aspects continue to escape standardisation and/or are not adequately covered by existing surveys. Based on the OECD experience, some of the areas where improvements are needed to respond to more pressing demands from policy-makers and the general public include the following.

Improving the temporal consistency of income data

8. Much of the OECD research has focused on *changes* in the distribution of household income across countries, as these changes attract most policy attention in member countries. But, despite progress, temporal consistency of the data remains elusive. To give one example, the move by European countries to EU-SILC since 2004 has, in many cases, led to the discontinuation of previous surveys, thus preventing any assessment of changes in income distribution since that date. But problems also exist when the same survey is used throughout the period, due to changes in population benchmarks and in the extent to which household income is under-reported in surveys. While under-reporting is especially important for the measurement of capital and self-employment income, changes in under-reporting over time can also affect other income component, as highlighted by recent Australian experience with respect to public transfers.

³ This common framework is defined through an harmonised list of primary (annual) and secondary (approximately every four years) variables to be delivered; a recommended design for its implementation; common guidelines and procedures for imputation, weighting, and calculation of sampling errors; as well as common concepts (e.g. of household and income) and classifications.

⁴ Nordic countries have traditionally, relied on tax registers, often linked to household surveys on living conditions, to measure household income and its distribution.

⁵ The most important of these differences relate to the income concept and the unit of analysis: most European research on the subject have traditionally looked at the distribution of *disposable* (i.e. after taxes and transfers) income 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 analysis in the United States has focused on the distribution on *pre-tax income* among *families* (and, more, rarely households). Poverty statistics in former transition countries in Eastern Europe were traditionally based on consumption, rather than income, and presented on a per-capita basis.

9. While most statistical offices regularly assess the temporal consistency of their survey data through comparisons with "external benchmarks" – taking initiatives to correct for changes in under-recording when this occurs – this is not universal. Improving the temporal consistency of survey data would also require more systematic comparisons with national accounts benchmarks (after correcting for differences in concepts and coverage between the two sources).⁶ Such comparisons would allow identifying differences in under-reporting across income sources – thus improving cross-sectional comparability – and could lead, in the longer-term, to the construction of SNA accounts for the household sector by detailed categories (such as income, age or occupational status of the household head), as already considered by some OECD countries. Such accounts would provide a powerful tool for bringing together the various (and sometimes conflicting) statistical sources on household income that exists in some countries, and for responding to demands for better measures of the "purchasing power" of different categories of people.

Extending measures of household income to non-cash components

10. Disposable income perceived in cash is a partial measure of households' resources and well-being. First, it does not fully reflect the impact of government activities on households: while household disposable income deducts from market income the direct taxes paid by households, it does not add the in-kind services that government provide to households (for free or at subsidised rates) and that are financed through these taxes; in addition, measures of household disposable income do not reflect the impact of consumption taxes, whose incidence varies significantly across countries and which weight more heavily on low-income groups. Both factors reduce the usefulness of cash income data to assess the impact on households' living standards of a change in the form of government support (e.g. of a shift from income to consumption taxes, or from in-kind services to cash transfers). Second, household income in cash exclude the value of imputed rents from home ownership and public housing, of capital and withholding gains, of employer-provided benefits and of non-wage components of the remuneration package of managers. The increasing importance of many of these elements reduces the significance of conventional measures of money income for assessing households' living conditions.

11. The data needs for achieving such extension are daunting and progress can only be realised step by step. While the importance of the different non-cash components varies among countries, progress would be better achieved in a co-ordinated way, and by establishing priorities between these various non-cash items. But it is also important that progress towards a more comprehensive measure of living conditions is achieved without compromising the current good comparability of cash-income (i.e. measuring them through special modules).

⁶ In the European Union, such comparisons between SNA and EU-SILC aggregates will be undertaken regularly from 2008.

Improving income measures at both ends of the distribution

12. General population surveys are not always well suited to measure the income of household at the bottom and top end of the distribution. This may reflect the reluctance of people in these two groups to fully unveil their economic resources, their partial coverage in the survey, but also the practices used by statistical offices with respect to "bottom" and "top coding" of people with very low and very high income. At the bottom of the income scale, poor quality of statistical information applies in particular to people without a permanent address, people living in institutions, illegal residents, ethnic minorities and recent immigrants – the very groups that are overly exposed to risks of poverty and destitution. At the top end of the distribution, several studies have recently focuses on changes in the income share of the very rich (the top 1% or 0.01% of the population) based on tax data. While these studies often report large secular swings in income distribution in favour of the very rich (which contrast with the smaller changes evident in household surveys), tax records are not ideal either, due to the effect of changes in tax codes in altering the scope of taxable income and of the impact of tax evasion.

13. Improving the measurement of income and living condition at both end of the distribution will require a combination of different measures. This may include over sampling of these two groups in general surveys, the introduction of special-purpose surveys, improved measures of capital and self-employment income, and the mobilisation of the statistical information collected by voluntary associations on the number and characteristics of those using various emergency services (e.g. shelter, food, etc).

Developing common measures of material deprivation

14. Most OECD countries and all international organisations, including the OECD, have traditionally based their analysis of poverty on developments in the lower end of the income distribution, using indicators such as the headcount poverty rate and the poverty gap (the difference between the average or median income of the poor and the poverty line) for alternative thresholds (40%, 50% and 60%) of median equivalised disposable income. While this approach builds on a respectable tradition, it contrasts with the "consumption based" measures used by many non-OECD countries. In recent years, these differences in measurement approaches have led to demands for poverty indicators that measure the living conditions of the poor in a more direct way. In the Secretariat's view, the most promising way of achieving this is through measures of material deprivation, i.e. the extent to which people in different countries cannot afford those items that are more critical to provide a "decent" standard of living.

15. Household surveys suitable for assessing the prevalence of material deprivation exists in several OECD countries, but they differ in terms of the items considered, the wording of survey questions (which does not always allow distinguishing between non-affordability and preferences), and who in the household answers these questions. While measures of material deprivation refer to items that are judged to be most important for decent living in any given society (also identified through surveys of people's views), in practice several of these items (i.e. food insecurity, financial stress, payment arrears) are common across countries. A possible goal would be to expand the list of these common items and achieve greater standardisation in surveys, so as to allow better cross-country comparisons. The timing for achieving greater cross-country comparability in this field is good, as EUROSTAT is

currently revising the deprivation questions to be included in EU-SILC 2009 and other countries (e.g. Canada) are considering the opportunity of collecting survey data in this field.

Developing measures of the distribution of household wealth

16. Household wealth provides, in theory, a better measure of household control over economic resources than current income. This holds true for people across the income distribution, and data on household wealth (where available) already provide the basis for the construction of poverty measures that consider not only people's current income but also of their capacity to meet their needs through the disposal of liquid assets. Better information of household wealth would also allow assessing the effects of the "assets tests" that are embodied in the social programmes of most OECD countries on the asset holdings and savings behaviour of social assistance clients; and the effects of the various "asset based" welfare programmes that have been recently introduced in several OECD countries. While survey measuring household assets and liabilities exist in several OECD countries, differences in country practices in this field are much larger than in the case of income surveys.

17. Availability of comparative information on the wealth holdings of households will improve significantly with the availability of the "public use" version of the *Luxembourg Wealth Study*, a collaborative project that aims to do for household wealth what LIS has achieved for income. First results from LWS are starting to become available, and the patterns they highlight bring new light to the assessment of living conditions and how these vary among the population – for example, in terms of how wealth and income vary with people's age, and of how wealth and income inequality vary across countries. But results in LWS are available for only a handful of countries, and they are limited to those categories of assets and liabilities that are covered in all surveys. Statistics on household wealth still lack a set of common guidelines that countries could follow when implementing surveys in this field.

CONCLUSIONS

18. The growing demand for better statistical data to describe household well-being and its distribution is only partly being met. While a number of initiatives in recent years have significantly improved data quality and comparability in this field, further progress in this area can only be achieved through greater *ex ante* coordination of statistical practices and the development of new instruments in emerging fields of research. To this end, an initiative by the Bureau of European Statisticians, aimed at launching an in-depth review of country practices in this field, could represent an important step.

REFERENCES

- Atkinson A. B., L. Rainwater and T. M. Smeeding (1995), *Income Distribution in OECD Countries*, OECD, Paris.
- Boarini R. and M. Mira d'Ercole (2006), "Measures of Material Deprivation in OECD Countries", forthcoming, Labour Market and Social Policy Occasional Papers, OECD, Paris.
- Expert Group on Household Income Statistics (2001), *Final Report and Recommendations – The Canberra Group*, Ottawa.

- Förster, M. and M. Mira d'Ercole (2005), "Income Distribution and Poverty in OECD Countries in the Second Half of the 1990s", *OECD Social, Employment and Migration Working Papers* No. 22, OECD, Paris.
- Freyssinet J., P. Chevalier and M. Dollé CCNIS (2007), *Niveaux de vie et inégalités sociales*, Rapport of a working group of the *Conseil National de l'information Statistique*, No. 103, March.
- Sawyer M. (1976), "Income Distribution in OECD Countries", *OECD Economic Outlook*, OECD, Paris.

* * * * *