*Chapter 2*

# Overview
# of household wealth statistics

This chapter discusses the need for, and importance of, information on household wealth, the objectives of micro statistics on this topic and the current availability of such statistics. It also considers some strategies for better integrating micro statistics on household wealth with other statistics. It concludes with an overview of several international initiatives on data collection and measurement in this field.

Wealth is understood in this report as ownership of economic capital. It is viewed as a dimension of people's economic (or material) well-being, alongside income and consumption. There are other concepts of capital that are important to people's well-being and complement the concept of economic capital, such as human capital, social capital and collectively-held assets. However, while they may have considerable economic value to the people that possess (or have access to) them, they are not material assets and liabilities over which people can exercise ownership rights. They are therefore deemed to fall outside the scope of this report.

## 2.1. Need for information on household wealth

Information on household wealth is important at both the macro and micro levels. Wealth is one of the key components of the economic system. It is a source of finance for future consumption, for reducing vulnerability to shocks and to other unexpected developments, and for undertaking business and other economic activities. At both the macro and micro levels, household wealth statistics play a vital role in informing responses to a wide range of policy and research questions. However, the perspectives and insights provided at each level are also quite different. As indicated in Chapter 1, the primary focus at the macro level is on the household sector's wealth, its relation with the other sectors of the economy, and its role within the broader economic system; conversely, the primary focus at the micro level is on the wealth of individual households and its distribution across different types of households.

### 2.1.1. Macro level information

Macro level information on household wealth refers to the data contained in the balance sheet for the household sector in a country's national accounts. These data measure the total value of the household sector's assets and liabilities, including its net worth, and are an integral part of a comprehensive system of accounts. The full accounts cover all sectors of the economy and provide a consistent description of the economic activity and structure of each sector in terms of the production, distribution and use of income, the accumulation of assets and the stock of wealth.

While balance sheet data for the household sector are necessary to compile measures of national wealth, the data are also needed for many other purposes, such as:

- explaining, within a national accounting framework, how the household sector relates to and interacts with each of the other sectors of the economy and with the rest of the world;
- investigating the causal mechanisms at work within an economy, such as how asset price fluctuations affect households' consumption and saving behaviour, or how changing wealth levels affect household consumption patterns;
- assessing the household sector's financial status and analysing its financial risks; and
- analysing the sustainability of consumption, by assessing the consequences of certain types of behaviour (e.g. spending of wealth on consumption goods) that may lead to increases in current well-being at the expense of future well-being.

Over recent years there has been increasing recognition of some important analytical needs for macro-level wealth information that are currently not satisfied. For example, the 2009 report of the Stiglitz-Sen-Fitoussi Commission and the 2009 report of the G20 Finance Ministers and Central Bank Governors, both referred to in Chapter 1, drew attention to a number of critical data issues related to: *i)* data availability; *ii)* data interpretability; and *iii)* macro/micro data linkage.

In the case of data availability, many countries still lack a timely and complete set of balance sheet data for the household sector. While data for financial items are often available, data for non-financial items are less common. Even where complete accounts are regularly published, there are often large cross-country differences in the definition of the household sector. For example, in some countries the sector excludes non-profit institutions serving households (NPISH), as recommended by the SNA, while in others it includes them. Also, across countries the accounts for the household sector include a wide and varying range of unincorporated enterprises owned by households.* Other issues relate to the delineation of the asset boundary: for some types of analysis, such as the assessment of the "sustainability" of a country's development path, a wider asset boundary (e.g. including human capital) may be needed.

In the case of data interpretability, the valuation of balance sheet items is often problematic. For example, for some assets (e.g. entitlements in pension schemes) there may be no markets, while for others (e.g. housing) only a small fraction of the existing stock may be traded on markets. During a crisis, markets for some financial assets may "freeze", with no transactions taking place and no market prices observed to guide asset valuations. All these cases can lead to considerable uncertainty when drawing conclusions or inferences from the data.

In the case of data linkage, the macro data on household wealth needs to be linked with the corresponding micro data to bring a distributional perspective into the macro wealth measures and allow disaggregation by demographic and socio-economic population groups. While the wealth of an average household or individual can be derived from macro-level data, aggregate ratios can be misleading, as they shed no light on the way wealth is distributed across households. This is particularly relevant when the heterogeneity in household circumstances and behaviour is taken into account. In most countries, assets and liabilities tend to be distributed very unevenly across households, and changes in wealth can be unequally shared, leaving some households worse off than others. Consequently, to interpret changes in wealth levels properly, distributional measures (e.g. median wealth levels, wealth levels at the top and bottom of the distribution) are needed. However, because such information is available only at the micro level, the macro and micro-level data sets need to be brought together to develop relevant indicators.

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* The SNA provides a mixture of practical guidance and conceptual treatments for such enterprises, and country practice ranges from including all unincorporated enterprises owned by households in the household sector accounts (i.e. no such enterprises are treated as quasi-corporations and included in the SNA corporations sector) to not including any in the household sector (i.e. all such unincorporated enterprises are regarded as quasi-corporations and excluded from the household sector account). No country appears to adopt the "rule of thumb" guidance provided in the SNA (i.e. to take the availability of a complete set of accounts for the unincorporated enterprise as evidence of a "quasi" corporation). Some countries treat such enterprises as quasi-corporations (i.e. if it would be meaningful from an economic point of view to compile a complete set of accounts for the unit), as recommended by the SNA, even if such accounts are not compiled. In other countries a range of practical criteria are adopted to delineate "quasi" corporations.

### 2.1.2. *Micro level information*

Micro level information on household wealth refers to data describing the assets and liabilities held by individual households. Such data provide measures of the level, distribution and composition of household wealth for the population as a whole as well as for particular population groups and for different types of households. When the data are brought together with micro-level data on income and consumption, a complete picture of the economic resources of individual households can be presented.

Wealth data at the micro level are needed for research and analysis in many different fields, and they can support the design and evaluation of a wide range of economic and social policies. Micro data on wealth holdings are crucial for purposes such as:

- analysing household economic behaviour, including the way different types of households respond to financial shocks and other economic developments, and the transmission mechanisms that are involved;

- assessing the living standards, consumption possibilities and overall economic well-being of particular groups within society;

- assessing the sustainability of household spending patterns and the concentration of financial risks in specific sectors of the population; and

- analysing the impact of particular government policies and institutional arrangements on households' eligibility for social programmes and on household asset accumulation and indebtedness, including the barriers and incentives created by those policies and arrangements.

### 2.1.3. *Examples of specific data needs at the micro level*

Some examples of specific needs for micro-level wealth data are outlined below.

### *Wealth inequality*

In many countries, a relatively small proportion of households hold the majority of total household wealth. It is therefore important to understand the economic behaviour of those at or near the top of the wealth distribution when analysing the dynamics of aggregate wealth. It can also be important to understand the distribution of particular types of assets or liabilities. In some countries, for example, a relatively small proportion of households hold high levels of debt. In these conditions, even small changes in asset prices can lead to the value of the outstanding debt exceeding that of the underlying assets (e.g. houses). This can trigger a vicious cycle of deleveraging and further declines in asset prices that can have a major impact on market outcomes.

In addition, policy makers and analysts are often interested in wealth heterogeneity because of its link with material living standards and economic well-being. For example, there may be a particular focus on households at or near the bottom of the wealth distribution when assessing vulnerability to future shocks, or when developing and evaluating policies designed to address the disadvantage of certain population groups. There may also be widespread interest in how the concentration of wealth, including particular types of wealth, is changing over time, in the factors driving these changes, and in the role of bequests and savings in changing wealth inequality over time.

### Joint distribution of income and wealth

To explore material living standards and economic well-being, it is important to look at the joint distribution of household income *and* wealth. For example, a low-income household with above-average wealth is not necessarily worse off than a medium-income household with no wealth, or vice versa. On the other hand, low-income households that also have low levels of wealth may be of particular interest to governments seeking to target policies and programmes more directly towards households in need. Joint analysis of the distribution of these resources can lead to more effective policies and better outcomes. Micro-level wealth data are essential for such research.

### Relationship between household wealth and consumption

Wealth can affect personal consumption through various channels. For example, households whose wealth increases due to higher asset prices may spend more because they have more resources available and their liquidity or collateral constraints are relaxed. Households may also use credit to insulate their spending from financial shocks, although for some of them the higher debt service costs may leave fewer funds available to smooth their consumption, and thus put them at risk of financial hardship. As household heterogeneity can play an important role in how average consumption responds to wealth changes, household level data are crucial in assessing the structural relationships between average wealth and average consumption. In particular, there are likely to be differences between households comprising young adults at the start of their working lives, and households made up of retirees.

### Relationship between housing prices and household wealth

As changing real estate prices may have a major impact on household assets and indebtedness, a body of research has aimed at understanding the relationship between these variables. Micro data are essential for this research, as they show the detailed composition of assets and liabilities across individual households. They can also support investigations into mismatches between assets and liabilities and help to assess the risks that too much debt or inadequate diversification of assets might pose for the households concerned and for the wider economy.

### Financial innovation and portfolio selection

Financial innovation can have a substantial effect on the level and structure of household assets and liabilities and on the financial risks to which households are exposed. As a consequence, there is interest in monitoring changes in household portfolios in order to assess the possible positive and negative impacts of financial market developments on households.

### Access to credit and borrowing constraints

Liquidity, the cost of debt and other constraints can substantially affect the borrowing of some households. Analysis of the wealth and other financial circumstances of households at the individual level can provide useful insights into the nature and effect of such constraints and into their association with financial hardship and the inability to smooth income shocks.

*Retirement funding and pension policies*

In order to assess the adequacy of retirement savings and the possible risk to these savings from asset meltdowns or other financial shocks, it is important to know the level and composition of assets of households whose main income earner is at or close to retirement. This may be of particular interest in countries where there are government incentives to take up certain types of assets, e.g. tax incentives for employees to make their own contributions to pension funds, as part of a strategy to encourage saving for retirement. To assess the effectiveness of these policies, it is important to know whether such incentives are leading to higher savings or to a shift away from other products in asset portfolios.

*Micro simulations of household behaviour*

Micro simulations, based on models of individual household behaviour, can be used to simulate the behaviour of all households and therefore explore different scenarios. The incorporation of wealth variables into such models can provide important insights into the possible effects of a range of financial shocks and policy changes.

*Derivation of distributional indicators for use in the national accounts*

As already indicated when discussing macro wealth statistics, micro data on household wealth have the potential to provide distributional information that could be used to disaggregate national accounts wealth measures. Macro wealth measures are typically compiled from sources that do not provide information at the individual household level. However, micro wealth statistics can provide such information – which is essential for producing distributional indicators – as they are typically compiled from survey data reported by individual households.

## 2.2. Objectives and uses of micro statistics on household wealth

### 2.2.1. Main objectives of the statistics

In the light of the information needs discussed above, the broad objective of micro statistics on household wealth is to provide measures of the level, composition and distribution of wealth at the individual household level that will support:

- policy development, implementation and evaluation in and across a range of areas, including fiscal, monetary, taxation, social welfare and housing policy;
- research into household economic behaviour, including influences, effects and mechanisms, taking into account the impact of household heterogeneity on each of these;
- analysis of the economic well-being of different types of households, including patterns and trends for population groups of special interest; and
- analysis of aggregates in the national accounts, including the distributional implications of economic developments.

To meet this objective, micro statistics on household wealth need to be accurate, comprehensive and regularly updated. They should include information on both the value of the different types of assets and liabilities in household portfolios and the characteristics of the households holding them. These characteristics allow households to be grouped in ways that are analytically useful, such as by their size, composition and geographical location, by the attributes of a particular household member, or by the level of their wealth or income. As the basic data relate to individual households, measures showing the

distribution of wealth can also be derived, and these constitute a critical statistical input for a variety of policy and analytic uses. Such measures include median as well as mean values for the entire population as well as for various parts of the distribution, such as the top or bottom quintiles.

These micro-level wealth measures need to be as consistent as possible with the macro-level wealth measures in order to facilitate the use of both sets of statistics in combination. This may have further benefits in view of the potential of the micro data to improve the national accounts, or vice versa. For example, in some instances macro and micro statistics might be directly comparable after adjusting for conceptual or coverage differences, and it might be feasible to use the micro data to improve the compilation of the macro estimates.

The methodologies used to gather micro statistics on household wealth also need to be consistent between countries in order to facilitate cross-country comparisons and policy learning. Improving international comparability in this field is one important objective of this report.

Wherever possible, the micro wealth data should be brought together with micro data on household income and consumption so that these different dimensions of economic well-being can be analysed simultaneously. The benefits of doing this are considerable, as indicated earlier when discussing information needs. Guidelines for the joint compilation and analysis of micro data spanning the full range of household economic resources are presented in the companion publication, *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth.*

### 2.2.2. Country examples showing the use of micro statistics on household wealth in policy making

Table 2.1 draws on the experiences of several countries that have been producing micro statistics on household wealth for many years to illustrate some of the policy and analytic uses that have been made of such data.

### 2.2.3. Current availability of micro-level wealth data

Many countries currently produce micro statistics on household wealth or are in the process of producing them, according to the responses to the Expert Group's 2011 questionnaire on country methodologies in this field (see Annex D). A total of 26 countries indicated in their responses that they have collections in place for compiling such statistics.

This contrasts with the situation prevailing only a few decades ago. A report by the United Nations Statistical Office in 1977 noted that, "some countries gather data from households on selected items of wealth, for example the amount of outstanding consumer debt or the number of automobiles, radios and other consumer durables possessed; however, few official efforts have been made to compile systematic figures on the value of all items of household wealth". Because of this situation, the report's statistical guidelines contained no recommendations on household wealth (UN, 1977, para. 1.35).

However, while considerable statistical activity is now taking place in this field, most countries still do not produce comprehensive micro statistics on household wealth or do not produce them regularly. Questions also arise about the quality of some of the existing data due to both sampling and non-sampling errors. Furthermore, in the absence of agreed international standards, there are many differences in the concepts, sources and methods used to gather

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Table 2.1. **Examples of the use of micro data on household wealth in policy making**

| | Uses |
|---|---|
| United States | Wealth data have been collected from households in the Survey of Consumer Finances since the early 1980s. These data are widely used to understand and illustrate the effects of past changes in monetary, fiscal and regulatory policies and to simulate the potential effects of future changes. These data are also important inputs into the compilation of more aggregated statistics.<br><br>Specific uses have included: understanding the structure of household portfolios and the implications of that structure for the transmission of monetary policy, including the role of debt; insights into the distributive effects of changes in monetary policy as they filter through the household sector; potential effects of steep declines in the stock market; monitoring the diversity of financial markets accessed by households (which has had important effects on bank competition policy); and provision of information on the structure of household deposits, which has been critical in some financial reforms. |
| Spain | Wealth data have been collected since 2002 in the Spanish Survey of Household Finances. Examples of the use of these data in policy relevant research are: analysing the consumption response to changes in housing prices; and assessing the financial vulnerability of households, including the impact of rising interest rates on indebted households and the characteristics of those households that would be most affected. |
| Italy | Wealth data have been collected from households since 1965 in the Survey of Household Income and Wealth. The information is important in domestic political debates on the economic conditions of households. These household-level data are also widely used in policy research and as a tool for simulating the impact of policy measures via micro simulation models. These data are also used in the compilation of financial and wealth accounts.<br><br>Some of the specific uses of these data have related to: channels of transmission of monetary policy; the functioning of banking markets; the analysis of fiscal issues and pension reforms; the monitoring of poverty and inequality; analysis of asset allocation, uncertainty and risk aversion; the effects of market structures and imperfections; patterns of wealth accumulation and transmission; demand for credit and payment technologies; and spatial interest rate differentials. |
| The Netherlands | Wealth data have been collected since 1993 by Statistics Netherlands. Another survey is also produced by the Nederlandsche Bank. Policy makers and researchers make extensive use of these data. Examples include: research into the potential effects of a housing crisis in terms of the number of households that might be faced with mortgage payment problems and the proportion of outstanding mortgage loans that might result in a financial loss for the banking sector; the wealth effects on consumption; the financial behaviour of households; and financial stability. |
| Portugal | Wealth data have been collected since 1994 and have been part of the Income and Expenditure Survey since 2000. The data have been used to study the heterogeneity of household debt and the debt burden and portfolio composition in terms of particular household characteristics. Specific uses include: assessing the sustainability of rises in household debt due to falls in interest rates and changes in the supply of credit; and assessing the impact of the widespread marketing of new financial products on household portfolio composition, including the segments of the household sector that may have assumed greater risks. |

*Source:* European Central Bank (2009), "Survey Data on Household Finance and Consumption: Research Summary and Policy Use", *Occasional Paper*, No. 100, January.

such information. As a result, the comparable statistics available in this field are very scant. This is evident from the experiences of the Luxembourg Wealth Study, which undertakes an *ex post* harmonisation of micro data, as described in Annex B, and from the information on country methodologies presented in Annex D. This has also been a matter of increasing concern to policy makers, researchers and others interested in cross-country comparisons.

The 2011 *Crédit Suisse Global Wealth Databook* (discussed further later in this chapter), which reported on research into household wealth in 216 countries across the world, summarised the situation of data availability as follows: "data on the level of wealth remains poor for many countries", and "information on the pattern of wealth within countries is even scarcer" (page 10). It noted that direct observations of wealth distributions across households or individuals were available only for 22 countries in the period since the year 2000, that the precise definition of wealth had not been agreed, that methods of valuation were not always clear, and that much work remained to be done to develop reliable estimates.

Areas where cross-country inconsistencies or differences exist in micro statistics on household wealth include: *i)* the definition and coverage of household wealth; *ii)* the definition and coverage of households; *iii)* the criteria used to value assets and liabilities; *iv)* the point in time at which wealth is measured; *v)* the extent to which assets are recorded gross or net of the liabilities pertaining to them; *vi)* the unit of analysis used in presenting

statistics; *vii)* the delineation, coverage and classification of individual wealth components; and *viii)* the household groupings that are used to present distributional information.

In other important areas, however, there is broad commonality in methodology. In particular, most countries that produce micro statistics on household wealth: *i)* base their data mainly on household surveys; *ii)* exclude the institutional population from their statistics; and *iii)* compile the three main wealth aggregates – non-financial assets, financial assets and liabilities – although the definitions used are generally not fully comparable and some detailed components are often missing.

## 2.3. Integration of micro statistics on household wealth with other statistics

As already noted, for joint analyses that consider the various dimensions of household economic well-being or that seek to bridge the macro and micro wealth perspectives, micro statistics on household wealth need to be brought together with other micro statistics, particularly those on household income and consumption, as well as with macro statistics on the wealth of the household sector. This can be difficult, especially where methodologies for these different streams of statistics have been developed separately and to serve different primary purposes.

In recent years, there has been increasing recognition that more integrated approaches are required to satisfy analytical and policy needs and to avoid the confusion that arises from different measures of very similar concepts. These approaches include integrated statistical frameworks, joint data collection, data matching and data confrontation. Each of these is discussed further below.

### 2.3.1. *Integrated statistical frameworks*

Statistical frameworks can play an important role in integrating different data sets by promoting the use of harmonised concepts, definitions, classifications and methodologies. As noted in Chapter 1, consistency with the SNA and other international standards has been a key consideration in the development of the statistical framework for micro statistics on household wealth in this publication. The parallel development of the *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth* also reflects the potential of such frameworks to foster integration. At the country level, a few national statistical offices (e.g. in Australia and Canada) have developed their own frameworks over the years to guide their measurement activity in these fields.

### 2.3.2. *Joint data collection*

According to the inventory of country methodologies included in Annex D, most household wealth surveys currently collect information not only about wealth but also about income and often consumption expenditure as well. In euro area countries, a key instrument for joint data collection is the *Eurosystem Household Finance and Consumption Survey* (HFCS). This initiative is discussed further later in this chapter, with more detail in Annex A.

The joint collection of data on household income, consumption expenditure and wealth involves integrated and coincident measurement, the benefits of which are far-reaching. In particular, it results in greater coherence between the statistics for each dimension at the household level; it allows a better understanding of the relationships between these different dimensions; and it enables a more complete assessment of household economic well-being. However, the joint collection of data also raises a number

of measurement challenges (e.g. in terms of sample design and adequacy of response rates). The companion publication, *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth* (Chapter 7, Integrated Statistics), draws on the experiences of a number of countries to provide guidelines on best practice for coincident measurement of the different dimensions of economic resources in household surveys.

### 2.3.3. *Data matching*

Where micro-level data on the different dimensions of household economic well-being are sourced from separate collections, data matching techniques can be used to achieve *ex post* integration of the data. Such techniques include direct and probabilistic record linkage of identical units and statistical (or synthetic) matching of similar units using a model-based approach. Record linkage can be applied where the households in different collections overlap to a large extent. Direct record linkage involves the use of an identification number to link records that correspond to the same unit, while probabilistic record linkage involves the identification of the same unit by probability methods based on a specified set of variables. Statistical matching can be used where the households in the various collections differ, but where the collections include a common set of variables that have good informative power in relation to the variables not collected together. This approach employs inference techniques to generate a synthetic micro-data file from the different collections.

Data matching techniques can enhance the analytical potential of existing data sources by facilitating the joint use of data collected at the household level. The *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth* (OECD, 2013, Chapter 7) describes these techniques in more detail and considers their potential benefits, limitations and implications (e.g. for collection design). It also discusses country experiences with them.

### 2.3.4. *Data confrontation*

Research conducted at both national and international levels has indicated that differences in major aggregates common to both macro and micro statistics on household wealth (e.g. non-financial assets, financial assets, liabilities and net worth) can be large in both absolute and relative terms. The differences are also variable, both across countries and over time. Teasing out the many factors that contribute to these differences is challenging, as differences in the concepts and definitions, estimation methods and classifications used all play a role.

A number of countries (e.g. Australia, France, the Netherlands and the United States) regularly confront their micro and macro wealth data to assess their coherence, to explain the differences between them, and in some cases to adjust or reconcile them. Such assessments improve the understanding of the quality and consistency of both sets of data, including their strengths and weaknesses. They can also open up possibilities for, or reveal barriers to, the greater use of micro data for the compilation of national accounts, or vice versa.

Examples of two different types of data confrontation are provided below. The first is a country example based on published research. The second is an international study with potentially far-reaching implications that is being undertaken by the OECD-Eurostat Expert Group to Measure Disparities in a National Accounts Framework.

*Confrontation of macro and micro wealth data: The case of Australia*

The way in which a comparison of macro and micro wealth data can be informative to both data producers and analysts can be illustrated using information regularly published by the Australian Bureau of Statistics in its statistical releases on household wealth and wealth distribution. In this example, the first stage of the comparison involves the identification of quantifiable scope and measurement differences that affect the estimates of household net worth in each set of statistics, while the second stage involves making adjustments for these differences. The third, and final, stage of the comparison involves examining selected wealth items relevant to both sets of statistics, quantifying the size of the difference in the estimates for each item, and then analysing the factors that limit the comparability of the estimates (e.g. specific features of the different data sources, the methods used, coverage gaps, data quality problems, etc.). Where possible, the main contributors to these differences are discussed, including possible reasons for changes in the differences over time.

The routine confrontation of the household survey measures of wealth with the corresponding macroeconomic measures provides a number of opportunities to make improvements in either of the data sets as well as to inform users about the differences.

From the household survey perspective, the results of these comparisons are used to assist with the validation of the data and to identify areas where improvements can be made in future survey cycles. The publication of the results of these confrontations is also useful for explaining to users the differences in scope, data sources, measures and other limitations (e.g. under-reporting of certain items).

From the national accounts perspective, the results of these confrontations are useful for similar reasons. For example household survey data are used to confront a number of items in the household financial accounts, particularly those calculated as the residual of other sectors, and so reflect errors and omissions in the estimates for those sectors.

*OECD/Eurostat Expert Group to Measure Disparities in a National Accounts Framework*

To capitalise on the experiences of a number of countries in bridging the gap between micro and macro estimates and to meet growing policy demands, an Expert Group was set up jointly by the OECD and Eurostat in late 2010 to consider how existing micro data on household income, consumption and wealth could be used to produce measures of disparities between groups of households that are consistent with SNA household concepts and aggregates. The Group members included experts in both macro and micro statistics on household economic resources.

The Group pursued its goal in two ways:

- First, by taking stock of currently available macro data on household income, consumption and wealth across OECD countries, describing how these data are compiled and how micro data are used in that process and, finally, comparing aggregate values for the various types of household economic resources from macro and micro sources.

- Second, by breaking down the national accounts household sector amounts by household group using information available from micro data sources (i.e. allocating macro aggregates for income, consumption and wealth among different groups of households) for a number of countries, using common methodologies and disaggregation; these breakdowns allow the construction of inequality indicators that are consistent with SNA aggregates.

The main findings from the work of this Group will be available in the course of 2013 in a series of *OECD Working Papers*. The links with the OECD Expert Group responsible for both this publication and the companion publication presenting an integrated framework for micro statistics on the distribution of household income, consumption and wealth have been recognised through some overlap in membership.

## 2.4. International data collection and measurement initiatives

Over the last decade, two major initiatives have been taken with the aim of collecting micro-level household wealth data that is comparable across countries and with other micro statistics: *i)* the Luxembourg Wealth Study (LWS); and *ii)* the Eurosystem Household Finance and Consumption Survey (HFCS). There has also been a substantial body of research that has resulted in the development of estimates of the level and distribution of global household wealth. Each of these developments is briefly outlined below, with more detailed information on the HFCS and LWS in Annexes A and B, respectively.

The guidelines in this publication complement these international developments by providing an agreed conceptual and practical base for the design of relevant national statistical collections. As the approaches recommended in this report are increasingly being adopted and tested by national statistical offices and other data producers, it is hoped that the available statistics and their cross-country comparability should significantly improve over time.

### 2.4.1. *Luxembourg Wealth Study*

The LWS originated from discussion at the 2002 Conference of the International Association for Research in Income and Wealth. At that conference, participants recognised that the time was ripe for the creation of a wealth database that was comparable across countries, similar to what already existed for household income (the Luxembourg Income Study, LIS), based on the classification of available national micro data using a common nomenclature and classification scheme. The LWS was officially launched in 2004 as a joint project of the LIS and institutions from nine countries, and currently includes data for twelve countries.

The primary aim of the project is to assemble and organise existing micro data on household wealth into a coherent database in order to provide a sounder basis for comparative research on household net worth, portfolio composition and wealth distribution. This involves harmonising data from existing country-level surveys by defining a standardised set of variables for inclusion in the *LWS Database*. This allows constructing broadly comparable wealth aggregates. The focus is on increasing the *ex post* comparability of wealth data (unlike the focus in this publication on improving the *ex ante* comparability of wealth data).

While the *LWS Database* provides a critical tool for comparative research in this field, its usefulness is limited by several factors, such as: *i)* its country coverage is limited, especially relative to the range of countries that have micro-level data on household wealth; *ii)* its data coverage is limited to a sub-set of assets and liabilities that are measured by all the countries involved in the exercise; *iii)* the comparability of data for this sub-set can still be affected by country differences in survey methodology (e.g. the exclusion of data below a specified amount); and *iv)* its data are often not-up-to-date.

### 2.4.2. Eurosystem Household Finance and Consumption Survey

In 2008, the Governing Council of the European Central Bank decided to conduct a specific household survey in all euro area countries to provide the Eurosystem with micro-level data on household wealth and consumption expenditure. The HFCS is a decentralised effort in which each of the seventeen participating institutions conducts its own survey using a common methodology and drawing on a blueprint questionnaire. The survey is to be conducted every 2-3 years.

The main aim of the HFCS is to gather micro-level structural information on household assets and liabilities in the euro area. In addition, the survey collects other information in order to analyse the economic decisions taken by households, an essential part of which includes gathering information on sub-groups of the population. The survey data are considered to be a key to: *i)* understanding both individual behaviour and the evolution of aggregate variables; *ii)* evaluating the impact of policies and institutional changes across households and across different institutional structures; *iii)* understanding the implications of shocks for macroeconomic variables; and *iv)* gaining insights into issues like monetary policy transmission or financial stability. As the data will be comparable across the countries involved, they will allow analyses for the euro area as a whole.

The HFCS will provide complete data sets for at least the basic components of household income, consumption and wealth. However, as the survey's main focus is on household wealth, priority is given to a detailed and accurate collection of information on household assets and liabilities. The first dissemination of the HFCS research data set is planned for 2013. It will cover results from the first wave of the survey and will be accompanied by a set of aggregate indicators for the euro area.

### 2.4.3. Global Wealth Reports and Databook

The first estimates of the level and distribution of global household wealth were published in 2007 by the United Nations University-World Institute for Development Economics Research (Davies, Sandstrom, Shorrocks and Wolff, 2007). Building on this and on further research by Anthony Shorrocks and Jim Davies, the Crédit Suisse Research Institute launched its *Global Wealth Databook* (GWD) in 2010, with updates in 2011 and 2012.

The GWD aims to provide estimates of the wealth holdings of households around the world for the period since 2000. It includes information on the levels and distribution of wealth within and across countries and global regions. The data set is used to analyse long-term wealth patterns and emerging trends, as well as to study the link between wealth and other topics, such as population ageing. The main findings from the analysis of the data set are highlighted in the Crédit Suisse *Global Wealth Reports*.

The global wealth estimates are obtained by assembling and processing information from a variety of different sources, including published macro- and micro-level wealth data for individual countries, and by using econometric techniques for the large number of countries that lack data on wealth. The estimation procedure involves several steps:

● *First*, the average level of household wealth for each country is established. Data are gathered on the level of a country's wealth and the size of its population in order to derive estimates of mean wealth per adult. Separate data are gathered for financial assets, non-financial assets and liabilities. For countries with both balance sheet data (i.e. macro-level data) and survey data (i.e. micro-level data), balance sheet data are preferred based on the view that they typically use survey results as one input but also take into account other

data sources as well. For countries where only one of these two data sources is available, estimates are based on whatever source is available. For countries where information on one of the components of household wealth is not available, that component is estimated using independent variables and regression techniques.

- *Second*, the pattern of wealth holdings within countries is established. For those countries where data on the distribution of wealth are not available, these are estimated based on the observed relationship between income distributions and wealth distributions.

- *Third*, information in "Rich Lists" (e.g. those published by *Forbes Magazine*) is used to adjust the wealth distribution pattern in the highest wealth ranges, as the traditional sources of wealth distribution data are considered unsuited to providing an accurate picture of wealth at the top end of the distribution.

- *Fourth*, estimates of the global distribution of household wealth are derived by combining information on the level and distribution of household wealth for each country. This involves grafting the pattern of wealth holdings in a country onto its average level of wealth. A synthetic set of wealth values, consistent with the (actual, estimated or imputed) wealth distribution, is generated for each country, and these values are then scaled up to match the mean wealth of the respective country. The results are then merged into a single world data set.

For those countries (usually small ones) where no information on household wealth is available, data are imputed by drawing on data on the average level and distribution for the world region and income class to which the particular country belongs. In the 2011 GWD, 50 countries (out of the 216 countries covered in the study) fell into this category.

## 2.5. Summary

The key highlights of this chapter can be summarised as follows:

- Information on household wealth at both the macro and micro levels is important for policy development, implementation and evaluation across a range of areas, as well as for research and analysis concerned with many economic and social issues.

- Micro statistics on household wealth aim to support these information needs by providing measures of the level, composition and distribution of household wealth at the individual household level. The measures need to be accurate, comprehensive, regularly updated, and based on methodologies that are consistent across countries.

- Micro data on household wealth need to be as consistent as possible with the macro wealth data. They also need to be linked with the macro data to bring a distributional perspective into the macro measures.

- Micro data on household wealth need to be brought together with micro data on household income and consumption so that these different dimensions of people's economic well-being can be analysed simultaneously.

- While many countries currently produce (or are in the process of producing) micro statistics on household wealth, most countries do not produce comprehensive statistics in this field or do not produce them regularly. In addition, the currently available country statistics are often based on different definitions, classifications, recording principles and measurement practices. Comparable and reliable statistics are very scant. Improving international comparability in this field is one important objective of this report.

- Several approaches are being used by countries and international agencies to improve the integration of micro statistics on household wealth with other statistics. These include:

  - ❖ development of the *Integrated Framework for Statistics on the Distribution of Household Income, Consumption and Wealth*, in parallel with the guidelines in this publication;

  - ❖ joint collection of data on household wealth and income, and often consumption expenditure as well, in household surveys;

  - ❖ data matching and linking techniques to bring together data from different collections;

  - ❖ data confrontation techniques to identify, explain and quantify (where possible) the differences between the micro and macro wealth estimates; and

  - ❖ disaggregation of the national accounts data for the household sector by groups of households, using information available from micro sources and the construction of wealth inequality indicators consistent with macro wealth aggregates.

- In recent years, several important initiatives have aimed at improving the availability and comparability of household wealth data. These include the Luxembourg Wealth Study, the Eurosystem Household Finance and Consumption Survey and the *Global Wealth Databook*.

- The guidelines in the following chapters of this publication complement the existing activity at national and international levels in order to improve the available micro statistics on household wealth. They provide an agreed conceptual and practical base for the measurement of household wealth at the level of individual households.
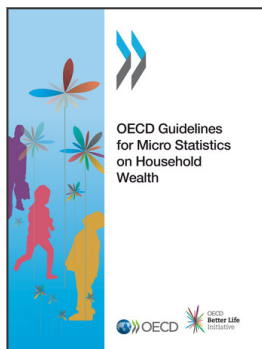
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