Chapter 3

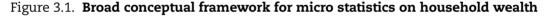
## Standard concepts, definitions and classifications for household wealth statistics

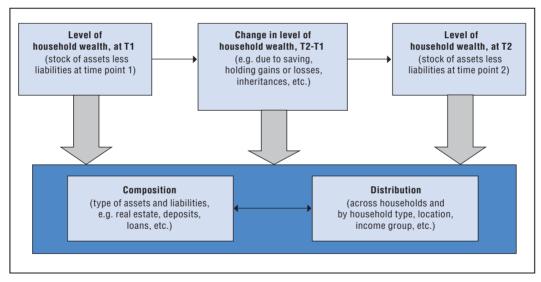
This chapter describes the conceptual framework for micro statistics on household wealth. The basic concepts and general principles for these statistics are introduced along with key definitions, standard components and standard classifications. The term "wealth", as used here, covers both the assets and liabilities of households.

# **3.1. Description of the conceptual framework for micro statistics on household wealth**

#### 3.1.1. The broad micro framework

In broad terms, micro statistics on household wealth refer to the level, composition and distribution of wealth held by households at a particular time, as well as to changes over time. The level of wealth refers to the value of the stock of assets held after deduction of liabilities outstanding. Composition refers to the dissection of wealth by type of assets and liabilities, while distribution refers to the spread of wealth across the population, including particular classes of households. Changes over time arise from factors such as saving or dissaving, holding gains or losses, inheritances and bequests. This specification of the scope of the statistics is reflected in the broad conceptual framework for their compilation, illustrated in Figure 3.1.



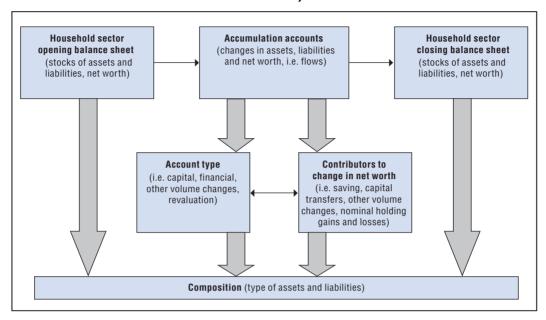


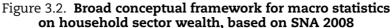
The guiding principles in the rest of this chapter have been formulated within this broad framework. The recommended concepts, definitions, classifications and recording principles flesh out the framework and provide an internally consistent conceptual base for micro statistics on household wealth. They are applicable to measuring the total stock of wealth at the household level as well as to measuring compositional and distributional patterns and trends, including factors contributing to changes in the stock of wealth.

#### 3.1.2. Relationship between the micro and macro frameworks

The framework for micro statistics on household wealth is closely related to that for macro statistics contained in the 2008 edition of the System of National Accounts (SNA,

United Nations, 2008). The macro statistics framework centres on the SNA's balance sheet and accumulation accounts for the household sector and is illustrated in Figure 3.2.





The "balance sheets" in the macro framework record the stock of assets and liabilities and net worth (i.e. the difference between the stock of assets and of liabilities) at the opening and closing dates of the accounting period. The balance sheets also record the type of assets that are held and the type of liabilities that are outstanding. The "accumulation accounts" record the changes in the stock of assets, liabilities and net worth between these two dates. These changes are referred to as "flows" and relate to a period of time, whereas "stocks" relate to a particular point in time. The balance sheet and accumulation accounts of the household sector are part of the SNA's integrated system of accounts covering the economic activity and wealth of all sectors of the economy.

There are several types of accumulation account in the macro framework: the "capital account" records transactions in non-financial assets as well as saving and capital transfers; the "financial account" records transactions in financial claims (covering both financial assets and liabilities); the "other changes in volume account" records the effect of exceptional events that cause variations in not only the value of assets and liabilities but also their volume (e.g. changes due to wars or natural catastrophes); and the "revaluation account" records nominal holding gains and losses, split into real and neutral. Real holding gains reflect changes in the relative price of assets, whereas neutral holding gains reflect movements in the general price level. The total change in net worth is also explained in terms of four broad contributors, i.e. "saving", "capital transfers", "other volume changes" and "nominal holding gains and losses".

"Saving" provides the link between the current accounts of the SNA and the subsequent accumulation accounts. It is the balancing item of the last current account (the "use of income account") and is the starting entry in the capital account. It is an accounting construct that cannot be measured independently of the other entries. It represents that part of disposable income that is not spent on the final consumption of goods and services, and it may be either positive or negative. For example, over a particular time period, if income exceeds consumption expenditure – that is, saving is positive – and there are no capital transfers, then the unspent income must be used to acquire assets or reduce liabilities. On the other hand, if consumption expenditure exceeds income – i.e. saving is negative (often called dissaving) – and there are no capital transfers, then some financial or non-financial assets must have been liquidated or some liabilities increased.

"Capital transfers" refer to the acquisition or disposal of assets when the receiving party neither makes a payment nor incurs a liability to the provider of the asset. Such transfers tend to be large and irregular. Examples relevant to households are large donations and gifts, inheritances and inheritance taxes and lump-sum retirement payments.

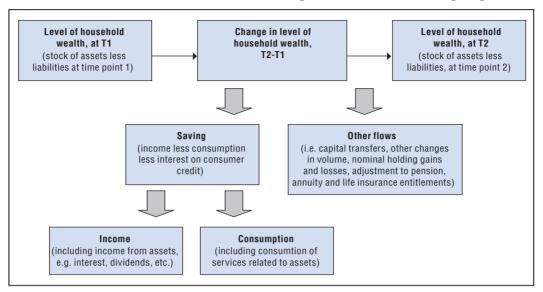
The "household sector" in the macro framework refers to one of the five resident institutional sectors separately identified by the SNA on the basis of principal functions, behaviour and objectives. The sector consists of all resident households, with each household comprising one individual or a group of individuals. All individual persons belong to one and only one household. A household is said to be a resident of the economic territory of the country with which it has the strongest connection, i.e. its centre of predominant economic interest.

Comparing the broad micro and macro statistics frameworks illustrated in Figures 3.1 and 3.2, it is evident that they have much in common, but also some differences. Each framework has a focus on wealth (net worth) and on the level (stock) and composition (type) of assets and liabilities at a particular point in time, and the changes in levels (flows) over time. Each refers to households, although the macro framework relates to an institutional sector. Unlike the micro framework, the macro framework has an accounting focus and is based on a fully articulated set of linked accounts covering the whole economy; it distinguishes the different types of flows that lead to changes in the stock of wealth; and it does not include wealth distribution as a core element.

The differences in the frameworks reflect the different purposes and analytic focus of the statistics to which they refer. However, the similarities indicate that there are many areas where consistency between the statistics is likely to be both appropriate and achievable. In developing the standards in this chapter, consistency between the micro and macro statistics in respect of concepts, definitions, recording principles and classifications has been a key consideration. Wherever the treatment recommended for micro statistics is not fully aligned with the SNA, justification for the difference is provided and the adjustments needed to achieve alignment are explained.

# 3.2. Conceptual relationship between micro statistics on household wealth, income and consumption

Micro statistics on household wealth refer to one dimension of household economic well-being. Other important dimensions are household income and consumption. An overview of the conceptual relationship, from a statistical perspective, between wealth and these other dimensions is presented in Figure 3.3. For purposes of this discussion and to facilitate comparability with the earlier diagrams, wealth stocks and flows are taken as the starting point for explaining this relationship; the downward arrows from particular aggregates point to the direct contributors to those aggregates.



#### Figure 3.3. Overview of conceptual relationship between micro statistics on household wealth, income and consumption from a statistical perspective

As indicated earlier, in the macro statistics framework wealth is linked to income and consumption through "saving". This is also the case for micro statistics. Specifically, household income during a period is either consumed, used to pay interest on consumer credit, or saved; in turn, saving along with other flows (i.e. capital transfers, other changes in volume, nominal holding gains and losses, and the adjustment to pension, annuity and life insurance entitlements) during the period explain the change in the level of wealth between the beginning and end of the period. In the absence of these other flows, if income exceeds consumption during the period, then the level of wealth increases, whereas if consumption exceeds income, then the level of wealth decreases due to dissaving. Broadly, the income and consumption concepts used here are the same as the SNA's concepts of "household disposable income" and "household final consumption expenditure".

Just as income is available through saving for accumulating wealth, wealth is available through dissaving for spending on consumption. For example, in any particular time period and in the absence of capital transfers, a household's consumption may be financed wholly or partly out of its income, wholly or partly out of its wealth, or partly out of its income and partly out of its wealth. Where consumption and the payment of interest on consumer credit are funded wholly out of household income, saving is positive or zero. Where consumption is funded wholly or partly out of household wealth (implying that income is zero or that no income is saved), saving is negative. Such dissaving implies the disposal of some existing assets belonging to the household (e.g. a reduction of bank liabilities) and/or the incurrence of some new liabilities. If there are no other flows affecting the value of the household's assets and liabilities in the period, this dissaving would be the sole contributor to and fully explain an overall decline in the household's wealth.

There are also some other links between wealth and income and between wealth and consumption, as indicated inside the boxes in Figure 3.3. For example, households can earn property income from the assets they own. Such income includes interest, dividend and rent receipts. In addition, households may consume services produced by their assets. Such services include those relating to owner-occupied dwellings. The *Income, Consumption and* 

Wealth Framework provides more detailed information on these additional links from the perspective of income concepts and their measurement.

Understanding the relationships between the concepts of wealth, income and consumption is particularly important when measures of each of them are brought together for joint analysis. As discussed in Chapter 2, there are many policy and research questions concerning the well-being and behaviour of households where joint analysis can add considerable value. Consistency across the statistical standards for each dimension is needed to produce statistical measures that support such analysis. This has been kept in mind in developing the standards in this chapter. Particular attention has been given to relevant recommendations in the 2011 *Canberra Group Handbook on Household Income Statistics* and the 2003 report of the 17th ICLS on Household Income and Expenditure Statistics.

It is also important to understand the relationships between wealth, income and consumption when only partial data are available. For example, if no wealth data are available or only stocks of wealth at one particular point in time, the extent to which wealth is being used to support consumption in a given period will not be clear. The observed relationships between income, consumption and derived saving may suggest significant use of wealth for consumption by some households, but timing issues, gaps in coverage, lumpiness in transactions and errors in measurement for both income and consumption will limit the conclusions that can be drawn. If users do not understand the broader framework, they may draw wrong conclusions from the available data. For example, they may conclude that some households are in much worse, or much better, economic circumstances than they actually are.

The need for consistent standards on the measurement of household wealth, income and consumption at the micro level has also been a key driver behind the concurrent development of the OECD publication, *Framework for Statistics on the Distribution of Household Income, Consumption and Wealth.* That publication brings together the agreed standards for each dimension into a single reference. It also includes advice on best practice for generating integrated data sets and for deriving statistical measures for analysing joint distributions, such as income and wealth. The wealth standards described in this document have been incorporated in that publication.

#### 3.3. Basic concepts and definitions for household wealth statistics

This section describes and defines the basic concepts used in producing micro statistics on household wealth. It contains recommended definitions of "household", "wealth" or "net worth", and "assets" and "liabilities". The section also discusses the consistency of these definitions with those used for macro statistics compiled according to the SNA and with other relevant international standards.

#### 3.3.1. Household

The concept of the household is important in many different fields of both micro and macro statistics. This is reflected in the various international statistical standards that describe and define the concept. While the main standards all focus on people's living arrangements, their specific recommendations are not always consistent, and there are some substantial differences.

#### Comparison of different definitions

The international standards of most relevance for the measurement of the distribution of household wealth are those relating to population censuses, household income and expenditure surveys and national accounts. The definitions adopted in the harmonised wealth surveys conducted in the seventeen euro area countries are also relevant. These surveys are part of the euro area Household Finance and Consumption Survey (HFCS) that is described in Annex A. The main features of the household concepts and definitions in each of these standards are summarised in Table 3.1 and described in more detail in Annex E.

The basic household concept is very similar in all the standards described in Table 3.1. Both single person and multi-person households are recognised, and multi-person households are identified using criteria that have much in common. Generally speaking, a multi-person household refers to a group of people who have a shared place of residence and some shared expenditure on the essentials for living. This notion of shared resources also implies shared use of the income and/or wealth used to finance the expenditure on these goods and services.

The main differences between the standards relate to: i) the detailed specification of the resources that must be shared to qualify as a multi-person household; ii) whether or not a multi-person household is confined to occupancy of a single dwelling or other place of residence; iii) whether or not people living in institutions are included within the household concept; iv) whether or not different household categories are identified and how they are defined (e.g. private households, resident households, etc.); v) the extent to which statistical coverage is restricted to certain household categories; and vi) the treatment of particular borderline cases (e.g. boarders).

All the standards rely on the notion of "usual" residence to determine household membership. In the case of the UNECE/CES and HFCS standards, detailed rules are provided to address special situations where a person's usual residence may not be clear (e.g. due to work, study, hospitalisation, etc.). These rules differ in a number of ways. Those recommended by the UNECE/CES are based on convention, including length of time in a particular place, whereas those recommended by the HFCS take into account additional factors such as household ties and financial ties.

In practice, countries generally focus on private households when measuring household wealth at the micro level, and they use differing definitions of these households. Research conducted by the Luxembourg Wealth Study suggests that micro sources in this field rely on two main types of definition: i) those that are based on people living together and sharing expenses; and ii) those that are based solely on people living together in the same dwelling. Some countries also require that persons within a household be related.

Where there is no requirement for members of a private household to share resources other than the dwelling itself, the outcome is that one household is defined for each occupied dwelling. The UNECE/CES population census standard (paras. 481-482) notes that this approach may be more practical for some countries than its recommended one. The UNECE/CES also considers that this approach would generally have little impact on the total number of private households, although it may result in large differences for certain types of households such as one person households.

The selection of a uniform household concept and definition for use in micro statistics on household wealth has important implications for both data collection and analysis within countries as well as for international comparability of these statistics. The choice is also

### Table 3.1. Summary of the main features of the household concepts and definitions usedin other standards

| UN World Population<br>Census <sup>1</sup>  | Basic household concept: A household is either a group of persons who make common provision for food and other essentials for living, or an individual perso who makes his or her own provision for these essentials.  |
|---|--|
|   | Population covered by concept: All persons living in housing units and in collective living quarters other than the institutional population.<br>Household categories: None.   |
|   | Housing arrangements: A household may occupy the whole, part of, or more than one housing unit, or be found in collective living quarters, or be homeless.<br>Statistical coverage restrictions: None. The statistics cover all households.  |
| UNECE/CES Population<br>Census <sup>2</sup>                                       | Basic household concept: A household is either a group of persons who make common provision for food and possibly other essentials for living, or an individual person who makes his or her own provision for these essentials.  |
|   | Population covered by concept: All persons.  |
|   | Household categories. <sup>7</sup> Private households, Institutional households and Other households.  |
|   | Housing arrangements: A private household may occupy the whole or part of a housing unit, but not more than one housing unit; there may also be private household within collective living quarters. An institutional household comprises persons whose need for shelter and subsistence is being provided by an institution.  |
|   | Statistical coverage restrictions: None. The statistics cover all households.  |
| ICLS Standards for<br>household income and<br>expenditure statistics <sup>3</sup> | Basic household concept: Based on the UN World Population Census Standard, with a slight modification. A household is either a group of persons who make<br>some common provision for food or other essentials for living, or an individual person who makes his or her own provision for these essentials.  |
|   | Population covered by concept: Same as the UN standard (i.e. the institutional population is excluded).  |
|   | Household categories. <sup>7</sup> Private households and Collective households.   |
|   | Housing arrangements: Same as the UN standard.   |
|   | Statistical coverage restrictions: Only private households living in housing units and those collective households whose members are involved in decision-making about their consumption (including consumption of housing services) are covered in the statistics. Other collective households (as well as institutions) are exclude  |
| Canberra Group<br>for household<br>income statistics <sup>4</sup>                 | Basic household concept: Based on the UNECE/CES Population Census Standard.  |
|   | Population covered by concept: Same as the UNECE/CES standard, by implication (i.e. all persons are covered).  |
|   | Household categories: Same as the UNECE/CES standard, by implication.  |
|   | Housing arrangements: A private household may occupy the whole or part of a housing unit, but not more than one housing unit.  |
|   | Statistical coverage restrictions: Only private households living in housing units are covered in the statistics. Private households in collective living quarters and institutional households are excluded.  |
| Euro area Household<br>Finance and<br>Consumption Survey <sup>5</sup>             | Basic concept: A household is either a group of persons who live together and share expenditures (including the joint provision of the essentials of living), or an individual person living alone.  |
|   | Population covered by concept: All persons living in private households and collective households. Persons living in institutions are excluded.  |
|   | Household categories. <sup>7</sup> Private households and Collective households.   |
|   | Housing arrangements: A private household may occupy either the whole or part of a private dwelling, but not more than one dwelling.   |
|   | Statistical coverage restrictions: Only private households residing in the national territory are covered in the statistics. All collective households (as well as institutions) are excluded.   |
| System of National<br>Accounts) <sup>6</sup>                                      | Basic concept: A household is either a group of persons who share the same living accommodation, who pool some or all of their income and wealth,<br>and who consume certain types of goods and services collectively (mainly housing and food), or an individual person who does not join with others in this way<br>Population covered by concept: All persons in the economic territory of a country. |
|   | Household categories: Resident households and Non-resident households. Within Resident households, Institutional households are separately defined.  |
|   | Housing arrangements: A household occupies a dwelling or dwellings, an institution, or other types of living accommodation.  |
|   | Statistical coverage restrictions: Only resident households are included in household sector statistics. Non-resident households are excluded from these statistic   |
| 1. Principles and   | Recommendations for Population and Housing Censuses, Revision 2, published by the United Nations in 200  |

1. Principles and Recommendations for Population and Housing Censuses, Revision 2, published by the United Nations in 2008, paragraphs 1.442, 1.448-1.455, 1.461-1.468.

2. Conference of European Statisticians' Recommendations for the 2010 Censuses of Population and Housing, published by the United Nations Economic Commission for Europe (UNECE) in 2006, paras. 158-170, 478-492, 592-595.

3. Household Income and Expenditure Statistics, Report II of the 17th International Conference of Labour Statisticians, published in 2003 by the International Labour Office, paras. 181-185, 193-195, resolutions 54-58.

4. Canberra Group Handbook on Household Income Statistics 2011, published by the UNECE, Boxes 3.2 and 6.1, and Section 3.3.1.

5. European Central Bank Household Finance and Consumption Network Core Output Variables, March 2011.

6. System of National Accounts 2008, paras. 1.48, 2.17-2.20, 4.10-4.37, 4.149-4.159, 24.12-24.17, 26.37-26.39.

7. Household categories are distinguished on the basis of the type of housing where each household lives. A "private household" generally refers to an individual person or group of persons occupying a separate housing unit; but, depending on the standard, it may also refer to a person or group occupying collective living quarters other than institutions. An "institutional household" refers to a group of persons whose need for shelter and subsistence is provided by an institution, such as hospitals, nursing homes, military barracks, prisons or student residences. A "collective household" refers to a person or group of persons occupying collective living quarters not classified as institutions, for example hotels, boarding or lodging houses and camps; some, all or none of these households may be regarded as private households, depending on the standard that is used and interpretation of that standard.

important for integration with micro statistics on other types of economic resources, particularly since household income is often also collected in wealth surveys and since data on both topics are often analysed together. As the household concept is already defined in detail in existing standards, there are advantages in basing the definition proposed for micro wealth statistics on one of these standards, provided that it is considered adequate for measuring wealth at the household level.

A case can be made for basing the household definition recommended here on any of the above standards. The SNA provides the conceptual base for macro statistics on wealth as well as on other economic resources. The value of consistency between the micro and macro wealth standards has already been discussed. The two population census standards provide conceptual benchmarks for micro statistics generally. In each case the household concept is the starting point for a range of other standard definitions and classifications (e.g. family, type of household, household characteristics, etc.). Many of these are relevant to micro statistics on household wealth. The ICLS, Canberra Group and HFCS recommendations are important from the perspective of integrating income, consumption and wealth statistics at the micro level. The first two explicitly draw on the population census standards to define their household concepts, but the differences in these census standards have led, at least partly, to different outcomes. The HFCS definition of household diverges at a detailed level from these other international standards but in a way that may be more attuned to the concept of wealth (e.g. its notion of financial interdependence is more suited to deciding on household membership in certain borderline cases).

In assessing the alternative approaches, the distinction between the "concept" of a household and the statistical "coverage" of households should also be kept in mind. As already illustrated, a statistical standard may recognise different categories of household within its overall concept but specify a narrower coverage for the statistics that are to be produced. For example, there may be analytical or practical reasons for excluding institutional households from the coverage of micro statistics on particular topics, even though such households are recognised within the household concept.

On balance, the UNECE/CES population census standard has been adopted as the household concept used in these guidelines on micro statistics on household wealth. The UNECE/CES household concept is closest to that in the SNA, as it encompasses all persons living in a country; it also underpins the Canberra Group's definition of a private household, and it can be broadly related to the concepts used in the other international standards, as it delineates private households separately from institutional households. However, differences in definitional detail preclude full alignment with the SNA, or with the ICLS standard and the UN world population census standard on which the ICLS concept is based. While the differences might be small in practice for many countries, they might still be significant for certain types of wealth analysis.

### 3.3.2. Definitions of household and associated concepts for micro statistics on household wealth

The recommended definitions of household and associated concepts for micro statistics on household wealth are provided below. The definitions of "household", "household categories", "housing arrangements" and "place of usual residence" are all based on the UNECE/CES population census standard. The definition of "country of residence of household" is based on the SNA (which in turn follows the IMF Balance of Payments Manual, 6th Edition), since this standard presents the internationally agreed basis for distinguishing residents of a country from non-residents.

#### Household

A household is either an individual person or a group of persons who live together under the same housing arrangement and who combine to provide themselves with food and possibly other essentials of living. All persons living in a country belong to one, and only one, household. A person's place of usual residence is the basis for determining household membership. However, all members of a household must be residents of the same country.

#### Household categories

In most countries, most people live in private households, but some live in institutional or other households. The main household categories are as follows:

- Private households. A private household is: i) a one-person household residing in a housing unit, i.e. a person who lives alone in a separate housing unit or who occupies, as a lodger, a separate room (or rooms) of a housing unit but does not join with any of the other occupants of the housing unit to form part of a multi-person household; or ii) a multiperson household residing in a housing unit, i.e. a group of two or more persons who combine to occupy the whole or part of a housing unit and to provide themselves with food and possibly other essentials for living. Members of the group may or may not pool their income or wealth, and they may or may not be related to each other; or iii) a oneperson or multi-person household residing in collective living quarters other than an institutional household. These private households live in hotels, boarding or lodging houses, camps, or employee quarters at institutions. This definition of a private household is based on the housekeeping concept. It does not assume that the number of private households is equal to the number of housing units. Within this concept, "boarders" are distinguished from "lodgers". Boarders take meals with the household and generally are allowed to use the household facilities; they are considered to be members of the household in which they live. Lodgers have hired part of the housing unit for their exclusive use and are considered to belong to a different household. Domestic staff living in the same dwelling as their employer may be boarders or lodgers: if the employer and staff share food and meals, the staff are boarders; if they do not, the staff are lodgers and constitute a separate household or households.
- Institutional households. An institutional household comprises persons whose need for shelter and subsistence is being provided by an institution. An institution is a separate and independent set of premises comprising all or part of a permanent building or set of buildings that are designed for long-term inhabitation and provision of services to a group of persons. These persons are subject to a common authority or regime or are bound by a common objective or personal interest. Institutional households fall under the following categories: i) residences for students; ii) hospitals, convalescent homes, establishments for the disabled, psychiatric institutions, homes for the elderly and nursing homes; iii) assisted living facilities and welfare institutions; vi) religious institutions; and vii) workers dormitories. Employees of an institution who live alone or with their family at the institution should be treated as members of private households.

• Other Household. An "other" household refers to a person who does not live in a private or institutional household, specifically the homeless with no usual place of residence.

#### Housing arrangement

A Housing Arrangement refers to the type of housing at a person's place of usual residence. Based on these arrangements, the whole population can be classified into three basic categories: i) occupants of housing units; ii) occupants of collective living quarters; and iii) homeless people with no place of usual residence.

- Housing Unit. A housing unit is a separate and independent place of abode intended for habitation by a single household or one not intended for habitation but used as a usual residence by a household. These units cover: i) conventional dwellings; and ii) other types of housing units such as mobile, semi-permanent and improvised dwellings.
- Collective Living Quarters. Collective living quarters comprise premises that are designed for habitation by large groups of individuals or several households and are used as the usual residence of at least one person. These premises cover: i) hotels and boarding or lodging houses; ii) institutions; and iii) camps (e.g. military camps, refugee camps and camps for housing workers).

#### Place of usual residence

A Place of Usual Residence is the geographic place within a country at which a person spends most of his or her daily night-rest. A number of special cases may however be distinguished.

In some cases where it may be difficult to determine this place, the treatment is as follows: i) for persons who work away from home and return at weekends, the usual residence is the family home; ii) for school students who are away from home during school term, the usual residence is the family home; iii) for tertiary students who are away from home while at college or university, the usual residence is their term-time address, except in specified circumstances (detailed below) where the family home is regarded as that place; iv) for inmates of institutions such as hospitals, nursing homes, prisons, etc., who have spent or are likely to spend 12 months or more in the relevant institution, their usual residence is the institution; and v) for persons – including children – regularly living in more than one residence during the year, their usual residence is the one where they spend the majority of the year.

Another special case is that of tertiary students living away from home but in the same country. The term-time address of tertiary students living away from home but in the same country while studying at college or university may be a housing unit (such as a rented house or apartment that is shared with others), an institution (such as a college hall of residence that accommodates large numbers of students) or some other type of collective living quarters (such as a boarding or lodging house). This term-time address is regarded as their place of usual residence with the following exception: where the student has sufficient financial support from parents to maintain himself or herself without other income (e.g. the student does not take on a job to provide income support while studying) and/or the student returns to the family home for long periods (e.g. longer than would be considered a family reunion), then the family home is regarded as the place of usual residence.

#### Country of residence

A household is resident in the economic territory of a country in which its members maintain or intend to maintain a dwelling or dwellings that are treated and used by them as their principal dwelling. If there is uncertainty about which dwelling is the principal dwelling, it is identified from the length of time spent there. Being present for one year or more in a territory or intending to do so is generally sufficient to qualify as having a principal residence there. For most households, their country of residence is the same as the country in which their place of usual residence is located, although this is not always so.

This definition of the country of residence has implications for household membership. All members of the same household have the same country of residence as the household itself, even though they may cross borders to work or otherwise spend periods of time abroad. If they work and reside abroad for such a long time that they acquire a centre of economic interest abroad, they cease to be members of their original households. Likewise, if a person lives with others in their principal dwelling but maintains his or her own principal dwelling in a foreign country, that person is a resident of the foreign country and is not regarded as a member of the same household as the others, even though income and expenses may be shared or assets jointly held.

Additional guidance is provided for a number of specific cases: i) students who go abroad for full-time study continue to be residents of the territory in which they were resident prior to studying abroad; ii) patients who go abroad for the purpose of medical treatment maintain their predominant centre of interest in the territory in which they were resident prior to the treatment; iii) crews of ships, aircraft and similar equipment that operate outside a territory or across several territories are treated as being resident in the territory of their home base; iv) national diplomats, military personnel, etc., employed abroad in government enclaves and their households are considered to be residents of the territory of the employing government; v) cross-border workers have their residence in the territory where their principal dwelling is located; vi) refugees have their residence in the economy where they stay or intend to stay for a year or more; and vii) highly mobile individuals having no principal dwelling or two or more principal dwellings in different economies have their residence determined on the basis of the territory in which the predominant amount of time is spent in the year.

Examples where a Household's Country of Residence may differ from the Country of Location of its Place of Usual Residence are provided below.

• Tertiary students studying abroad. As already noted, tertiary students who go abroad to study continue to be residents of their home country. However, their place of usual residence is their term-time address in the foreign country where they are studying, unless their specific circumstances satisfy the conditions for an exception. In particular, if the student has sufficient financial support from the parents to maintain himself or herself without other income, and/or the student returns to the family home for long periods, then the family home is regarded as the place of usual residence. From the perspective of the home country, when the student's place of usual residence is the term-time address abroad, then the student constitutes or is part of a resident household unit of the home country that is physically located in a foreign country. If the student is sharing their term-time accommodation with non-residents of the home country, the student needs to be separated from those non-residents when delineating a resident household unit. For both private and institutional households, this implies that two or

more households need to be identified at the same foreign address: one consisting of home country residents and one or more others consisting of non-residents.

- Persons undergoing medical treatment abroad. Similar situations may be encountered with people who go abroad for medical treatment. These persons continue to be residents of their home country, but their place of usual residence may be an institution in a foreign country (rather than their home in the home country) if they spend twelve months or more in the relevant institution. Again, two or more institutional households may need to be delineated at the one address to ensure that resident households can be separated from non-resident households.
- Diplomats, military personnel and the like serving abroad. A further situation where differences may arise concerns national diplomats, military personnel, etc., employed abroad in government enclaves. As already mentioned, such persons and their households are considered to be residents of the territory of the employing government. In addition, the physical enclaves where they work and sometimes live are considered part of the territory of the employing government. This reflects the fact that such enclaves, which are clearly demarcated land areas located within the geographical boundaries of the host country, are outside the legal jurisdiction of the host country of residence will differ from the country of location of their usual residence; whereas if they live inside the enclaves, both these countries will be the same.

#### Relationship between the household definition and statistical coverage

The coverage principles for micro statistics on household wealth are discussed later in this chapter. The recommended coverage of households is specified in terms of the types of households defined above, but not all types of households are to be included in the statistics. Specifically, the statistics should cover private households that reside in housing units and that are residents of the country to which the statistics relate, but exclude institutional households and private households residing in collective living quarters. They should also exclude non-resident households, even if they are physically located in the domestic territory of the country. The reasons for these restrictions, along with their analytical and practical implications, are explained in that section. These restrictions have implications for the alignment with macro statistics based on the SNA and with micro statistics based on recommendations by the Canberra Group and ICLS.

#### Relationship between the household definition and unit of measurement

The household definition is closely tied to the unit of measurement for micro statistics on household wealth. Both the collection unit and the analysis unit are usually based on the household or some dissection of the household, such as the family, the primary economic unit or the individual person. Many countries that have household wealth surveys also use more than one unit, especially to collect the data. The different types of units, and the analytical and practical considerations that need to be taken into account when choosing units, are discussed later in this chapter.

#### Relationship between the concepts of household and family

The concept of "household" should be distinguished from that of "family". The UNECE/ CES standard for population censuses (paras. 493-504) defines several concepts of family, all of which refer to a group of two or more persons who live in the same household and who are related to each other through blood, marriage or adoption. The narrowest concept is that of a "family nucleus". This refers to two or more persons who live in the same household and who are related as husband and wife, as cohabiting partners, as a marital (registered) same sex couple, or as a parent and child. Under this concept, a family comprises a couple without children, or a couple with one or more children, or a lone parent with one or more children. A family nucleus may also include "skip generation households", i.e. households consisting of a grandparent(s) and one or more grandchildren but with no parent of those grandchildren present. Other family concepts include: i) a "three generation household"; ii) a "reconstituted family"; and iii) an "extended family". The concept of a family may also cross the household boundary and involve much more complex relationships. Different cultural and institutional arrangements in countries can affect the relevance and usefulness of particular concepts as well as the practicality of measuring them.

While the concepts of household and family are related, there are three main differences between them. First, a household may consist of only one person, but a family must contain at least two members. Second, the members of a multi-person household need not be related to each other, while the members of a family must be related. Third, families may include persons who usually live separately or are permanently absent from the household. The value of producing wealth statistics in respect of family units, in addition to household units, is considered later in this chapter.

#### 3.4. Wealth and net worth

The concept of "wealth" generally refers to economic resources in the form of assets and liabilities. For example, the SNA refers to the wealth of an economy's inhabitants as being the levels of an economy's assets and liabilities at particular points of time (SNA, para. 1.2). Wider concepts of wealth are also important for some types of analysis. These may look beyond assets and liabilities, as commonly understood, to other types of resources that people may possess. For example, the conventional economic view of wealth may be extended by taking into account human capital (such as people's knowledge and skills), social capital (such as people's social networks and support mechanisms) or cultural capital (such as people's cultural and spiritual beliefs). However, concepts relating to these different types of capital are difficult to integrate with the established concepts dealing with economic resources. Also, their many dimensions are hard to measure comprehensively, particularly at the level of each individual household, and attaching monetary values to them is especially problematic.

For micro statistics on household wealth, confining the concept of wealth to assets and liabilities in a narrow economic sense – comprising items that have an economic value and are subject to ownership rights – is generally considered to be the most relevant and useful approach for most purposes as well as the most practical. This concept of wealth is often summarised in a net measure representing assets less liabilities. For an individual household, the net measure may be positive or negative, depending on that household's specific circumstances. This net measure of wealth is equivalent to "net worth" as defined in the SNA (paras. 13.4, 13.85).

The recommended definition of wealth, or net worth, for micro statistics on household wealth is as follows: wealth, or net worth, is the value of all the assets owned by a household less the value of all its liabilities at a particular point in time. This definition generally reflects country practices. Measures of total wealth at the individual household level typically refer to the level of assets less outstanding liabilities and are often described as net worth. In some data collection settings, however, practical issues may arise with the "point in time" condition. This condition and its implications are discussed in more detail later in this chapter.

#### 3.5. Assets and liabilities

Assets and liabilities are defined in detail in the SNA as part of its integrated system of national accounts (SNA, paras. 3.30-3.49). The SNA definitions are also applicable to micro statistics on household wealth and are widely used in producing these statistics. Consistent definitions for both sets of statistics can enhance the usefulness of both the micro and macro wealth measures and facilitate the integration of these and other statistics.

The recommended definitions of assets and liabilities for use in micro statistics on household wealth, based on those in the SNA, are as follows: an asset is a store of value representing a benefit, or series of benefits, accruing to the economic owner by holding or using the entity over a period of time; while a liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the creditor).

All the assets covered by the guidelines are economic assets, i.e. they are subject to property rights that give their owners the right to transfer them to another agent. Assets may be financial in nature or not, whereas all liabilities are financial. For all financial assets held by a household there is a corresponding liability held by another party.

To be recognised as an asset or liability, a financial claim or obligation must be unconditional once the contract or custom establishing it is agreed by both parties. This requirement for micro statistics on household wealth is the same as that for macro statistics based on the central SNA framework. It means that contingent assets and contingent liabilities are excluded from the asset and liability measures in both sets of statistics.

Contingent assets and contingent liabilities arise from past events where one party is obliged to provide a payment or series of payments to another party only if certain specified conditions prevail in the future. As there is no certainty about how the future will unfold in relation to these conditions, contingent assets and contingent liabilities can be viewed as possible assets and possible liabilities, whose existence will be confirmed only by the occurrence or non-occurrence of future events. For example, an undrawn line of credit associated with an overdraft facility on a bank account is a contingent liability of the account holder; only if and when the overdraft is drawn down does the holder incur a liability. Similarly, a claim for compensation or damages being pursued through legal processes where the outcome is uncertain is a contingent asset of the claimant; only if and when payment against the claim is virtually certain does the claimant acquire an asset. Uncertainty about the value of an asset or liability does not make this contingent if it is certain that an asset or liability of some value does exist, for example the entitlement to receipts from an annuity for the remainder of one's life, no matter how long one lives.

It should be noted that financial derivatives – such as option contracts and forward contracts – are treated as actual assets and liabilities rather than as contingent ones. This treatment follows that in the SNA (paras. 11.23, 11.111-11.125). Such financial instruments provide a means through which specific financial risks linked to underlying items can be traded or offset in financial markets in their own right.

A household's net equity in any unincorporated business owned wholly or in part by the household is included as an equity asset of the household. These businesses are those, owned wholly or partly by a member (or members) of the household, where the owner and the business are the same legal entity. The owner is personally liable for any business debts that are incurred and the business can be engaged in virtually any kind of productive activity.\*

Common types of financial assets held by households are currency and deposits, bonds and other types of debt securities, listed and unlisted shares, equity in family trusts and partnerships, investment fund shares and units, and pension entitlements. Common types of liabilities are loans and credit card debt. Examples of non-financial assets held by households are their homes, land, other property and valuables. Each of the different types of assets and liabilities held by households is discussed in detail later in this chapter.

#### 3.5.1. Treatment of consumer durables

An important conceptual issue affecting the coverage of household non-financial assets is the treatment of consumer durables. Their treatment can significantly affect the magnitude and distribution of household wealth. It also has implications for the integration of statistics on household wealth, income and consumption, as well as for the consistency of macro and micro measures.

A consumer durable is defined in the SNA as a good that may be used for purposes of consumption repeatedly or continuously over a period of a year or more. Examples of household consumer durables are cars and other vehicles, kitchen and laundry appliances, computer and entertainment equipment, clothing and other personal items. The central SNA framework explicitly excludes consumer durables acquired by households from its concept of assets. This exclusion occurs because the services they provide to households are not treated as being within the SNA's production boundary. However, the SNA recognises that information on the stock of consumer durables is of analytical interest, for example in the context of measuring household saving and wealth. It therefore suggests that information on the value of consumer durables should appear as a memorandum item in the household balance sheet, but that it should not be integrated into the balance sheet totals (SNA paras. 2.34, 3.46-3.47, 10.34, 13.93-13.94).

The SNA also notes that its central framework can be supplemented through satellite analysis using alternative concepts such as a different production boundary or an extension of the scope of assets to include consumer durables. One of the conceptual variations presented as an option in the context of satellite accounts is to treat household expenditure on consumer durables as fixed capital formation rather than as household final consumption expenditure. Under this option, the resulting fixed asset is treated as providing capital services to the household, estimates of these services are included in consumption, and the concept of saving

<sup>&</sup>lt;sup>+</sup> This treatment is consistent with the economic principle (enunciated in SNA para. 4.47 in regard to such entities abroad) that: "[...] An unincorporated enterprise abroad should be treated as a quasi-corporation when indications of substantial operations can be identified separately from the rest of the entity. As with other quasi-corporations, either a complete set of accounts for the unit exists or it would be meaningful from an economic point of view to compile them. The availability of separate records indicates that an actual unit exists and makes it practical to prepare statistics." Practical guidance in the SNA on the treatment of unincorporated enterprises is more generally based on the availability of accounts (SNA, paras. 4.21, 4.32, 4.155-4.157, 24.29), so that when unincorporated enterprises are included as quasi-corporations in the corporations sector, the full accounts for the corporations sector can be compiled. However, the constraint of a complete set of accounts for the compilation of the corporations sector does not arise for micro-household statistics where only the household's net equity need be recorded.

is extended accordingly. Studies have shown that this approach can have a significant effect on saving ratios (SNA, paras. 2.167, 29.6, 29.46-29.51, 29.152-29.155).

Most countries collect information on consumer durables (at least on the more important ones like cars and other vehicles) in their surveys for measuring household wealth at the micro level. Several countries also include consumer durables as a component of nonfinancial assets in their wealth classifications. This information is useful for analysing household wealth, including the behaviour of different types of households, as economic conditions and policy settings change. Collecting the information in the context of assets is also convenient, as individual households typically regard their major consumer durables as assets, and they may have loans tied to the purchase of these items. The view that such items are assets is reinforced by the practices of financial institutions and government agencies in carrying out their administrative functions.

In the household income standards recommended by both the 2011 *Canberra Group Handbook* and the 2003 ICLS report, the value of services from consumer durables is included in the conceptual definition of income. In principle, consumer durables are treated like owner-occupied dwellings, i.e. the goods are treated as assets belonging to a notional unincorporated enterprise owned by the household and earning income from the production of the services consumed by the household. This income is valued net of expenses that go into the production of the services. Both standards recognise, however, that most countries do not measure such income in practice. For purposes of international comparisons, therefore, the Canberra Group provides a practical definition of income that excludes the value of these services (Sections 2.3.3, 4.5), while the ICLS also provides an operational definition of income that excludes them (paras. 75, 80 and Resolution 16.)

In the case of household consumption expenditure, the ICLS standard recognises that the different purposes for which the statistics are required may require different approaches. It allows countries to choose between two alternative operational definitions: one that treats durable goods in the same way as non-durable goods, whereby the purchase value of the good is recorded as consumption expenditure; and another that involves assessing the estimated value of the services provided by the goods and recording this as consumption expenditure. It identifies this second alternative - which is consistent with its conceptual definition of income and the treatment of consumer durables as assets - as the conceptually preferred approach for welfare analysis. It acknowledges that this preferred approach involves imputations and that most countries do not make them. Nonetheless, it argues on analytic grounds that statistical offices should collect information that could be used to value the flow of services for major durable goods (defined in terms of expected lifetime and cost). This information should be collected, whichever alternative is used for measuring household consumption expenditure. It also recommends that, regardless of the alternative used for consumption, the corresponding method should be used for income when both sets of statistics are used in combination (2003 ICLS, paras. 142-148, 170-172, and Resolutions 32-35, 37, 49).

The recommended treatment of consumer durables in micro statistics on household wealth is to treat them as assets and to include them in measures of household wealth. They should also be recorded separately from other types of assets. This treatment is considered to be the most useful approach for the many types of analysis that micro statistics need to inform. Country experience has also shown that it is a practical approach. For some types of households, such as those at the lower end of the wealth distribution, the value of consumer durables may account for a sizeable proportion of their assets and have a significant impact on their net worth. Also, some types of liabilities (e.g. loans for vehicle purchases) may be closely associated with the acquisition of particular types of consumer durables. Inclusion of both the debt and the item giving rise to it is more informative than inclusion of the debt alone.

Separate recording will facilitate the compositional and distributional analysis of wealth at the micro level. It will also allow alignment with macro statistics on household wealth compiled on the basis of the SNA central framework, and with micro statistics on household income and consumption expenditure compiled on the basis of either the conceptually preferred or the operational definition in the standards for those statistics. As measures of household net worth at the micro level will have a wider asset coverage than those at the macro level, it is important to present these measures in a way that makes this difference clear to users.

#### 3.6. General principles of recording

A number of general principles of recording are specified in this section. These relate to: i) valuation; ii) time of recording; iii) consolidation and netting; iv) coverage; and v) unit of measurement. Research comparing country methodologies (see Annex D) and the experiences of the Luxembourg Wealth Study indicate that there are some significant differences between countries in all of these areas.

#### 3.6.1. Valuation

A variety of valuation bases exist for describing the assets and liabilities of households in monetary terms. These tend to reflect the different types of assets and liabilities that are held, the different institutional arrangements under which they are held, and the changes in prices that occur over time. Each valuation basis serves a specific purpose and may be used to produce some types of statistics.

For macro-level wealth statistics, the SNA recommends that all assets and liabilities be valued at their current value on the market, or at the closest equivalent to this, on the date to which the statistics relate (SNA, paras. 2.58-2.60, 3.16, 13.16-13.17). This basis of valuation is fundamental to the integrated nature of the national accounting system, as it ensures consistency between flow and stock measures. It also reflects the basis on which decisions are made concerning the acquisition and disposal of assets, since such decisions are generally taken in the light of the prices at which the assets may be bought or sold on markets. It means that the values of the assets and liabilities held by households at any moment in time vary whenever any transactions take place, price changes occur, or other changes in volume arise.

The SNA also provides guidance on methods for approximating the current value of assets and liabilities when observable market prices are not available (SNA, paras. 3.118-3.139, 3.155-3.158, 13.18-13.84). These methods include: *i*) the derivation of values from prices established in related markets; *ii*) the estimation of fair values that approximate market prices; *iii*) the calculation of written-down replacement cost; and *iv*) the estimation of the discounted present value of expected future returns. The SNA also discusses the use of nominal values, face values and insured values in estimating current values for particular types of assets and liabilities.

In the case of micro-level wealth statistics, the current valuation of household assets and liabilities is also the preferred measurement basis for most analytical purposes, for similar reasons to those given for macro statistics. However, ambiguities can arise when applying this broad concept to specific types of wealth. In particular, it may be difficult to assign a point estimate of value to those assets that do not face a regular market test or that are traded only rarely. Also, there can be considerable subjectivity in determining the best approximation of current values. For example, where there are multiple approaches to trading there may be different valuation bases, any one of which might be appropriate in some circumstances.

In practice, most of the different kinds of wealth held by households are likely to raise some valuation issues, and certain kinds of wealth can be expected to present more challenges than others. One of the most important assets for many households, their home, exemplifies the challenges. It may be difficult to value the dwelling in an objective way unless it is actually sold. Except when the dwelling is part of a newly built housing development with clearly distinguishable variations on a basic theme, its special features may generate considerable uncertainty about its value even under a given trading regime. But the valuation of a dwelling usually depends critically on the trading regime in place, and this implies that a range of potential prices may need to be considered. If a "quick sale" price is used, this may be lower than what might be obtained by filtering through a number of potential buyers over a longer period of time. The length of time an owner is willing to filter through potential buyers to optimise the sale price may also generate a range of values. A "self-evaluation" or "reservation" price – interpreted as the price that would cause an owner not currently intending to move to be willing to sell - might also be considered. A self-evaluation price of this kind might be particularly useful in explaining the consumption behaviour and/or financial decisions of an individual household as well as in analysing issues like the household's propensity to consume out of wealth. However, this might not provide a good approximation of the current price of the asset for use in compiling statistical measures.

Other valuation bases include the original acquisition price. The original price may provide useful insights for some wealth components, particularly when used in conjunction with the current price valuation and analysed at the individual household level. However, if this basis of valuation is used to produce wealth aggregates relating to all households, the aggregates may have little meaning for many types of analysis, since they would be based on a range of prices stretching back from the current period to possibly the distant past, and very similar assets could be valued at very different prices. In addition, changes in the level of assets over time could easily be misinterpreted, and there would also be inconsistencies between stock and flow measures.

In principle, for micro statistics on household wealth, all of a household's asset and liabilities should be valued at their current value on the market, or at the closest equivalent to this, on the date to which the statistics relate. This valuation basis is applicable to all types of assets and liabilities and allows a consistent, coherent and comparable set of aggregate measures to be produced. As it is identical to the valuation basis recommended in the SNA, it also facilitates consistency between macro- and micro-level wealth statistics and between stock and flow measures. In particular, it facilitates the alignment of micro statistics on household wealth with those on household income and consumption. To the extent that other bases of valuation may be useful for some purposes, any statistics compiled on these other bases should be treated as providing supplementary information. While this "current value" principle underpins existing micro statistics on household wealth in many countries, putting the principle into practice in a data collection context is generally not straightforward. Those assets that are typically large contributors to household wealth (e.g. the household home) and non-marketable or non-traded assets (e.g. pension entitlements) often need detailed attention when developing collection methodologies in order to determine how the current price valuation can be best approximated. Information availability within households together with respondent burden also affect the options that can be considered. The current price valuation of each component of household wealth is examined from a practical perspective in Chapter 5, along with methods for approximating this basis of valuation.

#### 3.6.2. Time of recording

In principle, for micro statistics on household wealth, all of a household's assets and liabilities should be recorded at the same point in time, and this point in time should be the same for all households.

A uniform time of recording is essential to ensure the internal consistency and coherence of the statistics. For example, the integrity of aggregates produced by summing or netting the assets and liabilities of individual households depends on all the components being measured at exactly the same date. To the extent that there are departures from this date, the asset and liability totals may be very difficult to interpret, and the meaning of derivations such as net worth or change in levels over time may be blurred.

The principle proposed here for micro statistics on household wealth is consistent with the time of recording rules for macro statistics based on the SNA (paras. 2.54-2.57, 3.16, 3.150-3.160). The SNA requires stocks and flows to be recorded consistently with respect to timing. It specifies that stocks of assets and liabilities are to be recorded at the same moment, typically the beginning or the end of an accounting period. Flows are to be recorded at the moment of accrual within the accounting period (i.e. the moment when economic value is created, transformed, exchanged, transferred or extinguished). It notes that the use of this timing for recording individual flows within the accounting period is crucial for distinguishing between changes in net worth due to transactions and changes due to holding gains and losses.

In practice, difficulties are likely to be encountered in applying this principle when collecting micro data on wealth. For example, even though data may be sought in respect of a specific point in time, a household may only have data available for different dates, and it may not be feasible to adjust the data. In addition, although a few countries specify "end of the previous year" as the time of recording for their data collections on household wealth, most countries refer to the "time of interview". As data collection typically extends over a period of time, such as several months, "time of interview" generally implies the use of different dates by different households. Again, adjusting the data to a common date may not be feasible. These measurement issues and the possible adjustment methods required (e.g. use of indices, such as those relating to the stock market) are considered further in Chapters 4 to 6.

A related matter is the reference date for micro-level wealth statistics. In accordance with both the stock concept of wealth and the time of recording principle, the reference date should ideally be a specific point in time rather than a period of time. In practice, constraints on data collection may lead to operational arrangements whereby reference dates span a period of time. For example, in some countries the statistics refer to stock levels over a period

of time (e.g. a year) rather than at a point in time (e.g. end-of-year). It may be appropriate in such cases to describe the resulting statistics as showing average stock levels over the period if the underlying records are considered to be representative of the entire period. Where such practices are adopted, their analytical implications may need special consideration, as additional elements may need to be taken into account for some types of analysis (e.g. understanding changes in wealth over time, joint analysis of micro and macro wealth statistics, and combining micro statistics on wealth, income and consumption).

#### 3.6.3. Consolidation and netting

A household's financial assets may include claims on other households. There is then an asset in the first household and counterpart liabilities in other households. A member of a household may also have financial claims on other members of the same household, who then have counterpart liabilities. However, these will generally cancel out by a process of consolidation when compiling household statistics.

A household may also have both assets and liabilities relating to a particular type of financial instrument. For example, it may have loan claims as well as loan obligations. Some of its assets and liabilities may also be directly linked. For example, it may own a dwelling on which there is a mortgage. Again, in both cases the asset and its corresponding liability could be included in the asset and liability aggregates. Alternatively, they could be offset against each other with only the net position included in the aggregates.

In principle, for micro statistics on household wealth, all assets and all liabilities belonging to members of a household should be recorded on a gross basis (i.e. separately) and included in the respective asset and liability aggregates irrespective of the counterparty's attributes, the type of financial instrument involved, or any direct links between particular components. The only exception applies when the financial asset of a household member has other members of the household as the counterparties with liabilities. This basis of recording implies that the statistics – both levels and change in levels – should be compiled without using consolidation or netting to eliminate or adjust any types of assets and liabilities, except for consolidating intra-household asset/liability relationships.

This approach is generally consistent with the consolidation and netting rules for macro statistics based on the SNA (paras. 2.68 -2.72, 11.40-11.43). It also allows some flexibility in the presentation of data for different types of analysis. For example, it does not preclude some degree of netting for particular analytical purposes, if needed. From a practical perspective, this basis of recording is generally straightforward, and it is typically the one adopted by countries when producing micro statistics on household wealth.

The treatment in micro statistics of the ownership of unincorporated enterprises as equity investments by their owners not only treats all business investments similarly, but also avoids the difficulty of obtaining separate data on all the separate assets and liabilities relating to the business. This issue is discussed further later in this chapter.

#### 3.6.4. Coverage

In principle, household wealth in macro statistics based on the SNA covers all households resident in a country at the reference date and all their assets and liabilities at that date. In comparison, household wealth in micro statistics usually refers to the assets and liabilities of a narrower range of households. Most countries restrict the target population to private households and their members residing in the domestic territory of a country at the time of data collection. Persons living in institutions and other collective living quarters are typically excluded. Some countries also have additional exclusions, such as people living in sparsely populated parts of the country, people without a permanent address, and people overseas.

Similar restrictions on household coverage are found in most countries' micro statistics on household income and consumption. The 2011 *Canberra Group Handbook* (Section 3.3.1) on household income statistics limits its coverage to private households living in housing units, thereby excluding persons living in institutions and other collective living quarters. The 2003 ICLS report (Resolution 58) on household income and consumption statistics is only slightly less restrictive, limiting its coverage to private households living in housing units plus certain households living in collective living quarters (other than institutions) where the members are involved in decision-making about their consumption.

From an analytical perspective, coverage restrictions of the type that most countries apply in their micro statistics on household wealth limit, to some extent, the usefulness of the data. The following examples illustrate this. First, the country statistics generally available do not present a complete picture of household wealth; although only a small proportion of the population of a country is likely to be excluded, their wealth holdings and associated behaviour may differ significantly from the rest of the community. Second, some population groups (e.g. older people and students) are more likely than others to be affected by the restrictions. This may affect the type of analysis that can be undertaken concerning the wealth of those groups, as well as measures of the overall distribution of wealth if those groups are more or less wealthy than others. Third, there is likely to be added complexity when trying to align the micro wealth measures with the macro ones, unless a method can be devised for separately estimating the wealth of the households excluded from the micro measures. At the same time, different coverage may be a source of confusion among users of both sets of statistics, unless the different coverage of each of them is well explained.

From a practical perspective, obtaining comprehensive wealth data for those living in institutions and other collective living quarters would generally be very difficult. Special collection arrangements would usually be needed, as would special estimation methods for dealing with situations where the required data are unavailable. Methods for incorporating the data into analytical measures, such as frequency distributions, might also require special attention, as institutional households are likely to differ substantially in size and composition from private households living in housing units. In many cases the costs of including these additional households in micro-level wealth collections could significantly outweigh the benefits.

Overall, there appear to be strong grounds at the present time for restricting the coverage of micro-level wealth statistics to private households living in housing units. Limiting coverage in this way will facilitate cross-country comparisons of wealth data as well as integration of micro statistics on income, consumption and wealth. However, as the share of the population that is omitted and their characteristics are likely to vary between countries, analysts need to be aware of this to make meaningful comparisons of wealth data.

The recommended coverage of micro statistics on household wealth is all assets and liabilities of private households that reside in housing units and that are residents of the country to which the statistics relate. Definitions of the terms "private household", "housing unit" and "resident household" were provided earlier in this chapter. Based on this coverage principle, measures of household net worth at the micro level will generally refer to most but not all households in a country. This will need to be made clear to users, particularly as the micro wealth measures will have narrower household coverage than the macro wealth measures. As a minimum, information should be provided on the estimated percentage of the population that is omitted and their demographic characteristics.

The statistics should exclude: i) institutional households; ii) private households residing in collective living quarters; and iii) non-resident households. Examples of institutional households and of private households residing in collective living quarters were also provided earlier in this chapter. In the case of non-resident households, the exclusion applies to those located in the domestic territory of a country – such as those containing foreign diplomatic and military personnel – as well as those located in other countries.

The statistics should include both the foreign and domestic assets and liabilities of the households that are to be covered. Examples of foreign assets and liabilities that should be included are: i) dwellings in foreign countries; ii) deposits in non-resident banks; iii) securities issued by non-resident entities; and iv) debts incurred with non-resident lenders. In the case of foreign assets in the form of land, dwellings and other buildings, their treatment should be consistent with that in the 2008 SNA (paras. 4.15d and 26.33), which in turn follows the IMF Balance of Payment Manual, 6th Edition. Such assets are always deemed to be owned by residents of the economy where they are located. This means that a resident owning such an asset in another country is treated as having a foreign financial asset in the form of equity in a notional enterprise in that country.

In practice, countries may encounter problems in implementing the coverage principle outlined above due to the geographic spread of their population. In particular, residents that are abroad at the time of data collection and those living in areas that are difficult to access or remote may be excluded, because obtaining data from them is impractical or too costly. These data collection constraints are not unique to household wealth surveys, and their statistical significance is likely to vary by country. These and other practical issues associated with coverage are discussed in more detail in Chapter 6.

It should be noted that the coverage principle recommended here is not intended to discourage countries from producing micro statistics on household wealth for all or for additional household categories where this is considered appropriate in their specific circumstances. However, if a wider coverage is adopted, separate details on private households residing in housing units should also be provided for use in international comparisons.

#### 3.6.5. Unit of measurement

It is important to distinguish between data collection units and data analysis units. The data collection unit is the physical entity within the population about which information is collected (e.g. a person or a household). The data analysis unit is the unit about which statistics are produced. It may be the same as the collection unit, or it may be derivable from the data obtained with respect to the collection unit.

#### **Collection unit**

The collection units that can be used for micro-level wealth data generally depend on the design of the statistical survey or the nature of the administrative system through which data is available. In the case of household wealth surveys, countries use two main types of collection unit: i) the household (defined in different ways); and ii) the individual person. Other units within the household, such as the family, are also used for collection purposes, but this is less common.

Many countries use both the household and the individual person as collection units. This usually means that some details are collected for the household as a whole from one of its members, while other details are collected separately from each of the members concerned. For example, information on wealth that is often shared may be collected for the whole household, while information on wealth that is typically held in a single name may be collected directly from each member. The practical issues associated with different types of collection unit are discussed in more detail in Chapter 6.

In general, wealth data collected at the level of the individual person is likely to have greater flexibility for analysis than data collected at the household level. For example, where wealth data is collected at the person level, it may be analysed by person or aggregated for analyses of households, families or other units within a household. However, if it is collected at the household level, it may only be analysed for units below this level to the extent that they can be derived from the information collected. Collection at the person level also opens up the possibility of obtaining data on individual ownership shares for assets and liabilities held jointly by household members: such data can provide insights into how wealth is distributed within the household.

From the perspective of accuracy, it is more difficult to generalise. In many cases, wealth data obtained directly from the persons concerned is more likely to be complete and based on relevant records than combined data for all household members reported by a single household spokesperson based on that person's knowledge of everyone's finances. In other cases, however, the situation may be less straightforward: for example, household members may have differing views about ownership and other aspects of jointly held assets, or one member may specialise in managing finances, with other members knowing very little about assets they nominally own.

As well as wealth information, most household wealth surveys collect a range of other information about the household and its members. Examples are household size and composition, income, employment, and characteristics or behaviours of individual household members (such as educational attainment or payment habits). While some information of this kind may be readily obtained for the household as a whole through a single person, other information may need to be collected from each person concerned to obtain accurate details. Often, core information about the composition of a household and the basic characteristics of its members is collected through a single spokesperson, and more detailed information relating to individual members is collected directly from each of them.

For purposes of integrating micro statistics on wealth with those on income and consumption, there may be advantages in adopting a unified approach to collection units. This is particularly relevant for countries that use a single household survey to cover wealth and one or both of these other topics, each in some depth. The 2011 *Canberra Group Handbook* (Sections 3.3.1 and 6.3.1) favours the individual person unit for collecting household income data on the grounds of data quality and flexibility for analysis. However, it also recognises that some elements of income might be best collected at the household level. The 2003 ICLS report (Resolution 56) takes a different position: it favours the household unit for collecting household income and expenditure data, while recognising that some components of income might be best collected at the individual person level.

It is recommended that the choice of collection unit for obtaining information in household wealth surveys be left to individual countries, taking into account the nature of the information being sought, the likely impact on data quality and the survey design. The household unit, the individual person unit, or possibly other units or multiple units may be appropriate, depending on a country's particular circumstances.

#### 3.6.6. Analysis unit

The main unit of analysis for micro statistics on household wealth is generally the household unit. For some countries and certain types of analysis, other types of unit within the household may also be important, such as the individual person, the family or the primary economic unit (i.e. the economically dominant individual or couple and all others in the household who are financially interdependent with that individual or couple).

The household unit is also the basic unit of analysis for micro statistics on income and consumption based on international standards in the 2003 ICLS report (Resolutions 54-57) and the 2011 Canberra Group Handbook (Sections 3.3.1 and 6.3.1), and this has been carried over to the Income, Consumption and Wealth Framework. These standards also recognise that the individual person unit and the family unit are useful as well.

While wealth is held by individual persons, wealth analysis usually focuses on households, since individual wealth, like other economic resources, may often be shared in some way with others living in the same household. For example, it is not unusual for some assets and liabilities (such as the household home and any associated mortgage) to be jointly held by the partners in a couple. Other assets, such as bank deposits of the main income earner, may be drawn down as needed to finance the consumption expenditure of a dependent person living in the same household. Even where there is no joint ownership of wealth and no intra-household transfers of wealth, the economies of scale that arise from the sharing of dwellings may benefit members by allowing higher levels of wealth accumulation than would otherwise be the case.

A full appraisal of the way in which wealth is shared within a household would require detailed information on how wealth and other economic resources are distributed and used within the household, including the various types of transfers that take place between household members. Such details would be very difficult to obtain, and generally countries do not attempt to collect them. However, as already noted, where information is collected at the individual person level it may be possible to obtain some limited information on individual shares of assets and liabilities held jointly by household members.

For many types of analysis of household wealth, the unit of analysis is assumed to be a type of decision-making unit. In the case of the household unit, this assumption seems reasonable for the most common and simple household structures, such as nuclear families and single individuals. But for more complex household structures, usually relating to a relatively small proportion of the population, the assumption may be more questionable, as decision-making arrangements within such households can be quite heterogeneous. Since complex households tend to be more common in some countries than others, this may also affect wealth comparisons across countries. Grouping households by size and composition (including family type) can assist in addressing these issues, as discussed later in this chapter.

Although it is usual practice to produce micro statistics on the distribution of income and consumption by individual person units as well as household units, micro statistics on the distribution of wealth are usually produced only for household units. However, some particular types of wealth analysis may target individual persons, since the intrahousehold distribution of resources can be very unequal and average household size and composition varies considerably, particularly between population sub-groups and across countries. For example, there may be interest in wealth distribution measures based on the number of people rather than on the number of households. To produce measures where the unit of analysis is the individual person, wealth estimates for households would need to be adjusted in a way that reflects the differences in household size and composition and the economies of sharing resources. For some types of analysis, adjustments of this kind could be calculated using adjustment factors determined by an equivalence scale. The relevance and use of equivalence scales for wealth statistics are discussed in Chapter 7.

It is *recommended* that the household be the basic unit of analysis for purposes of micro statistics on household wealth. The individual person unit, the family unit or possibly other units may also be used in particular cases where the analytical focus indicates they may be more appropriate. The following definitions should be applied when delineating these different levels of unit:

- Household. A household is defined earlier in this chapter.
- Family. A family refers to a group of two or more persons who live in the same household and who are related to each other to a specified degree through blood, marriage or adoption. The "specified degree" depends on the family concept that is used. In this context, reference should be made to the different family concepts defined in the 2006 UNECE/CES population census standard (paras. 493-504). As discussed earlier in this chapter, the narrowest concept is the family nucleus, which refers to two or more persons who live in the same household and who are related as husband and wife, as cohabiting partners, as a marital (registered) same sex couple, or as a parent and child. Other wider concepts are also defined in the UNECE/CES standard. Where the family unit is used in analysing micro statistics on household wealth, the particular family concept on which the unit is based should be clearly specified, and the definition of that concept should be based on the UNECE/CES standard.
- Individual person. An individual person refers to the individual members of a household.

#### 3.7. Standard components of household wealth

For many analytic purposes as well as for the consistent derivation of "net worth", it is necessary to identify and define the separate components of household wealth in some detail. Such information about the composition of wealth is particularly important for understanding household asset market participation, portfolio diversification and influences on household portfolio behaviour. Experience from the Luxembourg Wealth Study highlights the need for internationally agreed definitions of the various components identified in the micro-level data, particularly those relating to housing wealth, unincorporated businesses and pension wealth.

#### 3.7.1. List of standard components

The components of wealth consist of various types of assets and liabilities. Definitions of "assets" and "liabilities" were provided earlier in this chapter.

The recommended standard components are presented in Table 3.2. Each component should be separately identified in micro statistics on household wealth. The asset

| Non-financial assets | Owner-occupied dwellings<br>• Principal residence<br>• Other owner-occupied dwellings<br>• Other real estate<br>Consumer durables<br>• Vehicles<br>• Other consumer durables<br>Valuables<br>Intellectual property and other non-financial assets  |
|----------------------|--|
| Financial assets     | Currency and deposits<br>Bonds and other debt securities<br>Net equity in own unincorporated businesses<br>Shares and other equity<br>• Shares in corporations<br>• Other equity<br>Mutual funds and other investment funds<br>Life insurance funds<br>Pension funds<br>• Social insurance pension funds<br>• Private pension funds<br>Other financial assets  |
| Liabilities          | Owner-occupied residence loans   Principal residence loans  Other owner-occupied residence loans  Other real estate loans  Other investment loans  Financial asset loans  Valuables loans  Intellectual property and other non-financial asset loans  Consumer durable loans  Vehicle loans  Other consumer durable loans  Consumer credit loans and other liabilities  Education loans  Other loans and liabilities |

Table 3.2. List of standard components of household wealth

components are grouped into financial assets and non-financial assets, as this is a key distinction for many types of analysis, and countries usually make this distinction in both their macro- and micro-level wealth statistics. The liability components consist mainly of different types of loans. It should be noted that the technical terms used here to distinguish between components may not necessarily be appropriate for collecting data from respondents. The importance of describing each component using terms with which respondents are familiar is discussed further in Chapter 6.

The selection of the individual standard components was partly based on information reported by countries in the survey of country practices for measuring household wealth at the micro level (Annex D). Where a large number of countries reported that they had data available for a particular component, this was taken as a broad indication of the importance of the component, the practicality of collection, and the potential for producing internationally comparable data sets. Consideration was also given to the types of assets and liabilities included in the *Luxembourg Wealth Study Database* and to those shown in the SNA balance sheet. However, as the SNA wealth components apply to all sectors of the economy and are focused on the needs of macroeconomic analysis, some of them have no or limited applicability at the individual household level. On the other hand, some types of assets and liabilities that are important for understanding wealth at the individual household level are less important for sectoral and economy-wide studies.

Many countries collect household wealth data in finer detail than shown in Table 3.2, but may also have less detail in other areas. Some of the detail presented in Table 3.2 is included to allow direct comparison of asset and liability data with the corresponding categories used in micro statistics on income. Many countries also use different terminology for describing their components, and different classification schemes for organising the data in statistical presentations. These country-specific approaches reflect differences in country circumstances and analytical needs. They may also help to ensure complete coverage of assets and liabilities, particularly as new financial instruments are introduced or taken up by households at differing rates across countries.

The following paragraphs define the coverage of each component in broad terms. They also provide examples of some of the more common items associated with each component. Where appropriate, the definitions are based on, or consistent with, those in the SNA. A comprehensive examination of each component from a practical perspective, including detailed guidelines on what should and should not be included and what valuation methods are most appropriate, is provided in Chapter 5.

#### 3.7.2. Non-financial assets

A non-financial asset is defined, based on the SNA (paras. 10.9-10.17), as either a produced asset or a non-produced asset that is not a financial claim. Produced assets refer to outputs from production processes and cover new and existing fixed assets, inventories and valuables. Fixed assets are used repeatedly or continuously in production processes for more than one year (e.g. for micro household statistics they include dwellings, other buildings and structures and intellectual property products). As discussed earlier in this chapter, for purposes of micro statistics on household wealth, consumer durables are also included in fixed assets although they are not regarded as assets within the central SNA framework. Valuables are goods of considerable value not used primarily for purposes of production or consumption but held as stores of value over time. Non-produced assets that are not financial claims cover natural resources (e.g. land), contracts, leases and licences.

The standard components of non-financial assets are:

- Principal residence: The main dwelling or other type of housing unit occupied by the household and owned by one or more of its members. The residence may or may not have a mortgage or loan secured against it. The land on which the residence is located should be included in the value of principal residence when the land is owned by the household.
- Other owner-occupied residences: Dwellings or other types of housing unit regularly occupied by the household and owned by one or more of its members. They include dwellings used by one or more household members during the working week but not regarded as the principal residence of those members. They do not include dwellings owned by household members but only used occasionally, such as holiday homes.
- Other real estate: Other residential and non-residential buildings and land owned by household members other than own unincorporated business assets.

- Vehicles: The cars, motorcycles, boats, aircraft, etc., owned by household members other than own unincorporated enterprise vehicles.
- Other consumer durables: The contents of the household's principal residence and other housing units, where these contents are owned by the household, other than own unincorporated enterprise assets. Examples are kitchen and laundry appliances, furniture, computer and entertainment equipment, clothing and other personal items, excluding valuables.
- Valuables: Goods whose primary role is as stores of value. Examples are precious stones and metals, fine jewellery, works of art, antiques, and stamp and coin collections.
- Intellectual property and other non-financial assets: These include intellectual property products (e.g. literary or artistic originals, or computer software), and contracts, leases and licences that meet the conditions for treatment as assets (e.g. marketable operating leases allowing a tenant to sub-let a building, or tradable licences and permits to undertake specific activities).

#### 3.7.3. Financial assets

The definition of a financial asset is also based on the SNA (paras. 11.7-11.8). In the context of micro statistics on household wealth, this refers to a financial claim, which is the payment or series of payments due to the creditor by the debtor under the terms of a liability. Shares and other equity are treated as financial assets even though the financial claim their holders have on the issuing institutional unit is not a fixed or pre-determined monetary amount (conversely, equity is treated as a liability of the issuing unit). However, for wealth micro statistics, financial assets managed as an integral part of the operations of own unincorporated enterprises are not included in the other financial assets of the same class, since it is the net equity in the own unincorporated enterprise that is treated as the financial asset for the household.

With the exception on equity in own unincorporated enterprises, all the standard components of financial assets refer to financial instruments that are defined in the SNA, and the definition of each instrument is consistent with that in the SNA. The relevant instruments are: i) currency and deposits (SNA paras. 11.52, 11.54, 11.59); ii) debt securities (SNA para. 11.64); iii) equity (SNA para. 11.83); iv) investment fund shares or units (para. 11.94); v) life insurance and annuities entitlements (SNA para. 11.106); vi) pension entitlements (paras. 11.107, 13.78, 17.191-17.206, Table 17.10); vii) loans (para. 11.72); viii) financial derivatives (paras 11.111-11.125); and ix) other accounts receivable (paras. 11.126-11.127).

The standard components of financial assets cover:

- Currency: Notes and coins that are of fixed nominal value and are issued or authorised by the central bank or government.
- Deposits: Claims that are represented by evidence of deposit. Examples are transaction accounts, saving accounts, fixed-term deposits and non-negotiable certificates of deposit. Also included are special saving accounts, such as those relating to saving plans under which income taxes on funds deposited in the account can be deferred until money is withdrawn.
- Bonds and other debt securities: Negotiable instruments serving as evidence of debt. Examples are government saving bonds, corporate bonds, commercial paper, state or municipal non-saving bonds, foreign bonds and other non-saving bonds, debentures,

mortgage-backed securities, negotiable certificates of deposit, treasury bills and similar instruments normally traded in financial markets.

- Net equity in own unincorporated enterprises: Household members' share of the net equity in unincorporated enterprises in which they work (analogous to shares in an incorporated enterprise). Net equity in an unincorporated enterprise is usually best valued on the basis of how much the enterprise could be sold for (i.e. a market value), since their operations may utilise non-financial and financial assets and liabilities in an integrated way, and the simple differencing on component assets and liabilities is unlikely to approximate market value. Otherwise, where a sale value cannot be estimated, the net value of the enterprise might be approximated by adding the values of the individual assets of the enterprise (e.g. industrial land and buildings, livestock, inventories, machinery and equipment of various types, intellectual property, cash and deposits of the business, and shares and other investments managed as an integral part of the business), and subtracting the liabilities of the household raised to finance the unincorporated business (e.g. business loans and accounts with business suppliers still to be paid).
- Shares in corporations: Instruments and records acknowledging claims on the residual value of incorporated businesses after the claims of all creditors have been met. Examples are publicly traded shares that are listed on an exchange, and unlisted shares (i.e. private equity securities).
- Other equity: Instruments and records acknowledging claims on the residual value of a business after the claims of all creditors have been met. Examples are household members' equity in partnerships in which the household members do not work (these investors are sometimes known as "sleeping" or "silent" partners), and equity in family trusts. Household members' equity in own unincorporated businesses (that is, unincorporated businesses which the members own or partly own and in which they also work) and their equity in mutual funds and other investment funds are all excluded from this asset class and reported separately.
- Mutual funds and other investment funds: Collective investment undertakings through which investors pool funds for investment in financial or non-financial assets. Examples are mutual funds, hedge funds, unit trusts, income trusts and other managed investment funds.
- Life insurance funds: Claims of policy-holders on enterprises offering life insurance or providing annuities. These claims include life insurance entitlements, where the insurer guarantees to pay the policy-holder an agreed minimum sum or an annuity at a given date or earlier if the policy-holder dies beforehand. Both with-profit and without-profit policies are included. Term insurance providing benefits in the case of death (e.g. from an accident) but in no other circumstances is regarded as non-life insurance, as recommended in the SNA (para. 17.6), and is therefore excluded.
- Pension funds: Claims of members and account holders on pension schemes, sometimes also
  known as retirement plans or superannuation schemes. These claims include entitlements
  in both defined benefit schemes (where the formula for defining a member's pension is
  agreed in advance) and defined contribution schemes (where the amount of the pension
  depends on the performance of the assets acquired with the member's contributions). The
  schemes may be compulsory or voluntary, and government or private. Examples are current
  balances of accounts with public, occupational and industry schemes, and personal pension
  and superannuation accounts with financial institutions (e.g. superannuation or retirement
  savings accounts that meet conditions specified under superannuation or tax laws, tax

deferred retirement accounts and self-managed superannuation funds). Entitlements in pension schemes for a government's own employees are included, provided such schemes are distinct from social security and have separate accounting information. Other pension entitlements, accruing under government social security schemes, are excluded for reasons discussed in the following paragraphs.

• Other financial assets: Miscellaneous financial assets, including loans made to other people except other members of the same household, option contracts and other types of financial derivatives, and other accounts receivable.

From a conceptual perspective, it can be argued that all pension entitlements should be covered in financial assets, irrespective of whether the entitlements are in private schemes, government employee schemes or social security schemes. The exclusion of entitlements in social security schemes, as recommended here for micro statistics on household wealth, is primarily for practical reasons and to maintain consistency with the SNA's definition of financial assets. It reflects the view that reliable estimates of pension entitlements in social security schemes may not be readily available in many countries, especially for individual households, and that the case for departing from the SNA on this issue is not strong at this time. The recommended treatment is considered to offer the best prospects for the international comparability of micro-level wealth data at the time of writing, while at the same time facilitating integration of the micro and macro wealth measures. However, national accounts practices in this field are also evolving. The 2008 revision of the SNA, recognising that the exclusion of social security pensions from the core accounts will distort cross-country comparisons, recommends that all countries include entitlements from social security pensions in a supplementary (compulsory) table. As macro-level information on social security pension wealth becomes more widely available, the treatment recommended by these Guidelines is expected to evolve as well.

It may be argued that, even where estimates of pension entitlements in social security schemes can be derived for individual households, they would be of limited usefulness in cases where a government can change the basis on which the entitlements are determined in order to keep them within the bounds of what is feasible from a budget perspective. On the other hand, all schemes have their risks (e.g. private schemes can be affected by company collapses), and the exclusion of pension entitlements in social security schemes may create uncertainties for some types of analysis (e.g. analysis of wealth levels may be affected when people move between the included and excluded schemes, and cross-country wealth comparisons may be affected by differences between countries in the relative importance of the included and excluded schemes). To assist in analysing the wealth data in isolation, countries should provide some indication of the likely significance of excluding pension entitlements for their measures of financial assets and net worth. In addition, those countries that can make estimates of pension entitlements in social security schemes are encouraged to do so and to provide the estimates as supplementary information.

#### 3.7.4. Liabilities

The definition of a liability recommended earlier in this chapter, again based on the SNA (para. 11.5), is restated here for convenience. A liability is established when one unit (the debtor) is obliged, under specific circumstances, to provide a payment or series of payments to another unit (the creditor). Most of the standard liability components for micro statistics on household wealth refer to loans of various types. Loan liabilities are defined, based on the SNA (para. 11.72), as obligations that are created when a creditor

lends funds directly to a debtor and the creditor's claims are evidenced by documents that are not negotiable. Loan liabilities include overdrafts, instalment loans and hire purchase credit, but exclude accounts payable that are not delinquent. However, for wealth micro statistics the liabilities of own unincorporated enterprises are not presented with the other liabilities of the same class for that household, since it is the net equity in own unincorporated enterprises that is treated as the financial asset for the household.

The coverage of each standard liability component is described below. Loans are primarily classified according to the purpose of the loan. Where the purpose of a loan relates to more than one component, the allocation should be determined on the basis of its primary purpose.

- Principal residence loans and Other owner-occupied residence loans: Loans for the purpose of constructing, purchasing or improving the household's owner-occupied residences. Examples are home mortgage loans; home equity lines of credit for home improvement; money borrowed for a deposit on a home purchase; and bridging finance taken out until such time as a home loan is obtained.
- Other real estate loans: Loans for the purpose of constructing, purchasing or improving other dwellings, buildings and land (other than own unincorporated business properties).
   Examples are: loans used to purchase holiday homes; and loans used to purchase rental properties for investment purposes.
- Financial asset loans: Loans used to purchase shares and other financial assets. Excludes loans used to purchase financial assets that are integral to the operation of unincorporated enterprises.
- Valuables loans: Loans used to purchase art works, jewellery and other valuables primarily as stores of value.
- Intellectual property and other non-financial asset loans: Loans used to purchase intellectual
  property and other non-financial assets not included elsewhere (excluding loans for own
  unincorporated enterprises).
- Vehicle loans: Loans for the purchase of cars, motorcycles, boats, aircraft, etc. (excluding business loans).
- Other consumer durable loans: Loans for the purchase of other consumer durables such as furniture, electrical appliances, clothes, etc. (excluding business loans).
- Education loans: Loans to cover study expenses (excluding business loans).
- Other loans and liabilities: All other loans and liabilities not included above (excluding loans and liabilities of own unincorporated enterprises). Includes amounts outstanding on credit cards, bank account overdrafts and other lines of credit, if not included above. In practice, it is likely to be difficult to decompose credit card debt, bank overdrafts and similar types of ongoing loan facilities into separate purpose categories. In that case, they should be allocated to the major purpose for which they are normally used. This category also includes other loans taken: to purchase consumption items (e.g. food or holidays); to purchase valuables (including if they are purchased primarily as an investment); to pay tax obligations; for a capital transfer to another household (e.g. to help a relative purchase a dwelling); or to make a loan to another household (e.g. because the first household has better security or access to a better interest rate than the other household, where the first household would also have a financial asset equal to the value of the loan to the other household).

For some analysis, for instance, when considering a household's exposure to different forms of risk, it is also of interest to know the form of security used to obtain the loan. Therefore it is desirable to collect information on both the purposes for which a household obtained loans and the form of security used. The form of security may be a principal dwelling, other owner-occupied dwellings, other real estate, business assets, vehicles, valuables, or other security. Some liabilities have no form of security, and it may be useful to disaggregate these into liabilities outstanding on credit cards, overdraft amount, etc.

As described above, the liabilities of own unincorporated enterprises are not included in the standard liability components proposed in Table 3.2, because it is net equity in own unincorporated enterprise that is treated as a financial asset, rather than the individual assets and liabilities related to the operations of that business. However, users of micro statistics are likely to be interested in the value of those liabilities for some forms of analysis, and it would be useful, where possible, to collect the information as a supplementary data item.

#### Sub-components of assets and liabilities

For both assets and liabilities, countries may wish to identify sub-components within the standard components of Table 3.2 to meet the needs of data users and/or to facilitate data measurement. There are many possible bases on which such dissections may be specified, reflecting different user requirements and different data collection settings. Some specific components for which dissections may be useful are discussed below.

#### Shares in corporations

The assets component "Shares in corporations" covers the equity holdings of households in different types of businesses. These businesses may or may not have their shares listed on public stock exchanges. As equity holdings in businesses that are listed are likely to be much easier to value (as shares in these businesses have quoted prices) than those in unlisted businesses, it may be useful to distinguish listed shares from unlisted shares when collecting data. This distinction may also be useful for analytic purposes and for alignment with macro wealth statistics based on the SNA.

An illustration of the way this component may be split to show equity holdings in different types of businesses is provided below. The split is identical to that provided in the SNA (para. 11.85):

- Shares in corporations.
  - Listed shares.
  - Unlisted shares.

#### 3.7.5. Pension funds

The assets component "pension funds" covers the claims of households on various types of public and private pension schemes, sometimes also known as retirement plans or superannuation schemes. Some types of claims, such as those in defined benefit schemes, may be much harder to measure than those in other types of schemes (e.g. defined contribution schemes or personal retirement savings accounts). There may also be considerable analytic interest in the different types of claims. For example, some countries find it useful to separate assets in government schemes from those in nongovernment schemes in their published statistics. A breakdown of claims may therefore assist in data collection as well as to enhance the usefulness of the collected data. An illustration of the way the component may be dissected into different types of claims is shown below. This split can be readily aligned with that recommended in the SNA (Table 17.10) for macro-level wealth statistics. Pension funds, for example, may be dissected into:

- General government schemes.
  - Defined benefit.
  - Defined contribution.
- Non-general government schemes.
- Industry or occupational schemes.
  - Defined benefit.
  - Defined contribution.
- Personal schemes.

#### 3.7.6. Loans

In the case of loan liabilities, many countries collect details of both the purposes for which loans are taken out by households and the collateral provided to secure these loans, as such data is of considerable value in analysing the nature of household debt and associated household behaviour, and it can usually be readily obtained at the individual household level. For example, the euro area HFCS collects data on loans split by type of collateral and purpose, and the LWS provides country micro data that shows home-secured debt separately from other debt.

#### 3.7.7. Data availability

Results from the survey of country practices for measuring household wealth suggest that the majority of countries have either complete or largely complete data available for most of the standard components. However, the extent to which data is generally available varies across the different components, and for some countries there may be significant data collection implications.

In the case of non-financial assets, most countries collect data for the principal residence, other real estate, and vehicles. Some countries do not have any data on consumer durables other than vehicles, valuables or other non-financial assets.

In the case of financial assets and liabilities, most countries have data available for mortgage loans on the principal residence and on other real estate, but a number have no data or only incomplete data for various other components. These data gaps mostly relate to deposits, shares and other equity, mutual funds and other investment funds, pension funds and vehicle loans. In respect of pension funds, measuring a household's assets in public sector unfunded schemes (e.g. defined benefit schemes) can be particularly difficult and subject to considerable uncertainty. This and other measurement issues are discussed in detail in Chapter 5.

#### 3.7.8. Consistency with the 2008 SNA balance sheet components

The standard components in Table 3.2 can be aligned with the 2008 SNA balance sheet components at a very broad level, i.e. non-financial assets, financial assets and liabilities. Beneath this level, however, alignment is more difficult, as the classification schemes underpinning the two sets of components differ in significant ways, reflecting the different purposes of the statistics. As the household sector typically holds a more limited range of financial instruments than other sectors, the SNA (para. 11.30) recognises that a number of SNA balance sheet components are either not applicable to the sector (i.e. entries are conceptually impossible) or of limited relevance to it (i.e. entries are possible but expected to be small).

Table C.2 in Annex C outlines the relationship between the macro statistics components presented in the SNA and the micro statistics components recommended earlier in this section. While a number of micro components correspond – either alone or combined – with a single macro component, many do not. Full alignment at the component level is unlikely to be achievable for most countries, and even limited alignment at this level may require additional data collection and/or the use of special estimation or modelling techniques.

#### 3.7.9. Relationship to micro statistics on household income

For purposes of integrating micro statistics on household wealth with those on household income, there needs to be a correspondence between the wealth components and those income components relating to income from wealth. The *Income, Consumption and Wealth Framework* (Chapter 4 and Chapter 7 of OECD, 2013) defines the following basic income components that can be brought together in specified ways to derive the main income aggregates (i.e. "total income" and "disposable income"):

- Income from employment. This is further dissected into: i) employee income; and ii) income from self-employment, such as the profit or loss that accrues to owners of unincorporated enterprises.
- Property income. This is defined as receipts that arise from the ownership of assets that are provided to others for their use. These receipts are dissected into: i) income from financial assets, such as interest and dividends, net of expenses; ii) income from non-financial assets, such as rents for the use of houses and land, net of expenses; and iii) royalties, i.e. receipts arising from the return for services of patented or copyrighted material, such as receipts from writings or the right to make use of inventions. The expenses deducted from receipts include interest payments made on loan liabilities.
- Income from household production of services for own consumption. This is further dissected into: i) net value of housing services provided by owner-occupied dwellings; ii) value of unpaid domestic services; and iii) value of services from household consumer durables.
- Current transfers received. These are split into: i) social security pensions and other cash benefits; ii) pensions and other employment-related social insurance benefits; iii) social assistance benefits; iv) transfers from non-profit institutions; v) transfers from other households; and vi) other current transfers.
- Current transfers paid. These are split into: i) direct taxes; ii) compulsory fees and fines; iii) inter- household transfers paid; iv) employee and employers' social insurance contributions; v) transfers to non-profit institutions; and vi) other current transfers.

Table 3.3 shows, for each standard component of household wealth, the income component(s) specified in the *Income, Consumption and Wealth Framework* within which income is generated.

#### 3.8. Asset and liability groups

As indicated earlier in this section, there are many possible ways in which assets and liabilities can be grouped in micro statistics on household wealth. Different classification

### Table 3.3. Relationship between household wealth standard components and household income components in the Income, Consumption and Wealth Framework

| alth standard components                                  | Income from wealth: Corresponding ICW framework components <sup>1</sup> |  |  |
|---|---|--|--|
|   | Non-fi  | nancial assets   |  |
| Owner-occupied dwellings                                  |   |  |  |
| Principal residence                                       | 13.1  | Net value of owner-occupied housing services <sup>2</sup>                                |  |
| Other owner-occupied dwellings                            | 13.1  | Rent from real estate other than owner-occupied dwellings, net of expenses <sup>2</sup>  |  |
| Other real estate   | 12.2  |  |  |
| Consumer durables   | 13.3  | Net value of services from household consumer durables <sup>2</sup>                      |  |
| Vehicles  |   |  |  |
| Other consumer durables                                   |   |  |  |
| Valuables   | 13.3  |  |  |
| Intellectual property and other non-financial assets      | 12.3  | Royalties and other income from non-financial assets net of expenses $^{2}$              |  |
|   | Fina  | ncial assets   |  |
| Currency and deposits                                     | 12.1.1  | Interest from deposits, net of expenses  |  |
| Bonds and other debt securities                           | 12.1.2  | Income from bonds and other debt securities, net of expenses <sup>2</sup>                |  |
| Equity in own unincorporated enterprises                  | 11.2  | Income from self-employment <sup>2, 3</sup>  |  |
| Shares and other equity                                   | 12.1.3  | Income from shares and other equity, net of expenses <sup>2</sup>                        |  |
| Mutual funds and other investment funds                   | 12.1.4  | Income from mutual funds and other investment funds, net of expenses <sup>2</sup>        |  |
| Life insurance funds                                      |   |  |  |
| Pension funds   | 12.1.5  | Annuity and other regular payments from life insurance funds                             |  |
| Social insurance pension funds                            | 14.2  | Pensions and other benefits from employment-related social insurance                     |  |
| Private pension funds                                     | 12.1.6  | Regular payments from private pension funds  |  |
| Other financial assets                                    | 12.1.7  | Income from other financial assets, net of expenses <sup>2</sup>                         |  |
|   | L   | iabilities   |  |
| Owner-occupied dwellings loans                            |   |  |  |
| Principal residence loans                                 | 13.1  | Net value of housing services provided by owner-occupied dwellings <sup>2</sup>          |  |
| Other owner-occupied residence loans                      | 13.1  |  |  |
| Other real estate loans                                   | 12.2  | Rent from real estate other than owner-occupied dwellings, net of expenses <sup>2</sup>  |  |
| Other investment loans                                    |   |  |  |
| Financial asset loans                                     | 12.1  | Income from financial assets <sup>2</sup>  |  |
| Valuables loans   |   |  |  |
| Intellectual property and other non-financial asset loans | 12.3  | Royalties and other income from other non-financial assets, net of expenses <sup>2</sup> |  |
| Consumer durable loans                                    | 13.3  | Net value of services from household consumer durables <sup>2</sup>                      |  |
| Vehicle loans   |   |  |  |
| Other consumer durable loans                              |   |  |  |
| Education loans   | E3  | Interest paid on consumer credit <sup>4</sup>  |  |
| Other loans and liabilities                               | E3  |  |  |

1. Income component codes and descriptors are those shown in Table 4 of Chapter 4 of the ICW Framework.

2. Expenses include interest payments.

3. Includes profit/loss from own unincorporated enterprises; Goods and services produced for barter, less cost of inputs; and Goods produced for own use, less cost of inputs.

4. Classified as non-consumption expenditure, not a deduction from income.

schemes may be required for different types of analysis, and some of these may imply the collection of additional detail beyond what is necessary to compile the components in Table 3.2. For example, besides the conventional classification of assets into financial and non-financial, assets might be grouped in terms of risk, liquidity and/or duration.

• In the case of risk, assets carrying a level of return that is not guaranteed – such as publicly traded stocks, various types of bonds and other investment funds – are distinguished from other types of assets. The objective is to group assets and liabilities in a way that will facilitate assessment of the financial risks to which households are exposed.

- In the case of liquidity, assets are classified based on the speed with which they can be converted into cash (i.e. easily sold). Liquid assets are those that can be easily transformed into cash and enable households to pay debts when they fall due or easily moved into new investment opportunities. These assets include marketable securities that are highly liquid with minimal change in value (i.e. small capital gain or loss) as well as negotiable certificates of deposit, money market instruments, commercial paper, etc. Liquid assets are usually financial assets, and non-liquid assets are usually non-financial assets.
- The classification of assets based on duration is common in international accounting standards, specifically the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS). The IAS/IFRS classification distinguishes current assets from non-current assets. Current assets are expected to be converted into cash within one year. Examples are cash or cash-equivalent accounts and demand deposits. They are also called short-term assets and include those financial assets available for sale as well as liquid assets. Non-current assets, also called long-term or capital assets, produce economic benefits for more than one year. Non-current assets are usually divided into tangible assets and intangible assets. Tangible assets are all non-financial assets except patents, copyrights and trademarks, which are classified as intangible assets.

The classification of assets in the UN Central Product Classification scheme also includes a category for intangible assets that is then divided into financial assets and nonfinancial intangible assets. Non-financial intangible assets, as in the IAS/IFRS classification, consist of patents, copyrights and trademarks.

As previously noted, the standard categories of assets specified in the SNA are constructed around the basic dissection between financial and non-financial assets. Within the category for non-financial assets, sub-categories are provided for produced and non-produced assets, and two of the groups within these sub-categories – fixed assets and natural resources – are further dissected to indicate the physical nature of the component assets.

Similarly to assets, liabilities can also be classified in terms of their duration and nature. Interest-bearing liabilities are usually long-term, non-current liabilities, whereas non-interest-bearing liabilities are usually short-term, current liabilities. Current liabilities could also be reflected in short-term overdrafts on bank accounts, where liabilities will be settled within 12 months, or in the use of credit cards, where the payment is deferred for one month. Other bases on which liabilities can be grouped include by purpose of debt (e.g. to acquire particular types of goods, services or assets) or by collateralised status of debt (e.g. whether or not debts are secured against assets and the type of asset held as security).

It is recommended\_that financial assets and non-financial assets be treated as separate categories in micro statistics on household wealth, as shown in Table 3.2. As already indicated, this dissection is very useful for analysis of these statistics, and most countries collect the data needed to compile these categories. The breakdown is also important for alignment with macro statistics on household wealth and for integration with micro statistics on household income. Various other dissections may be compiled to satisfy analytic needs in particular countries. However, as the significance of different groupings is likely to vary according to country circumstances, no other dissections are specified for general compilation.

#### 3.9. Household groups

Many types of analysis of household wealth require looking at different groups within the community which may differ in ways that are not readily apparent when the focus is on the total household population. This need is reflected in the practices of most countries that produce micro statistics on household wealth. It is usual to provide information about the wealth of different household groups or sub-populations as well as information about the wealth of the population as a whole. This section discusses the groups into which households – specifically private households – are often classified in these statistics and recommends a number of standard dissections.

The characteristics that are most commonly used to classify households in micro-level wealth statistics are:

- Household size and composition.
- Geographic location.
- Tenure type.
- Income and wealth classes.
- Age, educational attainment and/or labour force status of the household reference person.

The groupings based on each of these characteristics are considered in more detail below. The discussion includes a number of country examples to illustrate some of the ways in which wealth data can be shown for each grouping. Many other household dissections may also be appropriate for individual countries and may be compiled to satisfy the needs of different kinds of analysis and policy making. They may involve the use of specific indicators (e.g. debt-to-asset ratios, or contribution of government pensions and allowances to gross income) as well as the use of other characteristics not listed above for classifying households (e.g. gender of the reference person, status in employment or other characteristics of the major income earner, life cycle stage, or main source of household income).

In the case of macro statistics, the SNA leaves it to individual countries to determine what household sub-sectors (i.e. groups) might be most relevant for analysing wealth and other economic resources. It recognises that there are many useful ways in which the sector might be split into sub-sectors, but the value of any particular breakdown depends on the type of analysis to be undertaken as well as on individual country circumstances. It notes that more than one method might be adopted if there is a demand for different breakdowns from different users, analysts or policy makers (SNA, paras. 4.33, 4.158-4.165, 24.27-24.44).

One of the approaches discussed in the SNA involves classifying households according to the nature of their largest source of income, and then allocating them to the following categories: i) employers; ii) own-account workers; iii) employees; and iv) recipients of property income and transfer incomes (SNA para. 4.161). Other approaches that are mentioned involve classifying households according to: the characteristics of a reference person or the main income earner; the total household income; the number of persons in the household; the type of area in which the household is located; or the type of assets owned by the household. With respect to the latter, a basic breakdown is that between households with assets in the form of unincorporated enterprises and those without: because of the special relevance of this category of assets, compilers of micro-data on household wealth should consider this breakdown when disseminating their data.

#### 3.9.1. Household size and composition

Household size refers to the number of persons that are members of a particular household. Household composition refers to the make-up of a household in terms of specified characteristics of its members. Examples of such characteristics are the age, gender and marital status of household members, their labour force status, and/or their family relationships. The number of possible characteristics and the variety of ways in which they may be combined means that household composition can be described in many different ways.

Grouping households according to their size and composition is crucial for understanding differences in the levels, structure and distribution of wealth across households and for analysing wealth trends and behaviours over time. Such groupings are also important for understanding household income and consumption, as noted in the 2011 *Canberra Group Handbook* (Section 6.3.2) and the 2003 ICLS report (para. 306, and Resolutions 102-105).

It is recommended that households be grouped by size and composition in micro statistics on household wealth. For this purpose data should be collected on:

- the size of each household in terms of number of members;
- the age and gender of each household member;
- the labour force status of household members (described below); and
- the family relationships between members of each household, at a level of detail sufficient to determine the household type (described below).

The "labour force status" of a household member refers to whether the person is "employed", "unemployed" or "not in the labour force". The benchmark for defining these categories should be the standard on labour force statistics maintained by the International Labour Organisation (ILO). As the ILO standard is consistent with the 2006 UNECE/CES population census standard and with the 2008 SNA, the adoption of this benchmark should facilitate integration of macro and micro statistics. It is recognised that, in practice, some countries may have difficulty in fully implementing this approach in household wealth surveys since labour market participation is generally not a major focus of these surveys.

"Household types" should be determined using the following classification, which is largely based on that recommended for private households in the 2006 UNECE/CES population census standard (paras. 547-551):

- Non-family household.
- One-person household.
- Multi-person household.
- One-family household.
- Couple only.
- Couple with one or more dependent children.
- Lone parent with one or more dependent children.
- Other one-family household.
- Two or more family household.

The collection of data on the range of characteristics recommended above will allow particular characteristics to be brought together in different combinations to describe

#### Box 3.1. Definition of terms in the classification of household types

*Family*. Family is defined here in the narrow sense, using the family nucleus concept discussed earlier in this chapter. It refers to two or more persons who live in the same household and who are related as husband and wife, as cohabiting partners, as a marital (registered) same sex couple, or as a parent and child. It therefore covers three situations: i) a couple without children; ii) a couple with one or more children; and iii) a lone parent with one or more children. This definition is based on the recommendations in the 2006 UNECE/CES population census standard (paras. 493-504).

Dependent children. Dependent children are defined as all persons under age 15, and people aged 15 to 24 who are full-time students, have a parent in the household, and do not have a partner or child of their own in the household. This definition is the same as that provided for illustrative purposes in the 2011 Canberra Group Handbook on Household Income Statistics (Section 6.3.2 and Box 6.2). It is recognised that, in practice, different definitions are in use in different countries, and the adoption of a standard definition may be difficult.

households in statistical terms. For example, household size may be brought together with household age structure to give a particular perspective on household composition. Different combinations may be appropriate for different countries and for different types of household wealth analysis.

The following two examples, sourced from the Bank of Italy (Table 3.4) and the Australian Bureau of Statistics (Table 3.5), respectively, illustrate how household size, household type and labour force status of household members can be incorporated into micro statistics on household wealth to show the impact of differences in these characteristics on median or mean wealth levels.

| llevesheld size   | Median values of household we | Median values of household wealth, 2008 (thousands of euros) |  |  |  |  |
|-------------------|-------------------------------|--|--|--|--|--|
| Household size    | Total assets                  | Net wealth   |  |  |  |  |
| 1 member          | 101                           | 100  |  |  |  |  |
| 2 members         | 188                           | 174  |  |  |  |  |
| 3 members         | 200                           | 183  |  |  |  |  |
| 4 members         | 206                           | 185  |  |  |  |  |
| 5 members or more | 163                           | 149  |  |  |  |  |

Table 3.4. Household wealth by household size in Italy, 2008

Source: Bank of Italy, Supplements to the Statistical Bulletin – Sample Surveys, Household Income and Wealth in 2008, Table E2, p. 69, Vol. XX, No. 8, 10 February 2010.

#### 3.9.2. Geographic location

Geographic location refers to the physical areas within a country, such as states, provinces, regions, capital cities and urban or rural localities. Classifying households into groups on the basis of their geographic location can be very useful, as wealth holdings and patterns of wealth distribution may vary substantially across different parts of a country. There may also be considerable interest by state and provincial governments in comparing data for their own and other jurisdictions.

The value of geographic information for micro statistics on other aspects of household economic resources is well established. The 2003 ICLS standard recommends that, as far as

| Selected household characteristics             | Household net worth (thousands of Australian dollars) |        |  |  |
|--|---|--------|--|--|
|  | Mean  | Median |  |  |
| Family composition of household                |   |        |  |  |
| One-family households                          |   |        |  |  |
| Couple family with dependent children          | 827   | 495    |  |  |
| One-parent family with dependent children      | 276   | 76     |  |  |
| Couple only                                    | 983   | 560    |  |  |
| Other one-family households                    | 809   | 562    |  |  |
| Multiple-family households                     | 715   | 444    |  |  |
| Non-family households                          |   |        |  |  |
| Lone person                                    | 461   | 309    |  |  |
| Group households                               | 243   | 89     |  |  |
| Total  | 720   | 426    |  |  |
| Household includes                             |   |        |  |  |
| Two or more employed persons                   | 869   | 513    |  |  |
| One employed person                            | 632   | 337    |  |  |
| No employed but at least one unemployed person | 241   | 63     |  |  |

## Table 3.5. Household wealth by household type and labour force status of household members in Australia, 2009-10

Source: Australian Bureau of Statistics, Household Wealth and Wealth Distribution, 2009-10 (Cat. No. 6554.0), Table 5.

possible, household income and expenditure statistics should be presented by geographic location of the household (Resolution 106). The 2011 Canberra Group standard also notes the usefulness of categorising households on a geographic basis for analysing household income (Section 6.3.2). Providing corresponding information for household wealth should facilitate the integration and combined use of all of these statistics.

It is recommended that, for purposes of micro statistics on household wealth, households be classified by relevant geographic areas. As the particular geographic dissections that may be appropriate will vary across countries, no recommendations are included here for standard dissections. In practice, the extent to which statistically significant data can be obtained for geographic dissections will often depend on the features of the data collection, such as the population coverage, sample size and sample design. Confidentiality constraints may also have a major impact on the extent to which geographic information can be released. Table 3.6, sourced from the United States Federal Reserve Board, shows two different classifications based on geographic location that provide additional insights into the net worth of families in the United States.

#### 3.9.3. Tenure type

Tenure type refers to the arrangements under which a household occupies its place of residence. The 2006 UNECE/CES population census standard (paras. 556-559) includes the following classification for tenure status of private households: i) a member is the owner of the housing unit; ii) a member is a tenant of all or part of the housing unit; and iii) other form of tenure.

As home ownership is a major form of wealth for many households, and rental costs can have a large impact on the ability to accumulate wealth, grouping households by tenure type can add considerable analytic value to household wealth statistics. For those households that own their dwelling, it can also be useful to distinguish between those with

|                                     | Family net worth (2007, thousands of US dollars) |      |        |      |  |  |
|-------------------------------------|--|------|--------|------|--|--|
| Geographic location                 | 20   | 04   | 20     | 07   |  |  |
|                                     | Median   | Mean | Median | Mean |  |  |
| Region                              |  |      |        |      |  |  |
| Northeast                           | 178  | 625  | 159    | 653  |  |  |
| Midwest                             | 126  | 479  | 108    | 468  |  |  |
| South                               | 70   | 382  | 96     | 499  |  |  |
| West                                | 104  | 575  | 156    | 663  |  |  |
| Urbanicity                          |  |      |        |      |  |  |
| Metropolitan Statistical Area (MSA) | 115  | 554  | 132    | 621  |  |  |
| Non-MSA                             | 65   | 193  | 77     | 241  |  |  |
| All families                        | 102  | 492  | 120    | 556  |  |  |

#### Table 3.6. Family wealth by geographic location of family in the United States, 2004 and 2007

Source: "Changes in US Family Finances from 2004 to 2007: Evidence from the Survey of Consumer Finances", United States Federal Reserve Bulletin, February 2009 article, Table 4, p. A11.

or without a mortgage; and for those that rent, whether or not their rental costs are subsidised and/or the type of landlord they have (e.g. a government housing authority providing low cost housing, an individual person providing housing either directly or through a real estate agent, an employer, the owner/manager of a caravan park, a private non-profit organisation, etc). Grouping households by their tenure type is also useful for understanding household income and consumption, as noted in the 2003 ICLS report (Resolution 104) and the 2011 *Canberra Group Handbook* (Section 6.3.2).

It is recommended that households be grouped by tenure type in micro statistics on household wealth. For this purpose, data should be collected on the different types of tenure using the following classification, which is consistent with the 2006 UNECE/CES population census standard:

- Owner.
  - Without a mortgage.
  - $\clubsuit$  With a mortgage.
- Renter.
  - Housing authority landlord.
  - Other landlord type.
- Other tenure type (e.g. rent-free).

Table 3.7, sourced from the Australian Bureau of Statistics, illustrates the application of a tenure type classification (similar to the one recommended here) in micro statistics on household wealth in Australia.

#### 3.9.4. Income and wealth classes

In producing micro statistics on household wealth, households are often classified according to the size of their income and/or the size of their wealth. This can assist the analyst by drawing out some of the patterns and distributional aspects that are embodied

#### Box 3.2. Definition of terms in the classification by tenure type of households

Mortgage. In this context a "mortgage" refers to a loan that is secured against the owner's principal residence. Such loans may be for any purpose, and they are classified within the standard wealth component "principal residence loans".

Housing authority landlord. This refers to those government units that provide low-cost rental accommodation to eligible households. The units may be in the general government sector (including central, state and local governments and non-market non-profit institutions controlled by government units), or they may be government-controlled corporations. While their rental charges are likely to be subsidised in most cases, in some circumstances they may be equivalent to full market rates.

Other landlord type. This refers to other entities – both government and non-government – that own residential property and rent it out to households either directly or through an agent. Such landlords can belong to any sector of the economy. For example, they may be individual persons or households, public or private sector employers, property developers or other businesses, owner-managers of caravan parks, housing co-operatives, or community or church groups. While their rental charges are likely to reflect market rates in most cases, in some circumstances (e.g. involving related individuals, employers, or non-profit bodies) they may be subsidised.

|                                   | Household assets, liabilities and net worth (thousands of Australian dollars) |             |            |              |  |  |  |
|-----------------------------------|---|-------------|------------|--------------|--|--|--|
| Tenure type                       | Assets  | Liabilities | Net        | worth        |  |  |  |
|                                   | Mean value  | Mean value  | Mean value | Median value |  |  |  |
| Owner                             |   |             |            |              |  |  |  |
| Without a mortgage                | 1 219   | 39          | 1 179      | 737          |  |  |  |
| With a mortgage                   | 1 033   | 263         | 770        | 487          |  |  |  |
| Renter                            |   |             |            |              |  |  |  |
| State/territory housing authority | 46  | 4           | 43         | 20           |  |  |  |
| Private landlord <sup>1</sup>     | 215   | 39          | 176        | 66           |  |  |  |
| Other landlord type               | 256   | 58          | 197        | 49           |  |  |  |
| Total renters                     | 194   | 35          | 158        | 55           |  |  |  |
| Other tenure type                 | 518   | 66          | 452        | 130          |  |  |  |
| All households                    | 839   | 120         | 720        | 426          |  |  |  |

#### Table 3.7. Household wealth by household's tenure type in Australia, 2009-10

 Private landlord refers to cases where the household pays rent to a real estate agent or to another person not in the same household.
 Source: Australian Bureau of Statistics, Household Wealth and Wealth Distribution, 2009-10

(Cat. No. 6554.0), Tables 18 and 19.

in the basic statistics. Labels such as "low income" or "low wealth" may be attached to households falling in particular classes to highlight their economic circumstances.

The standards in this chapter require details of household wealth to be collected for all members of each household. Using this information, a country can formulate appropriate wealth classes to suit its particular circumstances. These classes can be specified as monetary ranges or as quantiles (e.g. deciles or quintiles) based on a frequency distribution. Results from the survey of country practices indicate that many countries also collect income data as a primary topic in their household wealth surveys. Where information on income is collected in conjunction with wealth, it should be possible to estimate total household income as well as total household wealth. This then allows the grouping of households by income classes as well as by wealth classes. Such information can throw additional light on the economic situation of different types of households. The value of classifying households by income size is recognised in the 2003 ICLS standard for household income and expenditure statistics, which recommends that basic tables should include such information (Resolutions 104-105).

It is recommended that, for purposes of grouping households by income classes in micro statistics on household wealth, data be collected on the income as well as the wealth of all members of each household. This information, aggregated for each household, should then be used to group households into appropriate income classes and wealth classes. Different classes may be appropriate for different countries and for different types of analysis. However, for purposes of international comparisons, it is recommended that: i) the wealth classes refer to net worth; ii) the income classes refer to disposable income; and iii) the classes themselves be expressed as quintiles (e.g. lowest quintile, second quintile, third quintile, fourth quintile and highest quintile). Chapter 7 provides guidelines on the use of quintiles and similar analytic measures and explains how they are calculated.

Disposable income is defined for micro statistics in the *Income*, *Consumption and Wealth Framework*. It includes all receipts, whether monetary or in kind, that are received by the household or by individual members of the household at annual or more frequent intervals. It covers, in its conceptual definition, income from employment, property income, income from household production of services for own consumption, and current transfers received less those paid. It excludes windfall gains and other such irregular and typically one-time receipts.

The following tables, sourced from Statistics Canada (Table 3.8), the Netherlands Central Bureau of Statistics (Table 3.9) and the Bank of Italy (Table 3.10), respectively, illustrate some of the ways in which wealth and income classes can be incorporated into household wealth statistics to shed light on distributional and compositional patterns.

# 3.9.5. Age, educational attainment and/or labour force status of the household reference person

Characteristics such as age, educational attainment and labour force status can be assigned to individuals but not to households. However, it can be useful to select a particular household member, who is assumed to represent the household in some sense, and then classify the whole household according to the characteristics of this member. The selected member is referred to as the "household reference person".

Many countries find it useful to classify households in this way in their micro statistics on household wealth. It is also considered to be a useful approach for micro statistics on household income and consumption based on the ICLS and Canberra Group standards. However, care is needed both in selecting the reference person (an issue which is discussed further below) and in interpreting the statistics derived from this process. Where households are grouped according to the characteristics of a reference person, it is always important to make this clear to the user.

| Wealth component   |              | All net<br>worth quintiles | Lowest net worth quintile | 2nd net<br>worth quintile | Middle net<br>worth quintile | 4th net<br>worth quintile | Highest net<br>worth quintile |
|--|--------------|----------------------------|---------------------------|---------------------------|------------------------------|---------------------------|-------------------------------|
| Assets   |              |                            |                           |                           |                              |                           |                               |
| Private pension assets                                       | %            | 29                         | 9                         | 14                        | 18                           | 31                        | 32                            |
| Financial assets, non-pension                                | %            | 10                         | 8                         | 8                         | 7                            | 7                         | 13                            |
| Principal residence  | %            | 33                         | 33                        | 51                        | 55                           | 46                        | 24                            |
| Other real estate  | %            | 9                          | 5                         | 4                         | 5                            | 5                         | 11                            |
| Vehicles   | %            | 3                          | 18                        | 9                         | 5                            | 4                         | 2                             |
| Other non-financial assets<br>(including equity in business) | %            | 16                         | 27                        | 14                        | 10                           | 9                         | 19                            |
| Total assets   | %            | 100                        | 100                       | 100                       | 100                          | 100                       | 100                           |
| Average value of total assets <sup>1</sup>                   | Thousand USD | 421                        | 13                        | 80                        | 235                          | 447                       | 1.334                         |
| Debts  |              |                            |                           |                           |                              |                           |                               |
| Principal residence mortgages                                | %            | 64                         | 26                        | 71                        | 75                           | 73                        | 44                            |
| Other real estate mortgages                                  | %            | 11                         | 9                         | 4                         | 5                            | 6                         | 30                            |
| Student loans  | %            | 3                          | 23                        | 4                         | 2                            | 1                         | -                             |
| Vehicle loans  | %            | 6                          | 10                        | 8                         | 6                            | 5                         | 6                             |
| Other debt   | %            | 16                         | 32                        | 13                        | 12                           | 15                        | 20                            |
| Total debts  | %            | 100                        | 100                       | 100                       | 100                          | 100                       | 100                           |
| Average value of total debts <sup>1</sup>                    |              | 82                         | 25                        | 57                        | 104                          | 103                       | 111                           |

#### Table 3.8. Composition of family wealth by net worth quintile in Canada, 2005

Composition of assets and debts held by family units by net worth quintile

1. Mean value in Canadian dollars. Refers to family units holding assets and debts.

Source: Statistics Canada, Survey of Financial Security, Table 6-3.

#### Table 3.9. Household wealth by wealth and income classes in the Netherlands, 2011

|                                    |                                   | Privat              | e households           | s by size o | f wealth (at | 1/1/2011) | and size of | spendable | income (20 | 10) |     |                          |
|------------------------------------|-----------------------------------|---------------------|------------------------|-------------|--------------|-----------|-------------|-----------|------------|-----|-----|--------------------------|
|                                    |                                   |                     |                        |             |              | Hous      | sehold inco | me 10% gr | oups       |     |     |                          |
|                                    | Median wealth<br>(thousand euros) | Total<br>households | 1st<br>(low<br>income) | 2nd         | 3rd          | 4th       | 5th         | 6th       | 7th        | 8th | 9th | 10th<br>(high<br>income) |
| Average income<br>(thousand euros) |                                   | 33                  | 6                      | 15          | 18           | 22        | 26          | 31        | 36         | 42  | 52  | 84                       |
|                                    |                                   |                     |                        |             |              | Per cent  |             |           |            |     |     |                          |
| Total households                   | 29                                | 100                 | 100                    | 100         | 100          | 100       | 100         | 100       | 100        | 100 | 100 | 100                      |
| Household wealth 10% groups:       |                                   |                     |                        |             |              |           |             |           |            |     |     |                          |
| 1st (low wealth)                   | -29                               | 10                  | 6                      | 4           | 6            | 7         | 9           | 14        | 16         | 15  | 13  | 10                       |
| 2nd                                | 0                                 | 10                  | 32                     | 20          | 15           | 12        | 7           | 5         | 4          | 3   | 2   | 1                        |
| 3rd                                | 1                                 | 10                  | 23                     | 21          | 16           | 12        | 9           | 8         | 6          | 4   | 2   | 1                        |
| 4th                                | 6                                 | 10                  | 14                     | 17          | 16           | 14        | 11          | 9         | 8          | 6   | 5   | 2                        |
| 5th                                | 19                                | 10                  | 9                      | 15          | 16           | 14        | 12          | 9         | 9          | 8   | 6   | 3                        |
| 6th                                | 49                                | 10                  | 4                      | 6           | 9            | 11        | 12          | 12        | 13         | 13  | 12  | 8                        |
| 7th                                | 112                               | 10                  | 4                      | 5           | 7            | 9         | 11          | 12        | 13         | 14  | 15  | 11                       |
| 8th                                | 191                               | 10                  | 3                      | 5           | 6            | 9         | 11          | 12        | 11         | 13  | 15  | 13                       |
| 9th                                | 302                               | 10                  | 3                      | 4           | 6            | 8         | 11          | 11        | 12         | 13  | 15  | 17                       |
| 10th (high wealth)                 | 598                               | 10                  | 4                      | 3           | 3            | 4         | 7           | 8         | 9          | 12  | 17  | 34                       |

Source: Netherlands Central Bureau of Statistics, http://statline.cbs.nl/StatWeb/publication.

It is recommended that, for purposes of grouping households by the reference person's age, educational attainment and/or labour force status in micro statistics on household

|                         | Households in 2008         |                            |                            |                            |                            |       |  |
|-------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|-------|--|
|                         | 1st net<br>wealth quintile | 2nd net<br>wealth quintile | 3rd net<br>wealth quintile | 4th net<br>wealth quintile | 5th net<br>wealth quintile | Total |  |
| Households in 2000      |                            |                            |                            |                            |                            |       |  |
| 1st net wealth quintile | 65                         | 18                         | 12                         | 3                          | 2                          | 100   |  |
| 2nd net wealth quintile | 22                         | 44                         | 22                         | 10                         | 2                          | 100   |  |
| 3rd net wealth quintile | 10                         | 27                         | 32                         | 20                         | 11                         | 100   |  |
| 4th net wealth quintile | 2                          | 9                          | 26                         | 40                         | 23                         | 100   |  |
| 5th net wealth quintile | 1                          | 2                          | 10                         | 25                         | 62                         | 100   |  |
| Total                   | 20                         | 20                         | 20                         | 20                         | 20                         | 100   |  |

| Table 3.10. Household wealth mobility by net wealth quintile in Italy, 2000-0 | 8 |
|---|---|
|---|---|

Relative position of households, per cent<sup>1</sup>

1. Based on a sample of 1 682 households who were interviewed repeatedly over the time period.

Source: Bank of Italy, Supplements to the Statistical Bulletin – Sample Surveys, Household Income and Wealth in 2008, Table 2, p. 22, Vol. XX, No. 8, 10 February 2010.

wealth, data be collected on each of these variables from relevant household members. In the case of educational attainment and labour force status, the definitions of these variables should be based on the relevant international statistical standards covering these topics.

Table 3.11, sourced from Statistics Canada, illustrates the use of a reference person's age and educational characteristics in statistics describing family wealth in Canada.

| Selected characteristics <sup>1</sup>     | % of net worth |      | Mean n | et worth | Median net worth |      |
|---|----------------|------|--------|----------|------------------|------|
| Selected characteristics. –               | 2005           | 1999 | 2005   | 1999     | 2005             | 1999 |
| Age                                       | 100            | 100  | 364    | 281      | 148              | 120  |
| Under 65                                  | 76             | 75   | 338    | 259      | 120              | 97   |
| Under 35                                  | 5              | 8    | 77     | 87       | 19               | 20   |
| 35-44                                     | 18             | 20   | 304    | 218      | 135              | 110  |
| 45-54                                     | 27             | 26   | 468    | 381      | 232              | 215  |
| 55-64                                     | 26             | 22   | 649    | 518      | 407              | 312  |
| 65 and older                              | 24             | 25   | 486    | 378      | 303              | 238  |
| Education                                 | 100            | 100  | 364    | 281      | 148              | 120  |
| Less than high school                     | 15             | 20   | 259    | 204      | 92               | 88   |
| Graduated high school                     | 23             | 21   | 314    | 255      | 120              | 103  |
| Non-university post secondary certificate | 26             | 24   | 341    | 241      | 171              | 118  |
| University degree or certificate          | 36             | 35   | 534    | 467      | 237              | 220  |

#### Table 3.11. Household wealth by age and education of the household reference person in Canada, 1999 and 2005 Net worth of family units, thousands of Canadian dollars in 2005 prices

1. Characteristics refer to an unattached individual or, for families, the member with the highest pre-tax income. *Source:* Statistics Canada, *Survey of Financial Security*, Table 3.

#### 3.9.6. Selection of the household reference person

The choice of the household reference person can have a significant impact on the usefulness of statistics that classify households according to the characteristics of these persons. Countries define this reference person in different ways in their micro statistics on household wealth. A common approach is to define the reference person as the highest income earner in the household. Other approaches define the reference person as the person responsible for the household's accommodation, the person responsible for or most

knowledgeable about household finances, or the oldest person in the household. Each of these approaches may be useful for particular types of analysis.

There are also differences in the approaches taken by other international statistical standards when selecting a household reference person. In the case of macro statistics, the SNA (para. 4.163) considers that the reference person should be decided on grounds of economic importance rather than age or seniority. On this basis it concludes that the reference person should normally be the person with the largest income, although the person could also be the one who makes the major decisions with regard to the household's consumption.

In the case of micro statistics on household income and consumption, the ICLS standard (paras. 202-206 and Resolutions 60-61) concludes that the choice of reference person should depend on the purpose of the analysis. It notes that criteria linked to employment status, economic activity, demographic factors, etc., may be used. The Canberra Group standard (Section 6.3.2) presents, for illustrative purposes, an ordered set of objective criteria for selection of the reference person in the context of household income statistics. These criteria are designed to select the person likely to best represent the household as a whole.

It is recommended that, for purposes of grouping households by age, educational attainment and/or labour force status of a household reference person in micro statistics on household wealth, countries consider the usefulness of the following criteria for selecting the reference person. The criteria are the same as those presented in the 2011 Canberra Group Handbook on Household Income Statistics. Applying them in wealth statistics should help in achieving cross-country comparability for these statistics as well as consistency with micro-level statistics on household income. The criteria should be applied to all household members in the order listed until a single appropriate reference person is identified:

- one of the partners in a registered or de facto marriage, with dependent children;
- one of the partners in a registered or de facto marriage, without dependent children;
- a lone parent with dependent children;
- the person with the highest income; and
- the oldest person.

For example, in the case of a household containing a lone parent with a nondependent child, application of these rules will result in the person with the highest income being selected as the reference person. However, if both individuals have the same income, the older one will be selected as the reference person. The definition of dependent children to be used in applying the rules is the same as that provided earlier for the household type classification.

The choice of a reference person for purposes of classifying households should be distinguished from the choice of such a person for collecting data. For example, the 2006 UNECE/CES population census standard (paras. 505-519) recommends that a reference person be used in certain situations for collecting information on the relationships between household members. This information is then used to determine a household's family status and to assign individuals to families. An illustrative set of criteria is provided for selecting the reference person in these situations. The criteria do not include "the person with the highest

income" or "the oldest person", as these persons may not be appropriate for determining the broadest range of relationships.

#### 3.10. Other variables related to wealth/net worth

When measuring household wealth at the micro level, many countries also collect a range of information on related topics. This information can help to provide a broader and deeper understanding of the wealth circumstances of households and the differing influences on household wealth accumulation. Some of these topics look beyond wealth (as defined in this chapter) to factors such as income, consumption expenditure, housing, material deprivation and employment. Other topics explore particular features of wealth accumulation and associated attitudes and behaviours. This section is concerned with these other variables relating to wealth. Specifically, it discusses those variables that describe the different types of flows that together explain the changes in wealth levels over a period. It also considers some of the main variables that are used by countries to describe different types of household attitudes and behaviours that may influence wealth outcomes.

#### 3.10.1. Flow variables

Changes in the levels of household wealth between two points in time can be analysed from various perspectives. For example, the focus may be on the compositional changes that have occurred, on the distributional shifts that have taken place, or on the different types of flows that have contributed to these changes. The interest in different types of flows is most strongly associated with macro statistics where the distinction between transactions and other flows is of fundamental importance. However, information on different types of flows can also be useful in the context of micro statistics. The following discussion covers the main measures used in differentiating flows.

In the case of macro statistics, the SNA's accumulation accounts provide for complete recording of the different types of flows that directly contribute to changes in wealth between two points in time, as well as the different types of flows that change the asset and liability composition of wealth. The capital account and the financial account record flows that arise from "transactions", while the revaluation account and the other changes in volume account record "other flows", i.e. those that do not arise from transactions. Transactions are either an exchange of economic value between two parties by mutual agreement, or a voluntary transfer of economic value by one party to another without a counterpart (i.e. an unrequited transfer).

The SNA's capital account shows acquisitions and disposals of non-financial assets due to transactions, the redistribution of wealth by means of capital transfers, changes in inventories, consumption of fixed capital and the contribution to wealth from saving. The balancing item on the capital account is "net lending" when positive, and "net borrowing" when negative. When positive, this item indicates the net amount a unit or sector has available to finance, directly or indirectly, other units or sectors and, when negative, the amount a unit or sector is obliged to borrow from others. The financial account records acquisitions and disposals of financial assets and liabilities, also as a result of transactions. In principle, the net result of all these transactions in the financial account is identical to net lending/net borrowing.

The SNA's revaluation account records flows that arise from price changes, i.e. "nominal holding gains and losses". These holding gains and losses are further dissected into "neutral"

and "real". The other changes in volume account records flows that are not attributable to transactions or price changes. These flows include those arising from the economic appearance and disappearance of assets, the reclassification of assets and liabilities, and exceptional, unanticipated external events.

For purposes of micro statistics on household wealth, there may be interest in any or all of these flow variables, as they can assist in explaining changes in wealth between two points in time. The potential value of this information is reflected in country practices. Most countries that collect data on household wealth at the micro level also gather, at the same time, data on some of the flows that contribute to changes in the levels and composition of wealth. Examples are: i) capital transfers in the form of large gifts and inheritances; ii) purchases and sales of household assets (e.g. the main residence, or securities); iii) capital gains or losses realised on these sales; iv) nominal holding gains and losses; and v) a rough indicator of saving, involving comparison of expenses for the last 12 months with average income.

Several conceptual and practical issues need to be kept in mind in order to produce useful data on these flows at the micro level. For example, the valuation and time of recording principles and practices for flows and stocks need to be fully consistent. This can be difficult to achieve in practice. Also, since countries generally do not record the asset and liability levels of a household at the same point in time for all households, the specification of any single reference period for flow measures can be problematic.

A particular issue arises with one of the major flow variables: household saving. As noted earlier in this chapter, saving is a derived variable that is not independently measurable in either macro or micro statistics. In principle, it is derived by subtracting final consumption expenditure and consumer credit payments from disposable income. Each of these variables, in turn, has to be measured independently. From a practical standpoint, even where a survey aims to collect details of a household's income, consumption and wealth on a fully integrated basis, it is very unlikely that complete and consistent data would actually be available for each and every household. While the difference between income and expenditure can be calculated in such cases, its magnitude will be difficult to interpret, as it will reflect, in addition to saving or dissaving, errors and omissions in both measures as well as timing differences between them.

It is recommended that, where a country considers it useful to produce micro statistics on particular types of wealth flows, the definitions of those flows should be based as closely as possible on the standards provided in the *Income, Consumption and Wealth Framework*. The definitions that are likely to be the most relevant in this context are presented below. They cover: capital transfers; transactions in non-financial assets; transactions in financial assets and liabilities; holding gains and losses; and flows not arising from transactions or price changes.

#### **Capital transfers**

A transfer is a transaction where one party provides a good, service or asset to another party without receiving from the latter any good, service or asset in return as a direct counterpart. A capital transfer is defined as one where either the party making the transfer realises the funds involved by disposing of an asset (other than cash or inventories) or relinquishing a financial claim (other than accounts receivable), or where the party receiving the transfer is obliged to acquire an asset (other than cash), or where both conditions are met. Capital transfers receivable represent an increase in net worth for the recipient, while those payable represent a decrease in net worth for the payer. Transfers that are not identified as capital transfers are described as current transfers. Whereas capital transfers redistribute wealth, current transfers redistribute income (SNA, paras. 2.28, 3.60, 8.10, 8.38-40, 10.19-10.20, 10.200-10.212).

In practice, capital transfers tend to be large, infrequent and irregular, whereas current transfers tend to be comparatively small and are often made frequently and regularly. Examples of capital transfers relevant to households are: large donations and gifts; inheritances, bequests and legacies; inheritance taxes, death duties and other capital taxes; debt forgiveness; lump-sum retirement payments; exceptionally large insurance settlements in the wake of a disaster; and major payments in compensation for extensive damages not covered by insurance policies. Examples of current transfers are: personal remittances between households; income taxes; social insurance payments; and social assistance benefits. If there is any doubt about whether a transfer should be treated as current or capital, it should be treated as current.

While the need to differentiate between current and capital transactions is clear, the boundary between them is difficult to define. Terms such as "irregular" and "infrequent" are imprecise and lie on a continuous spectrum. Also, a transfer that may be considered large in a household with few economic resources may be considered small in a household with considerably more resources, which may be involved in transfers of that magnitude on a regular basis. These issues are discussed in more detail in Chapter 7 of the *Income, Consumption and Wealth Framework*.

Because that Framework focuses on transactions from a household perspective, it departs from the SNA in several respects. It allows for the possibility that a transfer that might be considered a current transfer in one household may be considered a capital transfer in another household. This is not possible in the SNA, because the SNA is an integrated and complete set of accounts for the economy in which transactions need to be treated in the same way by both parties involved in each of the transactions. The Framework also departs from the SNA in the treatment of receipts of accident insurance payouts. In the SNA, virtually all such receipts are regarded as current transfers received, while in the Framework they are regarded either as negative consumption expenditure or capital transfers received, depending on their magnitude.

#### Transactions in non-financial assets

A transaction in a non-financial asset refers to the acquisition or disposal of either a produced asset or a non-produced asset that is not a financial claim. Produced assets cover new and existing fixed assets, inventories and valuables. Non-produced assets that are not financial claims cover natural resources, contracts, leases and licences, as well as purchased goodwill and marketing assets. The transactions in these assets should be valued at the actual prices agreed upon by the people involved in the transaction, and they should be recorded at the time ownership changes (i.e. when claims or obligations arise, are transformed or are cancelled). The transaction values should include any costs of ownership transfer (SNA paras. 2.55, 2.59, 3.122, 10.22-10.199).

Examples of transactions in non-financial assets relevant to households are: purchases and sales of homes and other dwellings; purchases and sales of land; and purchases and sales of gold, fine jewellery or recognised works of art regarded as alternative forms of investment. Where relevant, transactions should be classified using the groupings recommended for non-financial assets, described earlier in this chapter.

#### Transactions in financial assets and liabilities

A transaction in a financial asset or liability refers to the creation, transformation or cancellation of a financial claim or obligation. These transactions often occur as counterparts of non-financial transactions, but also as transactions involving only financial instruments. The transactions should be valued at the actual price agreed upon by the transactors, and they should be recorded at the time ownership changes (i.e. when claims or obligations arise, are transformed or are cancelled). The transaction values should exclude any commissions, fees and taxes (SNA paras. 2.29, 2.55, 2.59, 3.122).

Examples of transactions in financial assets and liabilities relevant to households are: purchases and sales of debt securities; purchases and sales of shares; deposits in and withdrawals from financial accounts; drawdown and repayment of loans; incurrence and repayment of credit card debt; and contributions to and withdrawals from pension fund accounts. Where relevant, transactions should be classified using the groupings recommended for financial assets and liabilities, described earlier in this chapter.

#### Holding gains and losses

Holding gains and losses refer to the nominal gains and losses that accrue continuously to the holders of assets and liabilities as a result of changes in their prices over a period of time. These price changes reflect movements in the relative prices of assets as well as movements in the general price level. They affect the value, but not the volume, both of non-financial and financial assets and of liabilities. They include both realised and unrealised gains and losses over the period. Holding gains are sometimes described as "capital gains", but the term "holding gain" is preferred in the SNA because it emphasises that holding gains accrue purely as a result of holding assets or liabilities over time without transforming them in any way (SNA paras. 2.109, 3.105-3.106, 3.153-3.154, 12.73-12.93).

A holding gain occurs when an asset increases in value or a liability decreases in value; a holding loss occurs when an asset decreases in value or a liability increases in value. The value of holding gains and losses is calculated for each asset or liability over a period between two specified points in time: the beginning of the reference period, or when the asset or liability is acquired or incurred during the period; and the end of the reference period, or when the asset or liability is sold or extinguished during the period. The prices to be used in the calculation are those at which the asset or liability may be sold on the market.

Examples of holding gains and losses relevant to households are: changes in the prices of land and dwellings they own; changes in the prices of valuables they own; changes in the prices of equities they hold; and changes in the prices of debt securities they hold. Where relevant, holding gains and losses should be classified using the groupings recommended for assets and liabilities, described earlier in this chapter.

#### Flows not arising from transactions or price changes

These flows, not arising from transactions or price changes, affect the value of both nonfinancial and financial assets and their counterpart liabilities by changing their volume either physically or quantitatively. As already noted, they record the economic appearance and disappearance of assets, the reclassification of assets and liabilities, and exceptional, unanticipated external events (SNA paras. 2.109, 2.114, 12.3-12.72, 17.40-17.42). Examples of these flows relevant to households are: the destruction of dwellings and equipment by natural disasters (e.g. major earthquakes, volcanic eruptions, tsunamis, exceptionally severe hurricanes, forest fires, etc.); the destruction of assets by wars, riots and major technological accidents; the initial recognition of existing goods as valuables (when previously considered to be of negligible value); uncompensated seizures of assets by governments; and the write-off of claims by creditors due to bankruptcy or liquidation. Where relevant, flows should be classified using the groupings recommended for assets and liabilities, described earlier in this chapter.

#### 3.10.2. Attitudinal and behavioural variables

A variety of information on household attitudes and behaviours can also be useful for understanding developments in household wealth at the micro level. Many countries gather data on at least a few variables of this kind in their household wealth data collections. The topics covered include: i) saving and investment attitudes and behaviours, including risk aversion; ii) housing attitudes; iii) loan refinancing, payment behaviour and credit lines available; iv) use of online banking and different types of financial institutions; v) financial constraints (e.g. ability to get financial assistance, ability to pay off liabilities and loan rejections); vi) the probability of losing/finding a job; vii) pension rights and retirement plans; viii) house value expectations; ix) income and inheritance expectations; and x) saving, spending and borrowing expectations (e.g. direction of change expected in saving, and future expenses compared with current expenses).

As the circumstances in individual countries can affect the relevance, usefulness and practicality of measuring particular variables, no specific recommendations are made here for the collection of data on any of them. However, countries may wish to consider the experiences of others when developing or reviewing their own collections in this area.

Table 3.12 provides some examples of attitudinal and behavioural questions that are used in household wealth surveys. The examples are drawn from the Household Finance and Consumption Survey 2009-11 for the Euro area (Euro HFCS), the Survey of Consumer Finances 2007 by the United States Federal Reserve Board (US SCF) and the Wealth and Assets Survey 2006-08 by the United Kingdom Office for National Statistics (UK WAS).

#### 3.11. Consistency with other international statistical standards

This section brings together and summarises the differences between the recommendations proposed in this chapter for micro statistics on household wealth and the international standards in the 2008 SNA, the 2011 *Canberra Group Handbook on Household Income Statistics*, the 2003 ICLS Report on Household Income and Expenditure Statistics, and the UN and UNECE/CES recommendations for the 2010 round of population censuses. In most cases, details of the differences and their significance have already been discussed in relevant parts of the chapter, together with possible ways of achieving alignment. Many practical issues also affect consistency, and these are discussed in later chapters. In the case of the differences from the SNA, Annex C provides a comprehensive listing of those that arise from both the standards in this chapter and the operational guidelines in later chapters, including the adjustments needed to achieve alignment between the measures of household wealth compiled on each basis.

### Table 3.12. Examples of attitudinal and behavioural questions in household wealth surveys

| Selected topics              | Survey <sup>1</sup> | Questions   |
|------------------------------|---------------------|---|
| Saving<br>and investment     | Euro HFCS           | People have different reasons for saving, even though they may not be saving all the time. What are your (your household's) most important reasons for saving?  |
|                              |                     | (purchase own home; other major purchases [other residences, vehicles, furniture, etc.]; set up a private business or finance investments in<br>an existing business; invest in financial assets; provision for unexpected events; paying off debts; old age provision; travel/holidays; education/<br>support of children or grandchildren; bequests; taking advantage of state subsidies [e.g. a subsidy to building society savings]; other)   |
|                              | US SCF              | Which of the following statements comes closest to describing your (and your husband/wife/partner's) saving habits?   |
|                              |                     | (don't save – usually spend more than income; don't save – usually spend about as much as income; save whatever is left at the end<br>of the month – no regular plan; save income of one family member, spend the other; save regularly by putting money aside each month)<br>About how much do you think you (your family) need to have in savings for emergencies and other unexpected things that may come up?   |
|                              | UK WAS              | There are many reasons why people don't save. During the last 12 months, what were your reasons for not saving?   |
|                              |                     | (can't afford to; had unexpected expenditures; not interested/not thought about it/not got around to it; would lose out on benefits; don't trust financial institutions; don't know how to save/invest; too late to start saving now; don't want to save; don't need to save; other)  |
|                              |                     | Using a scale of 1 to 5 (where 1 is agree strongly, 3 is neither agree nor disagree, and 5 is disagree strongly), to what extent do you agree with the following statements?  |
|                              |                     | I would rather have a good standard of living today than save for retirement; having a pension is the best way to save for retirement; investing in property is the best way to save for retirement; I feel I understand enough about pensions to make decisions about saving for retirement. How important, if at all, is it to you to leave property or money as an inheritance at some point in the future?  |
| Assets and debt              | US SCF              | Over the past year, would you say that your spending exceeded your income, that it was about the same as your income, or you spent less than your income?   |
|                              |                     | To make up the difference, did you borrow additional money, did you spend out of savings or investments, or did you do something else (e.g. got behind on payments, didn't pay bills, help from others, sold assets, declared bankruptcy, did nothing)?   |
|                              |                     | Thinking of all the various loan or mortgage payments you made during the last year, were all the payments made the way they were scheduled, or were payments on any of the loans sometimes made later or missed?   |
|                              |                     | For the principal residence mortgage, what was the most important reason in choosing the lender? Was it because they were recommended to you, because they had low interest rates or fees, because of the location of their offices, because you had done other business with them, because it was easier to qualify for the loan, or for some other reason?  |
|                              |                     | When things that you (and your husband/wife/partner) own increase in value, are you more likely to spend money? On a scale of 1 to 5 (where 1 is agree strongly, 3 is neither agree nor disagree, and 5 is disagree strongly), where would you/your family be on the scale?   |
|                              | UK WAS              | Using a scale of 1 to 5 (where 1 is agree strongly, 3 is neither agree nor disagree, and 5 is disagree strongly), to what extent do you agree with the following statements?  |
|                              |                     | I tend to buy things even when I can't really afford them; I am more of a saver than a spender; I tend to buy things on credit and pay it off later.  |
| Financial risks              | Euro HFCS           | Which of the following statements comes closest to describing the amount of financial risk that you (and your husband/wife/partner) are willing to take when you save or make investments?  |
|                              |                     | Take substantial financial risks expecting to earn substantial returns; take above average financial risks expecting to earn above average returns; take average financial risks expecting to earn average returns; not willing to take any financial risk.   |
|                              | UK WAS              | If you had a choice between a guaranteed payment of one thousand pounds and a one in five chance of winning ten thousand pounds, which one would you choose?  |
| Financial<br>decision-making | US SCF              | When making major decisions about borrowing money or obtaining credit, some people shop around for the very best terms while others don't. On a scale of 1 to 5 (where 1 is almost no shopping, 3 is moderate shopping, and 5 is a great deal of shopping), where would you (and your family) be on the scale?  |
|                              |                     | (This question is also asked in respect of saving and investment decisions.)<br>What sources of information do you (and your family) use to make decisions about borrowing and credit? Do you call around,<br>read newspapers, magazines, material you get in the mail, use information from television, radio, the internet, or advertisements?<br>Do you get advice from a friend, relative, lawyer, accountant, banker, broker, or financial planner? Or do you do something else?<br>(This question is also asked in respect of saving and investment decisions.) |
|                              |                     | In planning your/your family's saving and spending, which of the following time periods is most important to you? Next few months,  |
|                              | UK WAS              | next year, next few years, next 5-10 years, longer than 10 years?<br>In the past five years, have you received any professional advice about planning your finances? Who have you received advice from?<br>Which of the following (list provided) would you trust for advice about saving for retirement?   |
| Access to finance            | Euro HFCS           | In the last three years, has any lender or creditor turned down any request you (or someone in your household) made for credit, or not given as much credit as you applied for?<br>In an emergency, could you/your household get financial assistance of say EUR 5 000 from friends or relatives who do not live with you?  |
|                              |                     |   |

| Selected topics | Survey <sup>1</sup> | Questions  |
|-----------------|---------------------|--|
| Expectations    | Euro HFCS           | Over the next year, do you expect your/your household's total income to go up more than prices, less than prices, or about the same as prices?<br>In the future, do you (does anyone in your household) expect to receive a substantial gift or inheritance from someone outside<br>the household? |
|                 |                     | At what age do you expect to retire?   |
|                 | UK WAS              | Over the next few years, do you expect your financial situation to be better, worse, or about the same?<br>Do you think it is likely you will save any money in the next 12 months?  |
|                 |                     | How much money do you think you will have to live on in your retirement? More than your income now, about the same, two-thirds, half, one-third, less than one-third?  |
|                 |                     | (Only asked if not a proxy, not retired and aged 40 or over.)  |

Table 3.12. Examples of attitudinal and behavioural questions in household wealth surveys (cont.)

1. For some selected topics, there are one or more similar questions in the different surveys. In such cases, only one survey has been chosen to illustrate the particular question(s).

#### 3.11.1. SNA standards

The concepts, definitions and classifications recommended in this chapter are consistent with those in the SNA with the exception of: i) the definition and coverage of households; ii) the selection of a household reference person; iii) the treatment of consumer durables; iv) the detailed classification of assets and liabilities; v) the treatment of net equity in own unincorporated enterprises; and vi) the definition of transfers.

The SNA definition of household has a different specification for multi-person households: the resources to be shared by members must include "some or all income and wealth" and the members must "collectively consume" certain types of goods and services, mainly housing and food". Also, the definition does not separately recognise "private" households. A further difference concerns domestic staff who are boarders in the same dwelling as their employer: the SNA treats them as belonging to a separate household from the one of their employer. In terms of statistical coverage, the SNA covers all resident households in its household sector, including institutional households. Full alignment with statistics compiled according to the SNA's definition and coverage of households is not achievable, although approximate alignment might be possible in situations where the SNA-based statistics contain separate details for institutional households and households living in collective living quarters.

Also, the SNA considers that the household reference person (for purposes of classifying households) should normally be the person with the largest income, although the person could also be the one who makes the major decisions with regard to the household's consumption. It is not possible to align statistics based on this approach with those based on the "ordered criteria" suggested in this chapter.

In the case of consumer durables, the SNA excludes these goods from the definition of assets in its central framework, although it suggests they should be recorded in a memorandum item in the household balance sheet. It recognises that these goods may be treated as assets in satellite accounts. Alignment with statistics compiled according to the central SNA framework can be achieved by omitting consumer durables from the asset aggregates in micro statistics on household wealth. This can be readily done, as the standards in this chapter recommend that consumer durables be recorded as a separate component of household assets.

While the asset and liability components recommended in this chapter can be aligned with the SNA's balance sheet components at a broad level, alignment at the component level would generally require additional data collection and/or the use of special estimation or

modelling techniques. The more significant differences in classification relate to nonfinancial assets, but there are also differences for financial assets and liabilities.

In this chapter, net equity in own unincorporated enterprises is treated as a financial asset (an equity investment in a business). This treatment is consistent with a household perspective on assets, in which the household is likely to have a notion of "what the business is worth", and it treats households' investments in business symmetrically regardless of the legal form of the business in which the investment is being made. In contrast, while the SNA appears to offer a conceptual treatment of unincorporated enterprises that is consistent with the micro framework, it also provides a threshold rule which, in some circumstances, only treats the unincorporated enterprise as a "quasi" corporation if it maintains a complete set of books. Otherwise, the SNA recommends that all of the individual asset and liability classes associated with the business operations be separately recorded as individual assets and liabilities of the household, even though they may be operated as an integrated entity and the compartmentalisation of the components may result in under- or over-estimation of the value of the business in the household account.

The treatment of transfers also differs somewhat from the SNA. In micro statistics, transfers are classified as current or capital on the basis of the size in the context of the household concerned, so a transfer of a given size may be considered current for one household but capital for another. Micro statistics also treat some transactions as negative consumption expenditure, whereas the SNA regards them as current transfers received.

#### 3.11.2. Canberra Group standards for micro statistics on household income

The concepts, definitions and classifications recommended in this chapter are consistent with those in the Canberra Group's standards for household income, with the exception of: i) consumer durables; ii) and royalties.

While the conceptual treatment of consumer durables is the same, the practical treatment is different. However, alignment with statistics compiled according to the Canberra Group's recommended practice can be achieved by omitting consumer durables from the asset aggregates for household wealth. As noted above, this can be readily done.

In the case of royalties, the Canberra Group's standards provide a separate income component for them, as they are not regarded as property income from non-financial assets. Alignment with statistics based on this approach can be achieved only by combining royalties with income from non-financial assets, as assets in the form of intellectual property, contracts, leases and licences are lumped together within the standard wealth components for non-financial assets.

#### 3.11.3. ICLS standards

The concepts, definitions and classifications recommended in this chapter are consistent with those in the ICLS Report, with the exception of: i) the definition and coverage of households; ii) the collection unit; iii) the treatment of consumer durables; and iv) the basis of recording and classification.

In respect of the definition of households, the ICLS standard adopts a different specification for multi-person households: the resources to be shared by members must include "other essentials of living" (in addition to food), and a household may extend beyond a single housing unit. Also, the ICLS concept of a household excludes institutions. In respect of statistical coverage, the ICLS includes some types of households living in collective living quarters (other than institutions) as well as private households. Full alignment with statistics compiled according to the ICLS standard is not achievable, although approximate alignment might be possible in situations where ICLS-based statistics contain separate details for collective households and non-single housing unit households.

In the case of the basic collection unit, the ICLS standard favours the household unit, although it recognises that some components of income might be best collected at the individual person level. In general, this should not prevent alignment between the statistics compiled on the basis recommended in this chapter and those compiled according to the ICLS standard.

For consumer durables, the ICLS conceptual treatment is the same, but the practical treatment differs for income and may differ for consumption expenditure, as an alternative approach is allowed. Alignment with statistics compiled according to the ICLS's practical treatment for income and its alternative approach for consumption expenditure can be achieved by omitting consumer durables from the asset aggregates for household wealth. Again, as already noted, this can be readily done.

The differences in the basis of recording reflect the netting of payments against receipts in measuring some income components relating to wealth. These differences, along with those relating to the classification of components, limit the extent to which alignment can be achieved between the wealth and income components.

#### 3.11.4. UN and UNECE/CES population census standards

The concepts, definitions and classifications recommended in this chapter are consistent with those in both these standards, with two exceptions: i) the definition of household, including some associated concepts; and ii) the coverage of households.

The UN household definition (but not the UNECE/CES definition) excludes institutions and does not separately recognise "private" households. It also contains a different specification for multi-person households: the resources to be shared by members must include "other essentials of living" (in addition to food), and a household may extend beyond a single housing unit.

While there is general consistency with the UNECE/CES definition of household, two aspects of the detailed concepts underpinning that definition differ from what is recommended here. Specifically, the UNECE/CES standard equates a person's country of residence with the country in which the place of usual residence is located. This chapter recognises that the two countries are generally the same, but not necessarily so. Also, the UNECE/CES standard provides for an exception from its recommended place of usual residence for tertiary students studying away from home but in the same country. This chapter provides for the same exception, but also allows the exception to be applied in the case of tertiary students studying abroad.

In respect of statistical coverage, both the UN and UNECE/CES standards cover all households within the scope of their particular definitions. Full alignment with household measures compiled according to the UNECE/CES standard should be achievable if institutional households and those living in collective living quarters can be separately identified and excluded from the UNECE/CES-based statistics. However, only approximate alignment is possible with the UN standard, and only in situations where the UN-based statistics contain separate details for collective households and non-single housing unit households.



## From: OECD Guidelines for Micro Statistics on Household Wealth

Access the complete publication at: https://doi.org/10.1787/9789264194878-en

#### Please cite this chapter as:

OECD (2013), "Standard concepts, definitions and classifications for household wealth statistics", in OECD Guidelines for Micro Statistics on Household Wealth, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/9789264194878-6-en

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