TERMS OF REFERENCE

OECD PROJECT ON THE DISTRIBUTION OF HOUSEHOLD WEALTH

June 2020

This document describes the basic set of micro-level indicators on households' net wealth, assets, and liabilities that the OECD Secretariat is seeking to collect through of a network of country-level experts having access to the source micro-data. The basic concepts and classifications detailed in this document are based on the *OECD Guidelines for Micro Statistics on Household Wealth* (http://www.oecd.org/statistics/guidelines-for-micro-statistics-on-household-wealth.htm).

The accompanying Excel workbook contains a number of tables. Tables 1 to 4 relate to the distribution and composition of wealth across household sub-group, while Tables 5 relates to the joint distribution of income and wealth. Table 6 complements the commonly-used measures of relative income poverty with information on household wealth holdings. The list of tables included in the Excel workbook is as follows:

- Table 1. Distribution of household wealth by population subgroups
- Table 2. Distribution of households by net wealth quintiles
- Table 3. Components of household wealth. This table is further broken down into:
  - Table 3a. Components on household wealth: unconditional means of different assets and liabilities per household
  - Table 3b. Ownership: number of households owning assets or having debt
  - Table 3c. Conditional medians: median values of different assets and liabilities among those who own the wealth components considered
- Table 4. Debt burden indicators among indebted households
- Table 5. Joint distribution of income and wealth across household quintiles
- Table 6. Asset poverty and financial vulnerability. This table is further broken down into:
  - Table 6a. Share of individuals with (equivalised) wealth below half of *median* equivalised household disposable income (asset poverty)
  - Table 6b ***(new)***. Share of individuals with (equivalised) liquid financial assets below a fraction of *their own* equivalised household disposable income (financial vulnerability)

This document provides detailed instructions for the compilation of each table, as well as general specifications of the wealth concept and classification variables.

1. General instructions

Tabulations are requested for the *most recent year* available.

All monetary values should be provided in local currency and nominal prices of the reference year, i.e. with no deflations or exchange rate conversions.

The rows and columns in the Excel tables should not be changed, i.e. new rows or columns should not be added to the data worksheet.

The Excel workbook contains a metadata sheet, which should be used to provide details of the data source. In particular, deviations from the definitions outlined in this document should be reported there.

2. Basic Definitions

Unit of observation

The basic unit of observation for wealth distribution data is the 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 with 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. More details on the household definition are given in the *OECD Guidelines for Micro Statistics on Household Wealth*, pages 46-54. Major deviations from this standard definition of households should be reported in the metadata sheet.

Unit of analysis

The unit of analysis to be used when compiling all these tables is the household. Each household is weighted by its sampling weight in the tabulations.

It should be noted that the unit of analysis used for this data collection differs from the one used by the OECD for its collection on the distribution of household income, which refer to the individual.

Reporting of values

Wealth values should be reported with positive sign, in the case of both assets and liabilities.

When values for specific cells are deemed to be 'not statistically significant' because based on a small number of observations, values should be 'flagged' (with cells highlighted in red), rather than omitted.

With the exception of Table 6 (see below), wealth values should be shown as reported by all members of the same household, i.e. in raw or *non-equivalised* terms.

It should be noted that the convention of reporting non-equivalised wealth values for this data collection differs from the one used by the OECD for its collection on the distribution of household income, which relies on equivalised income values (to reflect the sharing and economies of scale in consumption that occur in larger households).

Income concept

While the basic aim of these tables is to get information on the distribution of household *wealth*, income is mainly used as a cross-classification criterion. The income concept to be used when compiling these tables should be that of annual *household disposable income*, which refers to total sum of wages and salaries, self-employment income, property income, and current transfers received by all household members minus current transfers paid by them (e.g. income and wealth taxes, and workers' social security contributions). The income definition used should follow as much as possible the 2011 *Canberra Group Handbook on Household Income Statistics*. The definition of household income should exclude capital gains (and associated taxes) and imputed rents.

In cases where information on household disposable income is not available in the national source used, the income concept to be used should be that of *gross household income*. This refers to the total sum of wages and salaries, self-employment income, property income, and current transfers received, all recorded gross of taxes paid. As in the case of disposable income, gross income should exclude capital gains (and associated taxes), and imputed rents. This implies that, when measures of household disposable income are not available in the wealth source used, country experts should cross-classify households by quintiles of their gross household income.

In order to classify households by main income source, variables on wages and salaries, self-employment income, property income, and current transfers also need to be available (see Section 3 for more detailed instructions).

Treatment of negative and missing wealth values

For the purposes of completing these tables, *negative values* of net wealth are allowed. In other terms, households reporting negative wealth holdings (i.e. the value of their liabilities exceeding that of their assets) should be retained, rather than excluded or recoded. The number of households with negative net wealth should be reported in Table 2. Similarly, all households reporting *nil values* of their net wealth should be retained, rather than excluded from the tabulations. The number of households with nil net wealth should also be reported in Table 2.

In many surveys, participating households may fail to report information on specific wealth items. Usually, missing data due to item non-response are imputed by the agency responsible for the data collection. These households with imputed data values should be retained when completing these tabulations. After the imputation procedure, the number of cases with missing values should be non-existent or very low. In cases where some missing values remain, these can be treated as equivalent to nil values in the tabulations instead of being excluded.

Table 3a (means per households) is designed to be additive and to allow constructing different concepts of wealth. To that end, it is important that mean wealth values are computed across all households (and household subgroup), whether they hold or not the wealth item considered.

Conversely, Tables 3b and 3c (asset participation and conditional medians) only refer to households reporting strictly positive values of the wealth item considered. In other terms, households classified as not holding the asset/liability item considered (after imputation of the missing values) should be excluded.

For households whose income is reported as negative or missing, their income should be set to nil and these households should be included in the tabulations.

Top and bottom coding

Neither the wealth nor the income variables should be top or bottom coded.

3. The concept of wealth

The wealth concept largely follows the one outlined in Chapter 3 of the *OECD Guidelines for Micro Statistics on Household Wealth* (http://www.oecd.org/statistics/guidelines-for-micro-statistics-on-household-wealth.htm). The table below summarises the main concepts of net wealth requested for the tabulations. The main aggregates of wealth used in the tables are:[1]

- *net wealth*, i.e. excluding pension schemes related to employment (**NW**); and
- *extended net wealth*, i.e. including pension schemes related to employment (**NWE)**.

The rational for this distinction is that comparable data on pension schemes related to employment (claims of members and account holders on pension schemes related to employment, excluding those accruing under government social security) are unlikely to be available for most OECD countries; hence, they are considered as a supplementary component. In addition, entitlements under government social security schemes, while excluded from the OECD recommended definition of household wealth, are likely to be the main source of wealth for many households nearing retirement in several OECD countries: this suggests that, from the perspective of cross-country comparisons, it may be more meaningful to compare countries excluding both employment-related and social security pension schemes (as in the definition of 'net wealth' provided above) rather than including only a part of their retirement-income package (as in the definition of 'extended pension wealth' provided above).

Table 3 asks for detailed information on three main aggregates:

- non-financial assets (**NF**),
- financial assets (excluding employment related pension wealth, **F**); and
- total liabilities (**L**).

These aggregates and their sub-items are detailed below.

Assets and liabilities of resident households should include those held abroad.

Compared to the standard classification used in the *OECD Guidelines* (Table 3.2, page 67), the breakdown of the category "Shares and other equity" used in Table 3 of this questionnaire departs from the one recommended in the *OECD Guidelines*, by distinguishing "listed shares" (i.e. stocks) and "unlisted shares and other equity". Among non-financial assets, vehicles are included as a separate category while other consumer durables are included in the category "other non-financial assets". Liabilities are broken down into three main categories ('principal residence loans', 'other residence and real estate loans', and a residual category for 'other loans').

Not all components of household wealth listed in the table below may be covered in national sources, or they may be measured jointly with other components. When a component is not measured in the national source, the corresponding column in Table 3 should be left empty. When a component is measured jointly with another component, information on them should be reported in the OECD tables combined with the main component. Values for these components should be set to zero in Table 3 in order to distinguish them from missing components.

[1] Table 6 and some elements of Table 1 rely on the concept of liquid financial assets, which is defined on page 14.

Table 1. Basic wealth concepts and examples of typical items included in the various sub-components

NF Total non-financial assets = NF1 + NF2 + NF3 + NF4 + NF5	
NF1 Principal residence	Principal residence is the residence where majority of household members live.
NF2 Other real estate property	Second and holiday homes, investment real estate, farm land
NF3 Vehicles	Cars, motorcycles, boats, other vehicles owned by household and used for private purposes. Vehicles owned by own unincorporated enterprises are excluded.
NF4 Valuables	Works of art, antiques, fine jewellery, stamp and coin collections, precious stones and metals, other valuables
NF5 Other non-financial assets	E.g. other consumer durables, intellectual property, and other non-financial assets.
NB. The components included in the above broad categories should be reported in the metadata sheet.	
F Total financial assets, excluding pension assets related to employment = F1 + F2 + F3 + F4 + F5 + F6 + F7 + F8	
F1 Currency and deposits	Currency held (if measured in the survey), transaction accounts, saving accounts, fixed-term deposits, certificates of deposits.
F2 Bonds and other debt securities	Government savings bonds, corporate bonds, commercial paper, state or municipal non-saving bonds, foreign bonds, other non-saving bonds, debenture, mortgage-backed securities, negotiable certificates of deposits, treasury bills, other similar instruments
F3 Mutual funds and other investment funds	Mutual funds, hedge funds, unit trusts, income trusts, pooled investment funds, other managed investment funds
F4 Net equity in own unincorporated enterprises	Household members' share of the net equity in unincorporated enterprise in which they work (sometimes also called "self-employment business wealth").
F5 Stocks	Listed shares, i.e. shares in publicly listed corporations.
F6 Unlisted shares and other equity	Unlisted shares (value of ownership in incorporated businesses not publicly traded), net equity in partnerships in which the household members do not work ("silent partners").
F7 Other non-pension financial assets	Examples (non-exhaustive): managed accounts, money owed to household, any other non-pension financial asset
F8 Voluntary individual life insurance and private pension funds	Assets in life insurance and pension plans where participation is voluntary, and individuals independently purchase and select material aspects of the arrangements, without intervention of their employers. Does not include term life insurance.
L Total liabilities = L1 + L2 + L3	
L1 Principal residence loans	Loans taken for constructing, purchasing and/or improving the principal residence of household.
L2 Other residence and real estate loans	Loans for the purpose of constructing, purchasing or improving other dwellings, buildings and land (e.g., loans to purchase holiday homes and loans to purchase rental properties for investment purposes). This item excludes liabilities of own unincorporated enterprises, when these are recorded as net value in F4.

L3 Other loans	Car and other vehicle loans, instalment debt, education loans, other non-mortgage loans from financial institutions, loans to purchase shares and other financial assets, loans from other households, credit card debt, lines of credit, bank account overdrafts, other loans not included in L1 or L2 This item exclude liabilities of own unincorporated enterprise, when these are recorded as net value in F4.
= NW Net Wealth (excluding employment related pension funds, i.e. NF + F – L)	
EXT1 Pension schemes related to employment	Pension schemes related to employment (occupational pension plans with account balance). Does not include pensions accruing under government social security schemes.
= NWE Extended net wealth (including employment related pension funds, i.e. NF + F - L + EXT1)	

4. Household subgroups

Households are classified into sub-groups based on either household-level variables or characteristics of the household reference person (household head). Household-level variables are: i) housing tenure; ii) number of household members; iii) household type (singles or couples, presence of children, and age of the reference person); iv) main income source; v) quintiles of net wealth; and vi) quintiles of net income. The variables defined on the basis of the household reference person are: i) age; and ii) education.

To facilitate the compilation of these tables, all of them (with the exception of Table 5) rely on the same breakdown of household subgroups, i.e. the same rows figure in all tables: it should be understood, however, that some cells may be empty for some specific breakdowns.

Household reference person (head of household)

To the extent possible, the household reference person should be selected according to the criteria presented in the *2011 Canberra Group Handbook on Household Income Statistics* (see also page 87 of the *OECD Guidelines for Micro Statistics on Household Wealth*). For the purposes of these tabulations, children are defined only on the basis of their age (i.e. 0-17 years).[2] .

To identify the household reference person, the following criteria should be applied sequentially to all household members, in the order listed below, until a single person is identified:

1. One of the partners in a registered or de facto marriage, with children aged 0-17 years
2. One of the partners in a registered or de facto marriage, without children aged 0-17 years
3. A lone parent with children aged 0-17 years
4. The person with the highest income
5. The oldest person

For instance, in the case of three persons all aged 18 years or more and none of them in a registered or de facto marriage, the person with the highest income would be selected as the reference person. If two of

2 In other terms, the notion of ‘dependent children’ used in the 2011 *Canberra Group Handbook* (i.e. 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) is not used in this data-collection..

them were married, the partner with the highest income would be selected as the reference person. If the income of the partners were equal, the oldest partner would be selected as the reference person.

The definition of reference person given above should be used in particular when national definitions are based on non-income criteria such as gender (e.g. man as the reference person) or housing status (e.g. person responsible for accommodation). Implementing the definition of household reference person given above requires data on the relationship between household members (to identify partners within a household), their age (to define children and the oldest member in the household), and their personal income (to define the person with the highest income). When this standard definition of the reference person cannot be implemented, country-experts should indicate so in the metadata sheet.

Age and education of the reference person

Detailed guidance of how to define the age and education level of the household reference person is provided in Table 2 below.

Table 2. Definition of the age and education of the household reference person

Age of the reference person	This is the age of the person in the household who is identified as the reference person. The classification used in the tables distinguishes between the following age groups: 34 or less; 35-44; 45-54; 55-64, 65-74; and 75 and over. For the breakdown by household types, the classification used distinguishes between reference person of 'working age' (i.e. aged 65 or less) and 'retirement age' (i.e. aged 66 and over) .
Education level of reference person	This is the highest completed education of the reference person. The standard classification is based on ISCED, the UNESCO framework used to compare statistics on the education systems of countries worldwide (see http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.asp). The classification should be based on ISCED 2011 (see http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf). The tables in the Excel workbook distinguish between three main education categories: i) low (ISCED 2 and below); ii) middle (ISCED 3-4); and iii) high (tertiary, ISCED 5 and above). When the ISCED 2011 classification is not yet implemented in the national source, the three broad educational categories shown above should be based on ISCED 1997.

Household characteristics: housing status, number of household members, household type and main income source

Detailed guidance of how to define household characteristics (housing status, number of household members, household type and main income source) is provided in Table 3 below.

Table 3. Definition of household characteristics

Housing status	The 'housing status' classification separates those who own their principal residence (both full and partial ownership) from those who do not (renters and others). Owners are further broken down by whether the household has taken up loans for constructing, purchasing or renovating their principal residence ('owners with mortgage') and those who do not ('outright owners'). The distinction should be consistent with the principal residence loans in the classification of liabilities. No distinction is made between different categories of 'renters' (e.g. market renters and households with a social housing accommodation) due to cross-country differences in institutional arrangements and classifications.
Number of household members	The classification by 'number of household members' will allow comparing across countries the wealth holdings of household with different sizes, without requiring the use of 'equivalised' amount. Five categories are distinguished: 1 member 2 members 3 members 4 members 5 and more members Household members are not differentiated according to age (i.e. both adults and children count as one member)

Household type	Household should be classified on the basis of the age of the reference person into two groups (working age and retirement age) and then, within these two groups, by the number of children (0-17 years) and the number of adults). This classification leads to the following 6 categories: Working age head, single person (adult or child) Working age head, single adult, with children Working age head, two or more adults, no children Working age head, two or more adults, with children Retirement age head, single person Retirement age head, two persons or more For the purposes of this classification, household reference persons aged less than 18 should be included among “working age heads” (i.e. WA heads are effectively those aged 0-65 years old). Also, in the case of households with a retirement age head (i.e. aged 66 and more), the category ‘two or more persons’ includes children.
Main income source of the household	The classification of households by ‘main income source’ is defined on the basis of the largest type of income received by the household, i.e. income summed across all household members. The following five categories of main sources of income are distinguished: Wages and salaries Self-employment income Property income Current transfers received (e.g. old-age pensions) No income Main income source of the household is the type of income that has the highest value within a household. In the (unlikely) case that two types of income are recorded with the same (‘highest’) value, the main income source should be the one that occurs first in the list above.

Quintile groups of wealth and income

The tables in the Excel workbook also rely on a classification of households according to the level of their economic resources into **quintiles**.

In the case of **wealth quintiles**, the net wealth quintiles should be based on the narrower net wealth concept (NW), i.e. excluding employment related pension wealth. For the purpose of constructing wealth quintiles, households should be ranked in ascending order of their wealth holdings into five groups each consisting of 20% of households. The top quintile (V) further distinguishes between households belonging to the top 10%, 5% and 1% of the distribution of net wealth (optional).

In the case of **income quintiles,** these should be based on the concept of annual disposable income.[3] For the purpose of constructing income quintiles, households should be ranked in ascending order of their annual disposable income into five groups each consisting of 20% of households. The top income quintile (V) further distinguishes between households belonging to the top 10%, 5% and 1% of the distribution of household income (optional).

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3 In cases where information on disposable income was not collected, income quintiles should be based on gross income (i.e. before taxes).

5. Table-specific instructions

Table 1. Distribution of household net wealth by population subgroups

Table 1 provides information on the number of people in the sample and in the population (i.e. weighted), and on the distribution of net wealth (and income) across household subgroups.

- *Households in the sample* is the un-weighted number of households in the achieved sample.
- *Households in population* is the weighted number of households in the achieved sample[4], using sampling weights that can provide estimates of population totals (i.e. not normalised).
- *Consumption units in population* is the weighted sum of consumption units, where a consumption unit (i.e. equivalent adults in the household) is the square root of household size.
- *Individuals in population* is the weighted number of individuals in the achieved sample.

The table uses three definitions of net wealth. The first is the main definition, which excludes employment related pension wealth (NW). The second is extended net wealth (NWE), which includes employment related pension wealth (see section 3 above). The third is liquid financial assets (LF), which covers all financial assets with the exception of net equity in own unincorporated enterprises and unlisted shares and other equity (see page 14).For both net wealth and extended net wealth, values for the mean and for three quantiles (median, P25 or lower quartile, P75 or upper quartile) are requested. These should be computed using sampling weights from the distribution of households within each subgroup. For example, the lower quartile P25 for outright owners is the wealth value below which 25 % of outright owners are.

The mean income is requested for both disposable income and gross income (before taxes). The priority would be to have information on disposable income, i.e. net of taxes and social contributions.

[New] The last two columns request information on the median ratio of net wealth to disposable income, and on the median ratio of liquid financial assets to disposable income. For countries where information on annual disposable income is not available in the wealth survey used, these last two columns should be completed based on the concept of gross income.

Table 2. Distribution of households by net wealth quintiles

Table 2 provides information on the weighted number of households and on the mean net wealth in different parts of the distribution of net wealth for different household subgroups.

The net wealth concept used in Table 2 is the narrow one (NW), i.e. excluding employment related pension wealth. Wealth quintiles are based on household net wealth: weighted household observations are ranked in ascending values of their net wealth. In the row “total”, each quintile group should contain 20 % of households.

- The *number of households with negative net wealth* is the weighted number of households with net wealth < 0.

[4] If the source is not a sample but covers the whole population, then the number of households in the sample and in the population should be the same.

- The *number of households with nil net wealth* is the weighted number of households with net wealth = 0 or missing net wealth. [5]

- The *net wealth quintile* is defined from household distribution (household weighting), and is explained in the section household subgroups.

Tables 1 and 2 should be consistent (i.e. the mean values of net wealth and the total number of households should be equal for all households).

Table 3a. Components of household wealth: unconditional means household of different assets and liabilities per household

Table 3 provides information on the mean of different types of assets and liabilities across all households, i.e. whether they hold the asset/liability in question or not. Information on three aggregates (non-financial assets, financial assets, total liabilities) and their sub-components is collected using the specification of asset types given in Section 3. The typology of wealth components is the same in tables 3a, 3b and 3c.

All values should be computed as means across all households, i.e. unconditional (rather than as means across household having the asset type considered). Therefore, if the household does not hold that type of asset (after imputation for item non-response), its wealth values should be set to nil before the tabulation of Table 3a. As Table 3a is designed to be additive and to allow constructing different concepts of wealth, it is important to compute the values across all households.

- The mean net wealth in Table 1 should equal the sum of non-financial and financial assets minus total liabilities in Table 3.

- The sub-components of Table 3a should add up to the main aggregates (net wealth and extended net wealth in Table 1; total non-financial assets, financial assets, total liabilities in Table 3).

- If a sub-component is not available (e.g. data on vehicles were not collected in the national source), the corresponding column should be left empty.

- If a sub-component is only available jointly with some other sub-component(s), its values should be reported under the asset type which is more important (higher mean per all households). Footnotes should be used to indicate the types of assets covered, but *columns should not be added or deleted*. The column of the jointly recorded asset should be filled with nil values.

- The wealth components that are not available separately as well as those included in the column "other" should be noted in the metadata sheet. Information on the type of employment-related pension schemes included in variable EXT2 (pension schemes related to employment) should be reported in the metadata sheet.

Table 3b. Ownership: number of households owning assets or having debts

Table 3b provides information on the weighted number of households having strictly positive or negative values of different types of assets and liabilities. While the typology of wealth components is the same in tables 3a, 3b and 3c, the number of households is not: in Tables 3b and 3c, the values are conditional

[5] See Section 2 for the treatment of negative and missing values.

on holding the asset or liability in question; while in Table 3a, all values refer to all households (unconditional means).

Dividing the number of households having a certain wealth component, as reported in Table 3b, by the total number of households shown in Table 1 should give the proportion of households holding a the wealth component considered. These are sometimes called ‘asset participation rates’.

Table 3c. Conditional medians: median values of different types of assets and liabilities among those who own the wealth component considered

Table 3c provides information on the median values of different types of assets and liabilities among those households who have strictly positive or negative amount of the wealth component. While the typology of wealth components is the same in tables 3a, 3b and 3c, the population of households is not: in Tables 3c, values are conditional on holding the asset or liability in question; while in Table 3a, all values refer to all households (unconditional means).

If an asset or liability type has missing or nil values (after imputation for item non-response), then this household is not counted as holding the asset or having debt.

Table 4. Debt burden indicators among indebted households

Table 4 provides information on the total number of households reporting that they have outstanding liabilities (in the second column), as well as selected indicators on the fragility of their financial situation, measured in terms of their debt-to-income and debt-to-asset ratios. The notion of ‘indebted households’ should be understood as excluding those who have a balance on their credit card (or utility bills) on which no interest payment is paid, while conversely households with payment arrears on their credit cards (and utility bills) should be included among ‘indebted households. As for the previous tables, values of liabilities, total assets (NF + F, i.e. restricted definition) and income (annual disposable household income) should be non-equivalised.

Indicators for the fragility of household debt situation refer to:

i) the number of households with a debt-to-income ratio exceeding the value of 3 (in the third column);

ii) the number of households with a debt-to-asset ratio exceeding a value of 75% (in the fourth column);

iii) the median value of the debt-to-income ratio of all indebted households (in the fifth column), in percentage; and

iv) the median debt-to-asset ratio of all indebted households, in percentage (in the sixth column).

Debt-to-income and debt-to-asset ratios are computed at household level. For each indebted household, debts are divided by annual income or total assets. Households that do not hold debt are excluded from the table.

If a household holds debt but its income or assets are missing or nil (after imputation for item non-response), the values for income and assets should to be set at a small positive value (e.g. 0.1) before deriving the debt-to-income or debt-to-asset ratio at household level. It is assumed that there are few such households; the aim of this procedure is simply to avoid dividing the amount of debt outstanding by zero in order to retain all indebted households in the tabulations.

Table 5: Joint distribution of income and wealth

Table 5 provides information on the joint distribution of income and wealth. The values shown refer to the number of households in a cross-tabulation (by quintiles) of raw (i.e. non-equivalized) income and wealth values.

In this table, each household is weighted by its household sampling weight both in the tabulations and when constructing the quintiles. Households are ranked in ascending order using the household weights for each of the two distributions. The values reported in the table should refer to the *number of households*. For instance, cell B6 of Table 5 would refer to the number of households belonging to the bottom quintile of both the income and wealth distribution. The total number of households across all cells in Table 5 should be equal to the total number of households in Table 1.

Table 6a: Share of individuals with equivalised wealth insufficient to cover at least 3/6/12 months of income poverty line (asset poverty)

Table 6a aims at complementing the commonly-used measures of relative income poverty with information on household wealth holdings. Unlike previous tables, computations for Table 6a should refer to *individuals* (rather than households) and be based on the concepts of **equivalised** wealth and household disposable income.

An operational measure of asset-based poverty depends on the wealth concept, the income concept, the equivalence scale, as well as the threshold for income and wealth. In general terms, following Törmälehto et al. (2013)[6], an individual belonging to household *i* is defined as asset poor if:

$$\frac{W_i(t)}{S_i^e} < \frac{m}{12} * \lambda * median\left(\frac{Y_i(t)}{S_i^e}\right) \qquad (2)$$

where $W_i(t)$ is household *i*'s wealth at time point t, S_i is the number of members in household *i*, *e* is the equivalence scale used to "adjust" household wealth and income for household size, $Y_i(t)$ is household *i*'s annual disposable income, λ is a fraction that defines the income threshold, and *m* is the number of months the individual will need to rely on his/her wealth as buffer in the event of sudden drops in income.

For the purpose of compiling Table 6a, the equivalence elasticity *e* is set to 0.5 (the square root of household size), which is the equivalence elasticity used by the OECD when computing income-based measures of poverty and λ is set to 0.5, which is the OECD standard for relative income poverty (50% of median income). When possible, the income concept used should be that of *annual disposable income (DI)*[7]; for countries where information on annual disposable income is not available in the wealth survey used, Table 6a should be completed based on the concept of gross (i.e. pre-tax) income.[8] In order to check the sensitivity of the results to the parameters used, the asset-poverty threshold *m* can take three different values (*m* = 3, 6, 12). Equation (2) hence reduces to:

$$\frac{W_i(t)}{S_i^{0.5}} < \frac{m}{12} * 0.5 * median\left(\frac{DI_i(t)}{S_i^{0.5}}\right) \qquad where\ m = 3, 6, 12 \qquad (3)$$

6 See: http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/ywrp1_201300_2013_10518_net.pdf

7 Disposable income refers to gross household income (income from all sources, including public transfers) *less* all current transfers paid (transfers to other households, employment related pension schemes, taxes on income and wealth paid, and contributions paid by households to social security schemes).

8 Country-providers relying on the concept of gross income should indicate this in the metadata sheet.

where, for each individual, a wealth threshold is established as a fraction of median annual equivalised income. Column C in Table 6a requests information on the *share* of individuals who are *income* poor, i.e. they have equivalised annual disposable income below 50% of median. Columns D to F as well as columns H to J in Table 6a request instead information on the *share* of individuals who are *asset-based* poor, i.e. they have wealth holdings insufficient to cover 3, 6 and 12 months of income poverty line. In addition, Columns G and K record information on the *share* of individuals who are *both* asset-based poor *and* income poor.

Individuals who are asset-based poor are further classified into the groups specified below, based on their equivalised *wealth* holdings in relation to the income poverty line. Estimates are based on two wealth concepts, i.e. liquid financial assets, and (total) net worth, relative to different fractions of the annual income poverty line; these fractions correspond to the number of months (3, 6 and 12) that individuals could maintain poverty-level consumption by drawing down their (equivalised) wealth holdings.

- *Liquid financial assets,* i.e. the sum of deposits, bonds, mutual funds, stocks, and other non-pension financial assets (F1+F2+F3+F5+F7); financial liabilities are not subtracted.
    - LF1 Equivalised liquid financial assets below 25 % of the income poverty line (i.e. less than 3 months of poverty-level consumption)
    - LF2 Equivalised liquid financial assets below 50 % of the income poverty line (i.e. less than 6 months poverty level consumption)
    - LF3 Equivalised liquid financial assets below 100 % of income poverty line (i.e. less than 12 months and non-asset poor)
- *Net worth,* i.e. the sum of all financial and non-financial assets less all financial liabilities:
    - NW1 Equivalised net wealth below 25 % of income poverty line (i.e. less than 3 months of poverty-level consumption)
    - NW2 Equivalised net wealth below 50 % of income poverty line (i.e. less than 6 months poverty level consumption)
    - NW3 Equivalised net wealth below 100 % of income poverty line (i.e. less than 12 months and non-asset poor)

For each of the two wealth concepts, the three sub-groups of individuals are not mutually exclusive (i.e. the share of individuals with equivalised liquid financial assets below 50% of income poverty line (Column E in Table 6a) also includes those (Column D) with equivalised financial assets below 25% of income poverty).

Table 6b (new): Share of individuals with (equivalised) liquid financial assets insufficient to cover a 25%, 50% or 100% fall in their household income for at least 3 or 6 months (financial vulnerability)

Table 6b introduces a measure of financial vulnerability, where the wealth concept is restricted to liquid financial assets and the income threshold is based on the individual's *own* household income, instead of being defined in terms of the median income (as in Table 6a). Equation (2) can then be re-written as follows:

$$\frac{LF_i(t)}{S_i^e} < \frac{m}{12} * \lambda * \frac{DI_i(t)}{S_i^e} \tag{4}$$

Where the concepts of liquid financial assets (LF), household size (S), equivalence elasticity (e) and disposable income (DI) are the same as defined above for Table 6a. In order to check the sensitivity of the results to the parameters used, *m* and λ are allowed to take different values (m = 3, 6; λ=0.25, 0.5, 1), although only unique combinations are retained and shown in Table 6b.

Unlike Table 6a, Table 6b entirely relies on the concept of liquid financial assets. Columns C to F request information on the *share* of individuals with (equivalised) liquid financial assets below a fraction of *their own* equivalised household disposable income, defined as follows:

- LF4 Equivalised liquid financial assets insufficient to cover a 25% fall in equivalised household income for at least 3 months

- LF5 Equivalised liquid financial assets insufficient to cover a 50% fall in equivalised household income for at least 3 months

- LF6 Equivalised liquid financial assets insufficient to cover a 100% fall in equivalised household income for at least 3 months

- LF7 Equivalised liquid financial assets insufficient to cover a 100% fall in equivalised household income for at least 6 months

In addition, Columns G to J record information on *share* of individuals who are *both* income poor (i.e. they have equivalised annual disposable income below 50% of median income) *and* financially vulnerable, as identified in the previous columns.