

## Chapter 6

### **The household account**

*This chapter defines the three key indicators in the household account: household final consumption expenditure, household disposable income, and saving. It next looks at how these three indicators are identified and presented in the household sector accounts. Finally, the chapter considers an alternative way to measure household disposable income and consumption proposed by SNA 2008.*

**A household** is a group of people collectively taking responsibility to feed and house themselves. A household can consist of a single person or of two or more people living under the same roof, these people generally being linked by family ties. However, there are also “institutional households” consisting of, for example, members of the armed forces living in a barracks or on board a ship, people detained in prison, or nuns living in a convent. National accounts make no distinction between these different categories of “household”, and they are all lumped together in what is known as the “household sector”, carrying the code S14. In practice, however, the bulk of the household sector consists of families.

The other sectors described in the national accounts – *corporations, general government and non-profit institutions* – pursue a single goal, namely the production of goods and services. For households, on the other hand, things are more complicated. Members of a household, if they are employed, earn an income that they use to buy everyday goods and services or for investing in financial assets. However, members of a household can also, as is frequently the case, run a family business such as a shop, a cafe, a taxi firm or a farm. In the national accounts, these various enterprises are described by the term *unincorporated enterprises*; they have no shareholders and their responsibility is not limited in the case of payment default (see Chapter 7 on the business sector). Households also produce housing services (real or imputed).

As a consequence, the accounts of the household sector cover two quite different functions: the output of goods and services, on the one hand, and the allocation of an income to consumption and to saving, on the other. It is partly for statistical reasons that no distinction is made between these two functions. It is in fact generally possible to separate out transactions (relating to production, intermediate consumption, compensation and taxes on production) between “pure” households and unincorporated enterprises. Indeed, in certain countries (France, United States), a partial account of this kind is published for unincorporated enterprises. Nevertheless, it is impossible in practice to distinguish other transactions, meaning that there are no complete accounts for unincorporated enterprises nor are there complete accounts for “pure” households.

Certain other OECD countries publish accounts bringing together households and non-profit institutions serving households (NPISHs). This aggregation is based on the notion that, because these institutions are largely

financed by households and because their purpose is to serve households, their accounts can be assimilated to those of households. Moreover, the NPISHs constitute a small sector, and their inclusion in the household account makes little difference to the final result. In the end, even though the international system of national accounts recommends that NPISHs should be shown separately from households, in practice users of national accounts who want to make international comparisons will often have to compare “households + NPISHs” (i.e., S14 + S15) rather than the S14 sector alone.

For economists, the “consumer” function of the household sector is of particular interest in that economic growth is influenced directly and immediately by growth in *household final consumption expenditure*, which in turn is determined by *household disposable income* and by the way in which this income is divided between consumption and *saving*. The expressions in italics in this last sentence identify the three key indicators in the household account that we shall be defining in this chapter.

## 1. The three key indicators in the household account

Table 6.1. shows, as percentages of GDP, the corresponding expenditure items in the case of Japan, the main ones being: *household final consumption expenditure*; *government final consumption expenditure*; *gross capital formation*; and, lastly, *exports*. An increase or decrease in GDP can be a consequence of variations in one or other of these components. In describing the evolution in the Japanese economy, economists have at various times been able to say that growth has been “driven by exports”, “driven” or “slowed down” by consumption, or even sometimes that it was influenced or not by a combination of these factors. Table 6.1 nevertheless clearly brings out the predominant role played by household final consumption expenditure. Given that this expenditure contributes around 60% of GDP, a change in this aggregate is bound to have a major influence on GDP growth.

Obviously, all kinds of reasons may prompt a household to increase or reduce its consumption. In the first place, there are the variations in income, or the realisation of holding gains or losses on financial or real estate investments. However, the level of consumption is also influenced by the way in which the household sees its immediate future: likelihood of an increase or decrease in income; perception of the risk of unemployment; expectations regarding inflation. The influence of consumer behaviour on GDP leads economists to keep a close eye on indicators of “household morale” derived from opinion surveys in which consumers are asked questions such as whether they have confidence in the future, whether they expect to make major purchases soon and whether they think their financial situation has improved or deteriorated over the recent past.

Table 6.1. **Japan: final uses**  
As a percentage of GDP

Code		2010	2011	2012
B1_G	Gross domestic product	100.0	100.0	100.0
P31S14	Final consumption expenditure of households	58.0	59.1	59.5
P31S15	Final consumption expenditure of non-profit institutions serving households	1.2	1.4	1.5
P3S13	Final consumption expenditure of general government	19.7	20.4	20.5
P5	Gross capital formation	19.8	20.0	20.6
P6	Exports of goods and services	15.2	15.1	14.7
P7	(-) Imports of goods and services	14.0	16.1	16.6

Source: OECD (2013), "Aggregate National Accounts: Gross domestic product", OECD National Accounts Statistics (database), <http://dx.doi.org/10.1787/data-00001-en>.

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A second notable feature is the importance of gross capital formation. A substantial part of this is directly related to households, since it consists of purchases of housing, which are counted as household GFCF (gross fixed capital formation). This investment is partly financed by household saving.

Household **saving**, the second key indicator, accounts for a large proportion (more than 50%) of total saving in the OECD economies. Table 6.2 shows for Japan the proportion of total saving originating with households (and NPISHs). This proportion has already been traditionally high in Japan but reached about 75% in 2010. This reflects a post crisis situation where the deficit (negative saving) of the government has reached unprecedented levels, as well as the surplus (positive saving) of corporations. The sums saved by households are available to finance the gross fixed capital formation of other sectors (machinery, factories, transport equipment, roads, railways, communication networks, etc.) and also, in part, the GFCF of households themselves (purchases of housing). Since the end of World War II, there has been a noticeable causal link between the level of household saving and the size of the rise in GDP.

*The United States is an exception. Since the end of World War II, the United States household saving ratio has been relatively low, in contrast to the high GFCF rate that has enabled GDP to grow more or less constantly throughout this period. This situation is explained by the powerful attraction the American economy holds for foreign investors. In other words, the United States has been able to finance its investment with the savings of foreign households.*


At the microeconomic level, saving is also important in that it provides families with financial security in the event of job loss or illness, and it also

Table 6.2. **Japan: Breakdown of total net saving in the domestic economy by sector**

As a percentage of total net saving

		1980	1990	2000	2010
B8N-S1	Total economy	100.0	100.0	100.0	100.0
B8N-S11_S12	Corporations	28.3	14.7	61.3	504.9
B8N-S13	General government	10.1	34.8	-29.0	-479.7
B8N-S14_S15	Households and NPISHs	61.5	50.5	67.7	74.8

Source: OECD (2013), "Detailed National Accounts: Non-financial accounts by sectors, annual", OECD National Accounts Statistics (database), doi: <http://dx.doi.org/10.1787/data-00034-en>.

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covers part of the retirement pension. The social security systems that had previously managed to provide adequate protection against these risks are now, because of the ageing of the population, in a difficult financial situation in many OECD countries. In recent years, OECD economists in the various Economic Surveys of countries have been recommending that the authorities offer incentives to households to save more and thus finance more of their retirement requirements themselves.

The third key indicator, **household disposable income**, is the sum of *household final consumption expenditure* and *saving*. As we have seen, rises in these two components are desirable for several reasons: an increase in household final consumption expenditure stimulates GDP growth, while an increase in saving permits the partial financing of investment and at the same time eases the burden on the social security system. It seems evident that this result can only be achieved if household income increases, and this increase is largely a function of the economy's capacity to achieve productivity gains through more efficient use of the labour and capital factors of production.

## 2. The household sector accounts

These three indicators are explicitly identified in the household sector accounts. It is essential to bear in mind that from now on in this textbook, these accounts and these indicators are expressed at current prices and not in volume.

The sequence of accounts for households is divided into "non-financial" and "financial" accounts. The financial accounts are examined in Chapter 8. At this stage, we shall look only at the sequence of non-financial accounts, starting with the *production account* and ending with the *capital account*. The accounts we shall show here are in T-account form, the "T" referring to their aspect. This is in fact the presentation adopted by most households in keeping track of their receipts and expenditure:

Expenditure	Receipts
1.	a)
2.	b)
3., etc.	c) Etc.

In the national accounts, the receipts are known as “resources” and are set out in the right-hand column. Expenditure is known as *use* and is set out in the left-hand column. The final item in the *uses* column is a “balancing item”. This is the amount needed to bring *uses* and *resources* into balance. The balancing items of the various accounts (*value added*, *operating surplus*, *disposable income*, *saving* and *net lending/net borrowing*) are particularly interesting aggregates for the purpose of analysis. In the presentation of accounts adopted hereafter, these balancing items are shown in bold type.

Note that the only way to fully understand what is contained in any given balancing item is to examine the sequence of accounts leading up to it. For example, in order to reply to the question “what is household saving?” it is imperative to examine the series of items that have been added to, or deducted, from the value of the initial item in the sequence of accounts. This notion will become clearer as we progress with the examination of the household sector accounts.

To give an idea of the relative importance of the various items, we have chosen the example of the accounts of Italian households in 2012 (in billion euros, at current prices). The tables give the code of each transaction (for example, P1 for output). These are the codes used in international manuals (SNA 2008 and ESA 2010).

The initial letter of each code is based on “Eurospeak” terminology: “P” indicates products; “D” redistribution transactions; “F” financial transactions; “B” balancing items; and “K” (for the German word “Kapital”) indicates capital accumulation items. These short and precisely defined codes are very useful.

### The production account

The first account in the sequence is the *production account*. This very summary account initially consists of three items: *output*, *intermediate consumption* and the first balancing item, *gross value added*, which is the difference between the other two items. In the first table below, we have used the combined grouping “Households plus NPISHs” to illustrate the fact that

certain countries publish accounts for these two sectors only in aggregate. A possible variation is the inclusion of “net value added”, which is equal to gross value added minus the consumption of fixed capital.

**Table 6.3. Italy: Production account for households and NPISHs (S14 + S15)**

Billion euros, 2012

Uses		Resources	
P2. Intermediate consumption	136.6	P1. Output	543.7
<b>B1G. Gross value added</b>	407.1		
K1. Consumption of fixed capital	89.6		
<b>B1N. Net value added</b>	317.5		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=.](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=)

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If one excludes the NPISHs and looks at the production account of households on their own (S14), the following production account is obtained. It can be verified, by difference, that the share of NPISHs is very small, and therefore they will be ignored from now on.

**Table 6.4. Italy: Production account for households (S14)**

Billion euros, 2012

Uses		Resources	
P2. Intermediate consumption	133.4	P1. Output	536.2
<b>B1G. Gross value added</b>	402.9		
K1P1. Consumption of fixed capital	89.3		
<b>B1N. Net value added</b>	313.6		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=.](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=)

StatLink  <http://dx.doi.org/10.1787/888933143896>

The headings in this production account for households show the activities of unincorporated enterprises: farms, retail outlets, taxi firms, beauty parlours, etc. But they also include own-account production of goods by households, and the housing services “produced” by people who rent accommodation to others, or who own their accommodation (apartments or houses). As a consequence, the *output* item on the right hand side of the account includes the imputed rents of these “homeowner-occupiers”, while the intermediate consumption in the left hand side includes (in addition to the intermediate consumption of unincorporated enterprises) the expenditure these owners have to make for the upkeep of their accommodation.

### Generation of income account

The next account in the sequence is the *generation of income account*, which shows how the value added is distributed between remuneration of the labour and capital factors of production.

It starts by showing on the right-hand side, in the resources column, the balancing item from the previous account, in this case, the net value added.

Table 6.5. **Italy: Generation of income account for households (S14)**

Billion euros, 2012

Uses		Resources	
D1. Compensation of employees	50.1	<b>B1N. Net value added</b>	313.6
D11. Wages and salaries	40.9		
D12. Employers' social contributions	9.2		
D2. Taxes on production and imports, payable	20.7		
D3. (-) Subsidies, receivable	3.8		
<b>B2N. Operating surplus, net</b>	72.9		
<b>B3N. Mixed income, net</b>	173.7		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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The uses column contains two main items: “*compensation of employees*” and “*net taxes on production*”. When the value of these is deducted from *value added*, we have two balancing items, namely the **net operating surplus** and the **net mixed income**.

The *compensation of employees* item in this case covers only the employees of the unincorporated enterprises. Compensation consists of wages and salaries in cash, income in kind (free board and lodging, for instance) and the social contributions paid by the owners of unincorporated enterprises on behalf of their employees. It can therefore be seen that compensation of employees is not merely wages and salaries but represents the total cost of labour.

The *net taxes on production* item consists of the taxes payable for the ownership or utilisation of factors of production (labour and capital) – for example, the property taxes paid by owners of dwellings. The word “net” signifies that subsidies on production have been deducted. The subsidies obviously result in an increase in the size of the balancing items, *mixed income* and *operating surplus*. In the *generation of income account* for households, the subsidies are mainly those paid to farmers.

For the financial and non-financial corporate sectors, the balancing item of the account consists entirely of the **net operating surplus**, which measures the remuneration of the capital used in the production process or, in other



words, the principal measure of “profit” in the national accounts (see Chapter 7). However, the situation is more complicated for the unincorporated enterprises sector, for which it is often impossible to separate out the remuneration of capital and the remuneration of labour. Take the example of a family retail business or a family taxi firm: once the value added has been reduced by the compensation of employees and by the net taxes on production, what remains is both the remuneration of the capital invested (in this case, the premises, equipment and stock or the vehicles) and also the remuneration of the work done by the owners of the enterprises and their families. Unlike the owners of financial and non-financial corporations, the owners of family firms are not obligated to show in their balance sheet the value of the fixed capital used – and it would in fact be virtually impossible to force them to do so. A taxi can be used as a family car when not needed for professional purposes, just as business premises can also provide accommodation for the family.

This explains why, when it is not possible to distinguish between income from capital and income from labour, the remuneration is described as “mixed” and the balancing item in the *production account* is entitled **net mixed income**. This is what we find recorded as EUR 173.7 billion in the above *generation of income account*. However, there is one case in which there is no doubt that what we have is income from capital and is therefore a balancing item that can be called **operating surplus, net**. This is the activity imputed to homeowner-occupiers consisting of providing housing services to themselves as occupiers of the accommodation concerned. This accounts for the bulk of the EUR 72.9 billion shown above.

Within mixed income, macroeconomists sometimes need to clearly distinguish between remuneration of the capital used in production and remuneration of the labour used in production. There exist at least two methods for doing this (see section “Going further: the breakdown of gross mixed income”).

### **Distribution of primary income account**

The next account in the sequence is the *distribution of primary income account*. “Primary” income means the income generated by a production process itself or by a closely related process. By contrast, “secondary” income consists of money transferred to, or from, households without being related to a productive activity.

Table 6.6. **Italy: Primary income account for households (S14)**

Billion euros, 2012

Uses		Resources	
D4. Property income	15.0	<b>B2N. Operating surplus, net</b>	72.9
D41. Interest	10.6	<b>B3N. Mixed income, net</b>	173.7
D45. Rents	4.4	D1. Compensation of employees	672.6
		D11. Wages and salaries	490.8
		D12. Employers' social contribution	181.8
		D4. Property income	196.8
		D41. Interest	52.1
		D42. Distributed income of corporations	124.6
		D43. Reinvested earnings on FDI	0.0
		D44. Property income attributed to policy insurance holders	17.9
<b>B5N. Balance of primary incomes, net</b>	1 100.9	D45. Rents	2.1

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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Starting as usual on the side of resources, we have at the top of the column the balancing item from the previous account, **net mixed income/net operating surplus**.

Under resources, the *compensation of employees* item is much larger than the corresponding item in the previous account. This is because in this case it covers the compensation received by all employees in all firms, in general government or in non-profit institutions – and not merely those in unincorporated enterprises. This is the largest item of household income. As seen earlier, compensation of employees represents the total cost of labour and includes the social contributions paid by employers on behalf of their employees and even the “imputed” contributions. It may seem strange to record social contributions as being received by households. To understand the reasons, the reader is referred to the section “Going further: actual and imputed social contributions”.

The “interest” item (D41) in the resources column for households includes the interest received on households’ financial investments. The item D42 corresponds to the dividends paid by companies to households and to the “withdrawals from income of quasi-corporations” (D422) by households. This latter item is in principle reserved for recording payments to the owners of units known as “quasi-corporations”, which are not corporations in the legal sense (and therefore pay no dividends in the legal sense, either) but which have similarities with corporations. This item is normally very small because quasi-corporations are fairly rare. However, the Italian national accounts are unusual, in that unincorporated enterprises with more than five employees

are considered as “quasi-corporations” and are therefore classified in the corporate sector. Item D422 in the Italian case therefore refers to the gross mixed income of a very substantial group of small individual enterprises that in other countries are classified in the household account.\*

Item D44 consists of imputed interest received by households on their life insurance policies, even though (unlike the interest earned on bonds or savings accounts) they are not able to use the interest freely. The section “Going further: insurance” explains the way in which life insurance and other types of insurance are treated. Finally, item D45 is composed of rents received for land or sub-soil assets (deposits of coal or other ores, for example). If the owners of this land or these deposits decide to allow them to be used by others in a production process, they are regarded as beneficiaries of a primary income. On the other hand, rents received for making a dwelling available (or for the temporary use of some other type of fixed capital, such as personal goods or vehicle) are considered as payments for the purchase of services. Therefore, they are included as output in the *production account*, and do not appear in item D45.

The uses column of the account includes item D4 “property income” paid by households. Note that the *interest* sub-item includes both the interest paid by households when they take out consumer or housing loans and the interest paid by unincorporated enterprises on their borrowings, notably for the acquisition of machinery or premises.

When the uses are subtracted from the resources, the result is the next balancing item: **balance of primary incomes**. This item is then carried to the top of the resources column in the fourth account, entitled *secondary distribution of income account*.

### **Secondary distribution of income account**

The *secondary distribution of income* account traces the various transfers that take place subsequent to the distribution of primary income, with these transfers mainly aimed at correcting social inequalities. One could equally call this the “*redistribution account*”. The most important of these transfers result when government policies redistribute income from well-off households to poorer households, but the transfers appearing in this account can also include private initiatives, notably gifts to charities and repatriation of funds by immigrant workers from poorer countries to their families.

The transfers recorded here are called “current” (as opposed to “capital” transfers), either because they are taken out of income (and not out of capital) or because the beneficiaries regard them as part of current income.


\* The same is true for Germany. See Chapter 3 for consequences on the comparability of profit rates.

Table 6.7. **Italy: Secondary distribution of income account for households (S14)**

Billion euros, 2012

Uses		Resources	
D5. Current taxes on income, wealth, etc.	199.7	<b>B5N. Balance of primary incomes, net</b>	1 100.9
D61. Social contributions	252.3	D61. Social contributions	2.5
D6111. Employers' actual social contributions	167.5	D62. Social benefits other than social transfers in kind	345.1
D6112. Employees' social contributions	40.4	D7. Other current transfers	25.9
D6113. Social contributions by self- and non-employed persons	30.1	D72. Non-life insurance claims	17.6
D612. Imputed social contributions	14.3	D75. Miscellaneous current transfers	8.3
D62. Social benefits other than social transfers in kind	1.9		
D7. Other current transfers	40.2		
D71. Net non-life insurance premiums	16.7		
D75. Miscellaneous current transfers	23.4		
<b>= B6N. Disposable income, net</b>	<b>980.4</b>		
+ K1. Consumption of fixed capital	89.3		
<b>B6G. Disposable income, gross</b>	<b>1 069.7</b>		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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The third item in the resources column is D62 *Social benefits other than social transfers in kind*. These are current social transfers benefiting households (retirement pensions, unemployment allowances, family and maternity allowances, sick-leave per diem allowances). Note that these transfers include neither the reimbursement of medicines and medical services nor housing allowances, which are considered as social transfers in kind and recorded in a different account as part of adjusted disposable income. We shall return to this latter concept at the end of the chapter.

Social benefits (D62) break down into “social insurance benefits” and “social assistance benefits”. Social insurance benefits are paid out by social security plans organised by government and by private pension plans in return for prior contributions. Social assistance benefits may also meet the same types of needs as the social security benefits, but the recipients have not paid contributions, and these benefits are not provided as a matter of right. Certain subsistence allowances paid to asylum-seekers or minimum incomes provided to very poor people are examples of social assistance benefits.

The final two items in the resources column of this account fall under the heading *other current transfers*. These transfers are of two types: settlements of accident insurance claims by households (fire, theft, road accidents, etc.) and miscellaneous current transfers (money sent by relatives living abroad, grants by non-profit institutions to handicapped people or to disadvantaged families,

aid given by the government to households that are victims of floods or other natural catastrophes).

In the uses column of this account, the first item is titled *D5 current taxes on income and wealth*. Current taxes on income include personal income tax and taxes paid on the “mixed income” of unincorporated enterprises. Current taxes on wealth cover the regular tax payments (usually annual) paid on household net wealth (in the French case, for example, the “*impôt de solidarité sur la fortune*”). Note that inheritance taxes are not included, being exceptional payments and therefore treated as capital transfers.

The next item in the uses column is titled *social contributions*. As explained in the section at the end of the chapter (“Going further: actual and imputed social contributions”), this item covers the contributions to a social security fund paid by employers on behalf of their employees, the contributions paid by the employees themselves, the imputed social contributions and the contributions paid by the owners of unincorporated enterprises (also called “self-employed”).

The last item in the uses column is *other current transfers*. The net non-life insurance premiums are the premiums paid on non-life insurance policies, minus the estimated remuneration that the insured pay for the management services of the insurance company (for more details, see the box “insurance” at end of this chapter). The *miscellaneous current transfers* item covers the financial transfers made by migrant workers to their families in their home countries, gifts to non-profit institutions and parking and other fines.

The difference between uses and resources is equal to **net disposable income (NDI)**, a key indicator that represents the amount left at the disposal of households for either consumption or saving, over and above the replacement of the existing capital stock. It is called “net” because the amounts needed for the replacement of capital assets (dwellings and equipment of unincorporated enterprises) have already been deducted. However, certain analysts prefer to use the *gross disposable income (GDI)*, which is equal to the previous figure plus the consumption of fixed capital. One reason is because there is uncertainty in the calculation of consumption of fixed capital and, in particular, on the international comparability of this calculation. Another reason to prefer GDI is that it can be better analysed than NDI in terms of purchasing power and correlated to final consumption in volume. The *purchasing power of GDI* is equal to GDI deflated by the price index of household consumption expenditure. If the purchasing power of GDI increases, this means that GDI is rising faster than inflation, and therefore there is a chance that households will consume more in real terms.

Another thing to note about NDI is that this household income aggregate includes sub-items that are already earmarked for particular uses and are

therefore not open to a trade-off by households between consumption and saving. For example:

- The *output* item in the *production account* includes agricultural products held back by their producers for their own consumption and the imputed rents of homeowner-occupiers. As a result, the value added derived from these activities, which eventually becomes an element in disposable income, can clearly not be allocated to uses other than the consumption of the farm products and of housing services, respectively. In the OECD countries, own-account consumption of agricultural products is fairly negligible, but the imputed rents represent very substantial sums.
- The *compensation of employees* item in the *primary income distribution account* includes income in kind, but this income has already been “spent” on the corresponding goods and services provided to the employees.
- One part of the *property income interest* (D41) in the *Primary income distribution account* covers imputed interest on the reserves managed by the non-life insurance companies on behalf of policy holders. This imputed interest is earmarked as part of consumption of services provided by the non-life insurance companies.

The final point to note about NDI is that the concept of disposable income used in the national accounts is different from the theoretical concept as defined by certain economists (see “Income in national accounts and economic theory” in Going further). In particular, it does not include the holding gains or losses on shares or on real estate.

### Use of disposable income account


The balancing item **net disposable income** is shown at the top of the resources column in the following account, the *use of disposable income account*.

Table 6.8. **Italy: Use of income account for households (S14)**

Billion euros, 2012

Uses		Resources	
P3. Final consumption expenditure	947.1	<b>B6N. Disposable income, net</b>	980.4
D8. Adjustment for the change in pension entitlements	0.6	D8. Adjustment for the change in pension entitlements	3.4
<b>B8N. Net saving</b>	36.2		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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The adjustment required in the second item of the resources column (coded D8) is necessary because of the way contributions paid to pension funds, as well as the pensions paid out by these funds, are treated in the *secondary distribution of income account*. They are in fact assimilated as contributions to, and benefits from, the social security system, even though they should be treated in the same way as transactions with the life insurance companies. This special treatment has been adopted because contributions paid to pension funds (and the pensions paid out by these funds) are generally regarded by households as similar to the contributions paid to social security funds and the benefits paid by these funds. If one regards them as having the same impact on consumer behaviour, it seems logical to apply the same treatment. However, transactions with pension funds are also recorded in the financial accounts (see Chapter 8). Therefore, it is necessary to make an adjustment in the non-financial account so that the value of the balancing item (*saving*) carried forward into the financial accounts is correct. The adjustment equals the change in pension entitlements, thus its name. When calculating the household saving ratio, it is important to recall that item D8 should be added to the denominator of this ratio (disposable income) since it is included in the numerator (*saving*).

The uses column within the “use of disposable income” account contains only two important items, namely *final consumption expenditure* and the balancing item **net saving**. A complete definition of household final consumption expenditure was already given in Chapter 5, but it is worthwhile recalling that household final consumption expenditure consists mainly of purchases of everyday goods and services (clothing, food, durable consumer goods, rents, transport, personal services, etc.) *plus*:

- the imputed rents “paid” by homeowner-occupiers;
- the estimated value of in-household output of goods, especially crops and livestock consumed by households owning an agricultural holding;
- the estimated value of goods and services received by employees by way of remuneration in kind;

On the other hand, household final consumption expenditure does not include:

- purchases of housing – dwellings. They are fixed assets used to produce the provision of housing services: they are therefore recorded in the capital account (GFCF) and are not considered consumption;
- purchases of other types of buildings and equipment used mainly for production by family enterprises are also GFCF (agricultural equipment, business premises, taxis, goods vehicles, etc.);

- purchases by family firms of intermediate consumption goods (seeds and fertilisers in the case of farmers, paint and brushes in the case of decorators, fuels and maintenance for taxi drivers, etc.) are intermediate consumption and not final consumption;
- purchases (less sales) of “valuables” – including gold coins, antiques, rare stamps and works of art – purchased to serve as “stores of value”, are regarded as investments by the purchasers who hope their value will increase over time (or, at the very least, not diminish).

The balancing item, **net saving**, is the difference between NDI and consumption. This is our third key indicator. Because it is obtained as the difference between two very large aggregates, it is almost invariably tainted by errors. Even a relatively small adjustment in one or the other of the two contributing aggregates – disposable income and household final consumption expenditure – automatically leads to a relatively substantial adjustment in the balance. As a consequence, it is necessary to be wary of the initial published estimates of saving, as these will certainly be substantially readjusted in the following two or three years.

In practice, analysts are not interested in the level of household saving as much as in the household saving ratio, which is the ratio of household saving to disposable income (to which is added households’ receipts of adjustment D8). For the purpose of international comparison, it is essential to use the same definitions. The method preferred by the OECD is to take the *net saving* ratio. The following table shows the household saving ratio in Italy and in other industrialised countries in recent years.

Table 6.9. **Net household saving ratio**  
As percentage of disposable income

	2006	2007	2008	2009	2010	2011	2012
France	11.2	11.7	11.7	12.6	12.1	12.2	
Germany	10.8	11.0	11.5	10.9	10.9	10.4	10.3
Italy	9.5	8.9	8.5	7.1	4.9	4.3	3.6
Japan	1.3	1.1	0.6	2.3	2.1	2.3	
United States	3.5	3.2	5.2	6.4	5.9	5.9	5.8

Source: OECD (2014), “Detailed National Accounts: Non-financial accounts by sectors, annual”, OECD National Accounts Statistics (database).

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### Capital account

The balancing item **net saving** is forwarded to the top of the resources column in the *capital accumulation account*, which is the last non-financial account in the sequence. Because of the presence of “gross fixed capital




formation” under the uses, it is preferable that this account be on a gross basis. This is why we have also included **gross saving** under resources, this aggregate being equal to net saving plus consumption of fixed capital.

Table 6.10. **Italy: Capital accumulation account for households (S14)**

Billion euros, 2012

Uses		Resources	
P51. Gross fixed capital formation	102.0	<b>B8N. Net saving</b>	36.2
P52. Changes in inventories	0.8	K1. Consumption of fixed capital	89.3
P53. Acquisitions less disposals of valuables	2.3	<b>B8. Gross saving</b>	125.5
K2. Acquisitions less disposals of non-produced non-financial assets	0.1	D9. Net capital transfers received	-0.1
<b>B9. Net lending (+)/Net borrowing (-)</b>	20.1		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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The only other item in the resources column is *D9 net capital transfers received*. The use of the word “net” refers to the fact that capital transfers paid have been deducted from the capital transfers received. The receipts include investment aids. The payments mainly consist of inheritance tax. In some countries, capital transfers received also include an adjustment between taxes and social contributions due and taxes and social contributions paid.

*Gross saving* is used to acquire financial and non-financial assets. The first four items in the uses column correspond to the acquisition of non-financial assets. The first of these, *gross fixed capital formation*, includes purchases of housing or of equipment (by unincorporated enterprises) and the planting of orchards, vineyards or forests, among other things. The *change in inventories* item covers stocks of finished products and intermediate consumption goods held by unincorporated enterprises. *Valuables* are objects such as precious metals, antiques and works of art purchased to serve as stores of value, and their purchase is considered as “investment”, being often made with the intent to resell. The *non-produced non-financial assets* cover patents, copyrights, leaseholds and other assignable contracts entitling the holder to use land, buildings or mineral deposits.

The balancing item **B9 Net lending(+)/net borrowing(-)** is the amount available for the purchase of financial assets (for example, to be deposited in a savings account) or for debt repayment (paying off a car loan or a house mortgage, for example) and is almost always positive for the household sector as a whole. However, in some cases, such as Ireland and Spain in the recent years, households have become temporarily net borrowers, because

of the housing boom. The “net lending” is also sometimes called “financial saving”. Some countries publish a “financial saving ratio”, which is equal to net lending divided by gross disposable income of households (and multiplied by 100).

### 3. An alternative way to measure household disposable income and consumption

The international system of national accounts SNA 2008 proposes an alternative method of measuring household disposable income and consumption that takes into account spending by general government and NPISHs for the benefit of households.

The underlying idea is that final consumption expenditure by general government and by NPISHs finances are quite different categories of services: collective services intended to benefit society as a whole, and services used by members of household on an individual basis. Examples of *collective services* are defence, law and order, tax collection, control of public spending, supervision of air quality and water pollution, drafting and promulgation of legislation, and public management in general. In theory, it is society as a whole that benefits from these services, and it is impossible to calculate the extent to which an individual household uses them.

The “individual services” supplied by general government include healthcare, education, social services, housing services, recreational and cultural services. In these cases, it is possible in principle to calculate the extent to which any individual household makes use of them. Households use these services to differing degrees, depending on their situation. For example, childless households will not make great use of education services, in contrast to families with numerous children. Similarly, the consumption of healthcare services depends on the frequency with which members of a household fall ill.

SNA 2008 includes these individual services, along with other transfers, in an alternative household income account titled *redistribution of income in kind account*. In this account, they are recorded in the resources column under the title *social transfers in kind*.

Social transfers in kind include the expenditure by general government and NPISHs on the provision of the various individual services mentioned above (healthcare, education, etc.), but also the reimbursement of purchases of goods and services, such as medical consultations and medicines, as well as housing allowances. The balancing item **net adjusted disposable income** is equal to disposable income, as usually measured, plus the social transfers in kind.

Table 6.11. **Italy: Redistribution of income in kind for households (S14)**

Billion euros, 2012

Uses		Resources	
		<b>B6N. Net disposable income</b>	980.4
<b>B7N. Net adjusted disposable income</b>	1 173.3	D63. Social transfers in kind	192.8

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

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Given the existence of this alternative method of measuring disposable income, it was only logical that a new account be created illustrating the use of this new measure of income. This new account is called the *use of adjusted disposable income account*.

Table 6.12. **Italy: Use of adjusted disposable income account for households (S14)**

Billion euros, 2012

Uses		Resources	
P41. Actual individual consumption	1 139.9	<b>B7N. Net adjusted disposable income</b>	1 173.3
D8. Adjustment for the change in pension entitlements	0.6	D8. Adjustment for the change in pension entitlements	3.4
<b>B8N. Net saving</b>	36.2		

Source: I.stat Statistics (2013): National Accounts: Annual sector accounts, [http://dati.istat.it/Index.aspx?DataSetCode=DCCN\\_SEQCONTIASA&Lang=](http://dati.istat.it/Index.aspx?DataSetCode=DCCN_SEQCONTIASA&Lang=).

StatLink  <http://dx.doi.org/10.1787/888933143974>

The first item in the uses column is *actual individual consumption*. Note that there is now no mention of “expenditure”. Actual individual consumption measures the value of the goods and services actually consumed by households, including the goods and services financed by general government or NPISHs. This additional value is equal to the part of consumption of general government and NPISHs that can be considered “individual” as described in previous chapters.

It is important to note that the balancing item of this alternative account, **net saving**, remains strictly identical to the balancing item in the traditional presentation of the household accounts. This is because *adjusted disposable income* and *actual final consumption* have both been increased by the same amount (the value of social transfers in kind) so that the difference between the two, i.e., **saving**, remains unchanged. As mentioned in Chapter 3, the concepts of *adjusted disposable income* and *actual individual consumption* are mainly of interest in international comparisons.

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## Key points

- A household is a group of people who collectively take responsibility for feeding and housing themselves. A household can consist of a single person or two or more people living under the same roof, these people generally being linked by family ties.
- The principal function of the household sector is consumption, but it also has a productive function.
- The output of the household sector includes that of unincorporated enterprises and households producing housing services for themselves (homeowner-occupiers).
- “Gross disposable income” and “net disposable income” (GDI and NDI) are the most important balances for analysing the situation of households, measuring the sum available for consumption and saving.
- Changes in the purchasing power of gross disposable income are the main factor determining the change in the volume of goods and services consumed by households.
- Saving is equal to disposable income minus consumption expenditure; or, alternatively, adjusted disposable income minus actual individual consumption. Financial saving is the same thing as the net lending of households.
- The gross saving ratio is equal to gross saving divided by GDI (plus item D8). The net saving rate is equal to net saving divided by net disposable income (plus item D8).
- Social transfers in kind are equal to the “individual” consumption of general government and the NPISHs.

## Going further

### The breakdown of gross mixed income

Economists rely on national accounts to measure changes in the share of value added between wages and profits and, also, to measure changes in productivity over time and among countries (see introduction to Chapter 4). Economists find it hard to make their analyses unless they are able to distinguish in the national accounts between the returns to these two factors of production both for unincorporated enterprises as well as for corporations. This is why they usually try to break mixed income down into its two components: the implicit salary of the owner(s) and the return to capital.

There are two ways of doing this for unincorporated enterprises. The first consists of estimating the compensation of employees and of family helpers in the case of unincorporated enterprises. The return to capital is then the difference between the mixed income and this figure. The second method consists of estimating the return to capital and assuming that the rest of mixed income is the return to labour. The first method is generally based on the number of independent workers as reported in surveys of family employees or in the population census, on the assumption that they receive the same average compensation as dependent workers employed in similar activities. The second method takes as its starting point an estimate of the stock of fixed capital used by unincorporated enterprises, sometimes adjusting this stock downward to allow for the fact that this capital can also be used for private purposes. The observed average rates of return for similar assets in corporate enterprises are then applied to the assets of unincorporated enterprises to get the return to capital.

While in theory these two methods are equally valid, in practice it is the first that is mainly used, probably because the data needed are easier to obtain. These two methods can obviously be used simultaneously, but in this case the total obtained is often larger – sometimes considerably larger – than the mixed income recorded in the accounts. One possible explanation is that the owners of unincorporated enterprises earn a “psychological income” in the form of satisfaction at being their own masters and so accept lower remuneration for their labour and capital investment than would be true of a corporation.

## Actual and imputed social contributions

“Compensation of employees” is defined in the national accounts in a way that shows explicitly the full cost of labour as a factor of production. For example, whereas in the real world social contributions are paid directly by the employers to the social funds and are never seen by the employees, the national accounts treat them as part of wages paid to households. As a result, the “compensation of employees” item includes all contributions, including imputed contributions (see below), and therefore reflects the total cost of labour. So that things should come out right in the end, the “secondary distribution of income account” contains another fictitious flow, this time from households to the social funds. What we then have is the following fictitious circuit for social contributions: Employer → Households → Social insurance funds. It is essential to keep this circuit in mind when interpreting the household account.

In most countries, employees and employers are obliged to make regular contributions to a social security plan that usually reimburses employees for medical costs, pays out unemployment benefits and provides retirement pensions. However, certain employers pay social security benefits directly to their employees without going through a social security fund. In this situation, national accountants consider that these employees and employers pay an “imputed” social contribution. They estimate the sum the workers would have had to pay to receive the social benefits paid to them, and these imputed contributions are included in “compensation of employees”. Thus, the full cost of labour can be recorded in the accounts. The benefits they receive are recorded in the resources column of the “secondary distribution of income account” alongside the other social benefits. Because it is difficult to estimate the hypothetical contributions that these workers would have had to pay to receive benefits, national accountants often start from the principle that the imputed social contributions are equivalent to the benefits actually received. However, more and more national accounts estimate the social contributions regarding unfunded or underfunded defined benefit pension schemes based on actuarial calculations of the cost of future pensions and not on effective contributions, thus incorporating an additional element of imputation.

## Pension funds and social security plans

One difficult issue, especially for international comparisons, is the recording of pension contributions and pension benefits of employees. One can distinguish two main types of pension systems: those functioning as “savings plans” (also called “by capitalisation”) and those functioning as “transfer plans” (also called “by repartition” or “pay-as-you-go”). If the pension plan is a saving plan (often called a “pension fund”), each employee contributes

to a fund from which his or her future pension benefit will be paid. Thus, the national accounts record all the contributions to the plan (both those of employers and of employees) as a form of saving (i.e. an increase in the pension asset of employees) and pension benefits as “dis-saving” (i.e. a decrease of the pension asset of retirees).

By contrast, a pension plan is a transfer plan (rather than a saving plan) when the pension contributions of current employees are used to pay the pension benefits of current retirees. In this case (which is typical of social security pension systems), the national accounts deduct pension contributions from income (and thus they are also deducted from saving), and pension benefits are considered part of income (and thus included in saving). Thus, there is a significant difference in impact on income between these two methods of financing the retirement of employees. To harmonise the measure of income, the SNA 2008 recommends recording also (in parallel) the pension contributions and benefits of saving plans (i.e. pension funds) as if they were transfer plans (i.e. social security). However, this creates a dissymmetry in the accounts, which has to be corrected by item “D8 adjustment for the change in pension entitlements” in the “use of disposable income account.” It is interesting to note, however, that the United States, Canada and Australia – three major countries with pension funds – do not record this item because they do not use the parallel accounting that generates it.

Because of the dramatic financing problem caused by the forthcoming retirement of the “baby-boom” generation (those born between 1945 and 1960), significant reforms of pension systems are under way in many countries. These reforms are in two directions: first, reduce the pension promises and/or raise contributions; second, transform “defined benefits plans” in “defined contribution plans”. This last sentence needs some explanation.

- A **defined benefit** plan is a pension plan for which the pension benefit is calculated in terms of a percentage of salary. In this type of plan, it is the sponsor of the plan, often the employer, who bears the financial risk of the pension benefit. Defined benefit plans are often “pay as you go” and thus unfunded. Typically, the social security retirement systems of continental European countries are unfunded defined-benefit plans.
- On contrary, **defined contribution** plans are saving plans: the pension benefit is the result of the accumulated contributions of the employee and the employer on behalf the employee. Thus, the employer does not bear the financial risk of the pension promise. Defined contribution plans are, by definition, funded, meaning that they hold a reserve of non-financial or financial assets that results from the investment of the accumulated contributions. It is from this reserve that the pension benefits are paid.



The SNA 2008 remains flexible about how to record unfunded pension plans, resulting in differences between OECD countries. Some countries, in line with business accounting recommendations, record all unfunded employer-defined benefit plans as if they are saving plans, including government plans for their employees. This requires the calculation of a pension liability for these plans (and thus a pension asset for the employees) using what is called actuarial methods. Actuarial methods for pension accounting consist in estimating the pension liability of defined benefit plans based on employee demographics and calculating from that the employer's expected outflows for pension payments. These outflows are transformed into a current liability and discounted using a discount rate. Some countries (essentially continental Europe) will continue to record unfunded pension plans as "pay-as-you-go" schemes. As a result, there is no full comparability for pension flows and stocks data between OECD countries. SNA 2008 urges OECD countries to produce an additional table where all pension flows and stocks are presented in a comparable way. It is premature to conclude today that this very useful table will be available for all OECD countries. EU countries have the obligation under the compulsory transmission program of ESA 2010 to produce this table for 2017. Hopefully, if other OECD countries achieve the same, it will be finally possible to have full comparability for pension flows and stocks.

### **Insurance**

A distinction is made between two types of insurance: non-life (often described as accident insurance) and life insurance. With non-life insurance, the policyholder is compensated for theft, road accidents, fire, natural catastrophes, bodily injury, income loss, etc. Non-life insurance also covers a type of "life" insurance that would be more appropriately called "death" insurance. This is an insurance policy in which the insurance company agrees to pay the beneficiaries named by the insured person a predetermined sum in the event of his/her death (before a predetermined age in the case of "term" life insurance and at any date in the case of "whole life insurance"). Term life insurance is simply a wager between the policyholder and the insurance company. If the policyholder dies before the pre-agreed age, he "wins" in the sense that the insurance company will be obligated to pay a certain capital to the beneficiaries. On the other hand, if the policyholder is still alive at the predetermined age, it is the insurance company that "wins" since it will not have to pay out the premiums paid in by the policyholder during the duration of the policy. This insurance functions in a similar manner to non-life insurance and is quite different from life insurance as described below.

In the case of non-life insurance, national accountants divide the premium paid by the policyholder into two parts: the remuneration for the

service provided, and the net premium, i.e., the remainder. The remuneration for the service corresponds to the estimated payment by the policyholder to the insurance company for the management of the funds collected in the form of premiums, the processing of claims, advisory services, publicity and other current expenditures. By assumption, the amount of the remuneration for the service is equal to the difference between the premiums received and the claims paid out plus what is known as the “premium supplement”. This supplement corresponds to the property income received by the insurance company from investing the premiums in financial and other assets. National accountants regard this income as belonging to the policyholders. They therefore show it as “received” by the policyholders (in the resources column of the distribution of primary income account) before being “paid back” to the insurance company when they remunerate it for its services. Remuneration for the service is part of household final consumption expenditure. The net premiums (premiums minus remuneration for the service) are treated as a transfer between the policyholders paying the premiums and the policyholders eligible for receipt of claims. The net premiums are recorded in the “other current transfers” item in the uses column of the secondary distribution of income account, while the repaid claims are recorded in the “other current transfers” item in the resources column of the same account.

Life insurance works very differently from non-life insurance. A life insurance policy, or contract, is one of many ways in which a person can build up capital that will be repaid at a pre-agreed date, increased by the interest earned on invested premiums. A life insurance policy usually involves the regular payment of premiums or contributions. Life insurance defined here is thus a saving plan as defined in the previous box and is thus similar to any other financial investment (a savings account, share purchases, stuffing gold coins in the mattress, for example).

The contributions and the withdrawals made when the policy/contract matures are financial transactions and recorded in the financial accounts (see Chapter 8). Life insurance nevertheless requires two non-financial transactions that must be recorded in the non-financial accounts. First, as in the case of non-life insurance, the policyholder has to pay the insurance company for the service rendered in managing the funds collected. Most of the time, insurance companies record this remuneration for service separately, and it is therefore unnecessary to make estimates of the amount concerned. It is included in household final consumption expenditure as remuneration for services. Second, even though the insurance companies retain the interest received from investing the insurance premiums, and even though policyholders have no access to this interest before the policy matures, this interest, legally speaking, is the “property” of the policyholders. For this reason, it is recorded in the “property income” item in the resources column of

the primary distribution of income account. This manner of proceeding has a legal justification but also an economic one. When a life insurance policy/contract offers a higher yield than usual, the policyholder feels richer and increases his consumption (the so-called “wealth effect”), even though the money will not be received before the pre-determined date. If the yield offered is lower than usual, he or she will be inclined to reduce consumption.

## Income in national accounts and in economic theory

The national accounts define income as the flow of net resources arising directly, or through redistribution, from normal productive activities and potentially available for consumption. On the other hand, some economists define income as the maximum sum that can be consumed in a given period without reducing a household’s real net worth (net worth is the difference between assets and liabilities; real net worth is this difference deflated by the price index for final consumption). It is therefore important to have a clear understanding of the differences that exist between the two definitions:

- Capital gains and losses, known as “holding gains/losses” in the national accounts, are related to changes in the prices either of fixed assets (notably housing) or of financial assets (notably shares). Households in OECD countries have on several occasions in the recent past benefited from rises, or suffered from falls, in the prices of these two types of assets. One remembers in particular the stock market bubble toward the end of the 1990s, and the steep drop in stock prices starting in 2000. More recently, the consequences of the burst of the housing price bubble in 2007-09, in the United States, and later in Ireland and Spain, have been catastrophic, leading to an unprecedented great recession since World War II. When the price changes are positive, the holding gains enable households to consume far more than their disposable income without eating into their net worth. Conversely, negative holding gains (i.e., losses) prompt households to consume distinctly less than their disposable income to compensate for the decline in their net worth. These amounts may therefore be included in the economists’ definition of income, but they are not included in the national accounts definition of income.
- A second difference is that theoretical income (the economists’ definition) includes capital transfers. But in the national accounts, only current transfers are included in the calculation of disposable income.
- Lastly, a household’s net worth can be affected by events totally unrelated to the economic activities that constitute the principal subject of the national accounts. Floods, forest fires, gales and earthquakes reduce net worth by destroying buildings or other types of property. Conversely, net worth takes on increased value when, for example, a farmer finds oil on his

land. The changes in asset values following events of this type are recorded under “other changes” in the volume of assets account, but they are not considered income in the national accounts.

However, by combining several different accounts, the national accounts system allows for the calculation of household net worth based on the theoretical concept of income, rather than disposable income.

## Exercises for Chapter 6

### Exercise 1. True or False?

- a) When share prices rise:
  - i) household disposable income increases;
  - ii) household saving declines.
- b) When a tenant buys the apartment he/she had previously been renting, GDP increases because it now includes an imputed rental income of homeowner-occupiers.
- c) When, in a given year, the number of road accidents is higher than usual, household *disposable income* also tends to be higher than usual.
- d) A rise in the rate of income tax automatically leads to a decline in household disposable income.
- e) A farmer whose olive plantation is destroyed in a storm automatically suffers a decline in his disposable income.
- f) A cut in the rate of inheritance tax automatically leads to a decline in household saving.
- g) A cut in the rate of reimbursement of dental care leads to:
  - i) a rise in GDP;
  - ii) a decline in household disposable income.

### Exercise 2. Test your knowledge of the household account

Enter the transactions described below in the sequence of accounts starting with the *production account* and going through to the *utilisation of disposable income account*.

The Devant household consists of Jacques, his wife Monique, their daughter Nicole, Monique's mother Simone, and Jacques' brother Xavier. During the year:

- Jacques receives a salary of 2 000 for his job as store manager. His employer pays 20 in social contributions. Jacques pays 25 in income tax and 15 in social contributions. He spends 100 on meals and transport and 280 to buy a new car. He finances this purchase with a loan and pays 5 in interest

during the year as a whole. He hands over the rest of his salary to Monique, who is responsible for the household's accounts.

- Monique is unemployed throughout the year, receiving 350 in unemployment benefit. She spends 1 900 on food, 120 on rent and 15 on household insurance. (Even though Monique is unaware of this, 5 out of this 15 corresponds to remuneration for the service provided by the insurance company).
- Simone receives 45 from a pension fund to which her late husband was affiliated, as well as 265 in the form of a social security pension. She spends 130 on clothes and gives Nicole 25 in pocket money.
- Nicole spends all the pocket money received from her grandmother on sweets. She also receives 30 in pocket money from her parents but saves this in order to buy a bicycle.
- Xavier has no fixed employment, but carries out undeclared painting jobs for neighbours. This brings him 1 500 during the year, but he spends 400 of this on paint and brushes. He occasionally calls on a friend to help him and pays him 40. Once when on a worksite, he parked in an unauthorised space and his van was clamped, costing him 20 to have the clamp removed. He spends 450 on cigarettes, beer and football match tickets. He pays 60 in alimony to his ex-wife.

#### Production account

Uses	Resources
Intermediate consumption	Gross output
Value added	

#### Primary distribution of income account

Uses	Resources
Compensation of employees	Value added
Wages and salaries	
Employers' social contributions	
Net taxes on production	
Mixed income/operating surplus	

#### Allocation of primary income account

Uses	Resources
Property income	Mixed income/operating surplus
Interest	Compensation of employees
Rents	Wages and salaries
	Employers' social contributions
	Property income
	Interest and dividends
	Rents
Balance of primary incomes	

**Allocation of primary income account**

Uses	Resources
Property income	Mixed income/operating surplus
Interest	Compensation of employees
Rents	Wages and salaries
	Employers' social contributions
	Property income
	Interest and dividends
	Rents
Balance of primary incomes	

**Secondary distribution of income account**

Uses	Resources
Current taxes on income and wealth, etc.	<b>Balance of primary incomes</b>
Social contributions	Social benefits other than social transfers in kind
Employers' social contributions	Social security benefits in cash
Employees' social contributions	Social assistance benefits in cash
Social contributions by self-employed persons	
Other current transfers	Other current transfers
Net non-life insurance premiums	Non-life insurance claims
Miscellaneous current transfers	Miscellaneous current transfers
<b>Disposable income</b>	

**Use of disposable income account**

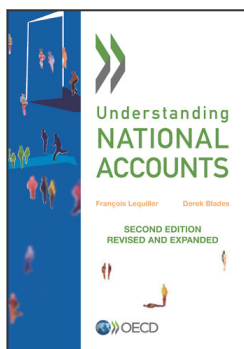
Uses	Resources
Household final consumption expenditure	<b>Disposable income</b>
	Adjustment for the change in pension entitlements
<b>Saving</b>	

**The solutions to these exercises are available at:**

<http://dx.doi.org/10.1787/9789264214637-24-en>







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