

Box 2. Institutional units and institutional sectors

The basic economic unit in the national accounts is known as the **institutional unit**. It is defined as “an elementary economic decision-making centre characterised by uniformity of behaviour and decision-making autonomy in the exercise of its principal function”. A household is an institutional unit in the sense that it is within the household that decisions are made regarding the modalities of its principal function, *i.e.*, consumption. For a “legal person” (*i.e.* a corporate body and not a “physical person”) to be an institutional unit it must, among other things, have a complete set of accounts. If the unit in question does not have complete accounts, it is considered as forming part of the larger unit that contains it. For example, the French statistical office (INSEE) is not an institutional unit, because it is a directorate of the Finance Ministry, which is itself part of general government. General government has complete accounts but INSEE does not.

The **institutional sectors** are groupings of institutional units. They are six in number: households (S14); non-financial corporations (S11); financial corporations (S12); general government (S13); non-profit institutions serving households (S15); and the rest of the world (S2). The rest of the world is not really an institutional sector since it comprises only that part of the accounts of non-resident units that relates to transactions with resident units. The notion of residence was explained in Chapter 4. The definition of most of the institutional sectors was set out in Chapters 5, 6, 7 and 9, except for financial corporations.

The **financial corporations** are the institutional units specialising in financial intermediation (banks) and in insurance. The financial corporation sector (S12) comprises the central bank, the commercial banks, specialised financial corporations, mutual funds (also called UCITS in Europe – undertakings for collective investment in transferable securities), financial auxiliaries, which comprise certain portfolio management companies, insurance companies and pension funds.

Let us take, among the 60 or so rows in the integrated economic account (IEA) for Denmark, the row for “interest” (D41). In the IEA, this is a single row, with the left side showing the amounts as uses, and the right side showing the amounts as resources. But for space reasons, in Table 7 we show the resources below the uses (even though in the actual table they are side by side).

Here is how to read the table: The first sub-table shows the “uses”, *i.e.* the interest *paid* by the institutional sectors. The first group in the column is entitled “National economy” and labelled S1. This is the institutional sector, consisting of the four *resident* institutional sectors, as opposed to the “Rest of the world”, consisting of *non-residents*. The four resident sectors are the non-financial corporations, the financial corporations, general government, households and non-profit institutions serving households. The figure of 334.3 billion kroner for interest is therefore the total amount of interest paid by each of the domestic sectors, *i.e.*: 45.2 + 157.9 + 48.0 + 83.1, these figures all appearing in the same row. ► VII. Following this,

VII. The equality between S1 and the sum of the resident sectors is a consequence of the national accounts not being “consolidated” (see section “Going further”).

Table 7. Extract from the integrated economic account for Denmark: row “D41 interest”

Billions of Danish kroner, 2003

		Uses						
		S1 National economy	S11 Non-financial corporations	S12 Financial corporations	S13 General government	S14-S15 Households and NPISHs	S2 Rest of the world	Total
D41.	Interest	334.3	45.2	157.9	48.0	83.1	31.4	365.6
		Resources						
Total	S2 Rest of the world	S14 Households and NPISHs	S13 General government	S12 Financial corporations	S11 Non-financial corporations	S1 National economy		
365.6	47.6	22.5	18.9	237.1	39.6	318.1	D41	Interest

Source: OECD (2006), *National Accounts of OECD Countries: Volume II, Detailed Tables*, 1993-2004, 2006 Edition, OECD, Paris.

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the next column indicates the interest paid to Denmark by the rest of the world, amounting to 31.4 billion kroner. In all, 365.6 billion of interest is paid by the various sectors.

The second sub-table (“resources”) shows the interest *received*, broken down by institutional sectors. Obviously the total interest received, 365.6 billion, is equal to the total interest paid, in conformity with the principle of consistency of the national accounts. Going along the row, one finds the sums received by each institutional sector.

This table is interesting because it makes it possible to visualise how the interest flows are broken down among agents. It nevertheless has two limitations. The first is that it is not consolidated (see section “Going a step further”), so it is important not to misinterpret the figures. The large sum of interest paid by the financial corporations does not signify that this interest is paid to other institutional sectors – far from it. Most of the interest paid by financial corporations is to other financial corporations, as a result of the complexity of modern financial systems.

The second limitation, linked to the first, is that these tables fail to show what national accountants call the “who-to-whom” element. For example, the table does not show “to whom” the financial corporations pay the 157.9 billion. Most probably, as has just been said, it is paid largely to other financial corporations, but also to households and non-financial corporations. However, these amounts are not known. Only a “who-to-whom” matrix could answer this question. The statistical offices have this type of information for certain transactions but do not generally publish them.

receipts will be felt in the first quarter of the following year, given the time lag between the payment of VAT by agents and the receipt of these monies by government. However, it would be analytically incorrect to record the rise in VAT only in the following year, whereas some consumption at the new rate has already taken place in the current year. In accountants' jargon, it is said that the VAT receipts have to be "time-adjusted" in order to attach them to the period when the flow was generated (at the time when, for example, a household purchases a product).

In practice, things are not so simple. On the one hand, the national accountants use company accounts, for which accrual accounting is primordial. One might therefore think that the principle is respected. However, this is not totally the case, since in many countries one of the largest macroeconomic agents, *i.e.* government, does not systematically apply this rule. Quite rightly, the national accountants consider that for certain transactions (*e.g.* taxes) government statistics are better than those derived from aggregating the company accounts. The national accounts, which are bound to be internally consistent, therefore replace the accrual-basis tax data supplied by firms with the government statistics, which are better in terms of coverage but worse with respect to the accrual basis. An adjustment is therefore necessary and is made by shifting the timing of the VAT receipts of the government in order to bring them more into line with the timing of the generation of the tax.

Another practical difficulty needs to be pointed out, namely the difficulty experienced by the national accountants in applying this principle without taking into account "provisions". A firm always has to deal with bad payers. While it will therefore record all its claims on its purchasers, it will also, by precaution, set aside a "provision" to cover non-payment and this will be recorded in its income statement. But the national accounts do not allow for the recording of these provisions, which, by definition constitute a view taken by one agent of other agents, entailing a lack of symmetry. The national accounts, for the purpose of internal consistency, record only what is symmetrical. This is a contradiction that needs to be resolved.

What does "consolidation" mean?

There are two ways of aggregating institutional units' accounts. The first is simply to add them together, as do most national accounts systems. The second is to add them together but to eliminate the transactions between individual institutional units involved in the aggregation. This method is known as "consolidation". When consolidation has been carried out, there remain only the transactions between the aggregate grouping created and the units located outside this grouping. For example, in the extract from the integrated economic account concerning interest discussed in the main text (see Table 7), if the total for the national economy (S1) had been calculated by consolidation, the figure would have been much smaller than DKK 334.3 billion, because most of the interest is paid by resident units to other resident units, and so takes place within S1.

It is fairly easy to find a consolidated figure for S1. This is because if one eliminates transactions between resident sectors all that is left, in principle, are the transactions with non-resident sectors, and there is only one such sector, *i.e.* the rest of the world (S2). The “consolidated S1” figures therefore correspond to the counterpart of the figure for S2, and so the consolidated interest paid by “S1 National Economy” is necessarily equal to the interest received by “S2 Rest of the World”, *i.e.* DKK 47.6 billion. **Note that two sectors are already consolidated. These are the rest of the world and households.** The rest of the world by definition because the national accounts for a country take no interest in transactions that are internal to other countries or to transactions between other countries; households by statistical necessity because their accounts are obtained by difference since virtually no direct information is available regarding households. Because they are obtained by difference, household accounts are consolidated out of necessity. **However, as it is very difficult to consolidate aggregate business accounts, they are most often not consolidated in the national accounts.**

Note also that the items obtained as balancing items in the accounts (value added, operating surplus, saving, net lending/net borrowing) are generally invariant, whether there is consolidation or not. This is because they result from the difference between resources and uses. If the resources consist of transactions internal to the sector, the uses must necessarily include them also.

Notes

1. This value is in fact negative in the case of France and so it would be more correct to say that it is subtracted. It is negative because spending by foreign tourists in France is greater than spending by French tourists abroad. This situation is also described by saying that the tourism balance is positive.
2. Ahmad, Nadim and Wyckoff, Andrew (2003): Carbon Dioxide Emissions Embodied in International Trade of Goods, *OECD Science, Technology and Industry Working Papers*, No. 2003/15, OECD, Paris.