

# **Quarterly Non-financial Accounts by Institutional Sector (QSA) in Belgium**

## **Sources and Methods**

Second edition

May 2010

## TABLE OF CONTENTS

<b>1. General description</b> .....	<b>4</b>
1.1. Organisational aspects .....	4
1.2. Sources .....	5
1.3. Methods .....	7
1.3.1. General description: availability / unavailability of pre-existing quarterly data .....	7
1.3.2. Consistency with other submissions of the transmission program .....	8
1.3.2.1. Consistency with main aggregates of sector S1 (Table 1 of the transmission program) .....	8
1.3.2.2. Consistency with government data (Table 25 of the transmission program) .....	9
1.3.3. Use of econometric modelling .....	9
1.3.4. Description of procedures .....	10
1.3.5. Integration financial and non-financial accounts .....	11
1.4. Release and revision policy .....	11
1.4.1. Release policy .....	11
1.4.2. Revision policy .....	12
1.4.2.1. Major revisions (consistency with updated annual data) .....	12
1.4.2.2. Revisions of data for the latest quarters .....	12
1.4.2.3. Methodological revisions .....	12
1.5. Remarks .....	12
1.5.1. Consolidation rules .....	12
1.5.2. FISIM allocation .....	13
1.6. Future plans .....	13
<b>2. Description by transaction</b> .....	<b>14</b>
2.1. General remarks .....	14
2.2. Overall picture .....	14
2.3. Detailed review of transactions .....	14
2.3.1. Output (P.1) and intermediate consumption (P.2) .....	14
2.3.2. Value added, gross (B1.g) .....	14
2.3.3. Final consumption expenditure (P.3) .....	16
2.3.4. Actual final consumption (P.4) .....	17
2.3.5. Gross capital formation (P.5) .....	17
2.3.5.1. Gross fixed capital formation (P.51) .....	17
2.3.5.2. Changes in inventories and acquisitions less disposals of valuables (P.5N) .....	18
2.3.6. Exports (P.6) and imports (P.7) of goods and services .....	19
2.3.7. Compensation of employees (D.1) .....	20
2.3.8. Taxes on production and imports (D.2) .....	21
2.3.8.1. Taxes on products (D.21) .....	21
2.3.8.2. Other taxes on production (D.29) .....	22
2.3.9. Subsidies (D.3) .....	23
2.3.9.1. Subsidies on products (D.31) .....	24
2.3.9.2. Other subsidies on production (D.39) .....	24
2.3.10. Interest (D.41) .....	26
2.3.11. Property income other than interest (D.4N) .....	28
2.3.11.1. Dividends (D.421) .....	28
2.3.11.2. Withdrawals from the income of quasi-corporations (D.422) .....	32
2.3.11.3. Reinvested earnings on direct foreign investment (D.43) .....	32
2.3.11.4. Property income attributed to insurance policy holders (D.44) .....	35
2.3.11.5. Rents (D.45) .....	36
2.3.12. Current taxes on income, wealth, etc. (D.5) .....	37
2.3.13. Social contributions (D.61) .....	38
2.3.13.1. Actual social contributions (D.611) .....	38
2.3.13.2. Imputed social contributions (D.612) .....	39
2.3.14. Social benefits other than social transfers in kind (D.62) .....	40

2.3.15. Social transfers in kind (D.63) .....	42
2.3.16. Other current transfers (D.7) .....	43
2.3.16.1. Net non-life insurance premiums (D.71).....	43
2.3.16.2. Non-life insurance claims (D.72).....	44
2.3.16.3. Other current transfers, n.e.c. (D.7N).....	45
2.3.17. Adjustment for the change in net equity of households in pension funds reserves (D.8).....	47
2.3.18. Capital transfers (D.9).....	48
2.3.18.1. Capital taxes (D.91).....	48
2.3.18.2. Investments grants and other capital transfers (D.9N).....	49
2.3.19. Consumption of fixed capital (K.1).....	50
2.3.20. Acquisitions less disposals of non-financial non-produced assets (K.2) .....	50

## BOXES

Relative importance of pre-existing data and appropriate estimates of missing data for non-financial corporations, financial corporations and households.....	6
Additional explanation for the estimation of quarterly profile of dividends paid by resident enterprises.....	29

## TABLES

Table 1 - Residual sector selected to balance QSA.....	11
Table 2 - Breakdown of value added by industry between institutional.....	15
Table 3 - Breakdown of the quarterly domestic wage bill between institutional sectors.....	21
Table 4 - Quarterly profile of dividends paid by Belgian corporations.....	29
Table 5 - Quarterly profile of dividends paid by the rest of the world according to national accounts.....	30
Table 6 - Quarterly profile of dividends received by the rest of the world according to national accounts.....	31
Table 7 - Method used to estimate annual dividends.....	31

## ANNEXES

Methodology by transaction - Overall picture.....	52
---	----

## 1. GENERAL DESCRIPTION

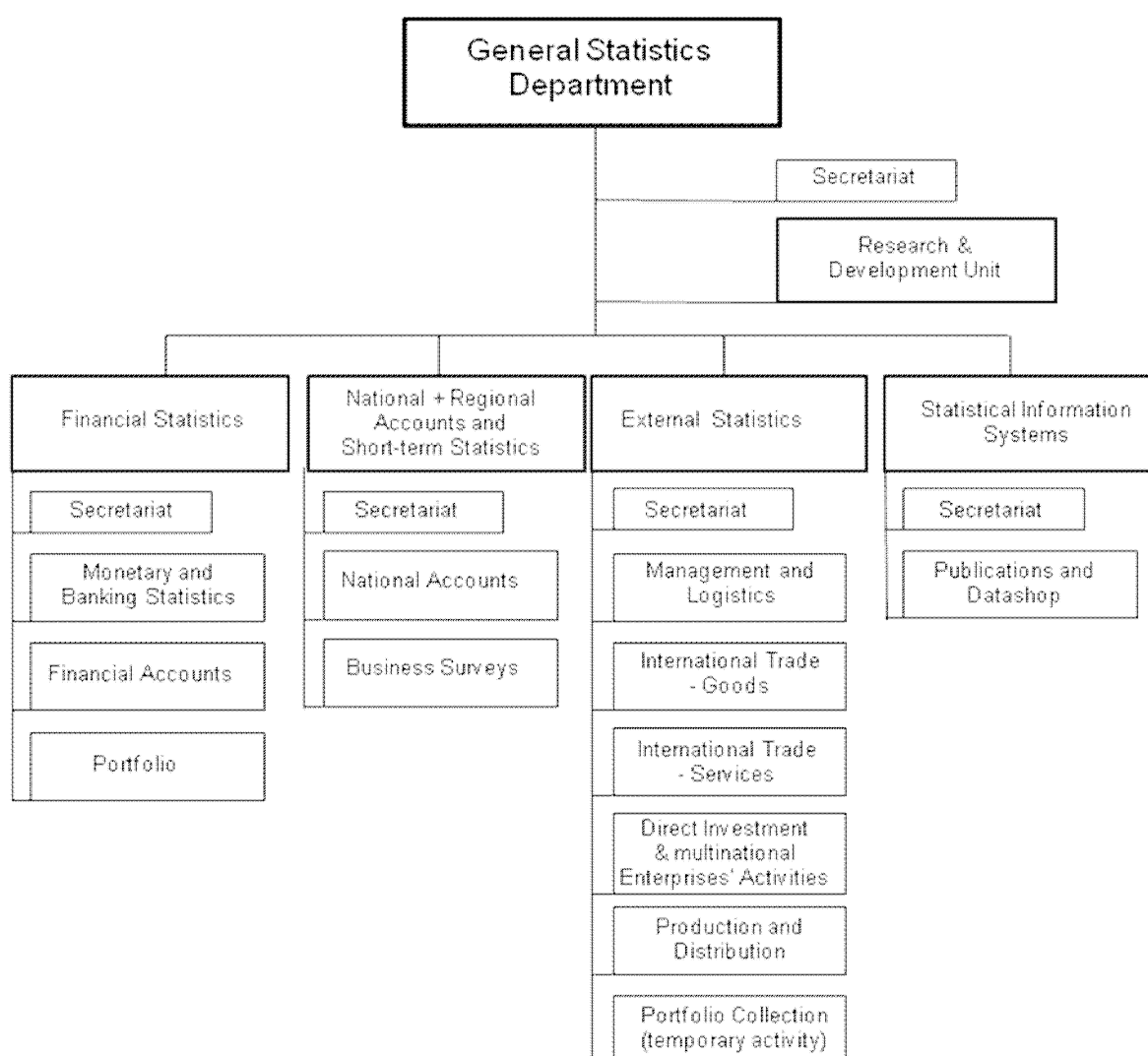
### 1.1. ORGANISATIONAL ASPECTS

Quarterly non-financial sector accounts (QSA) are established within the "National / regional accounts and business surveys" division of the National Bank of Belgium's General Statistics Department, on behalf of the National Accounts Institute (NAI).

Annual and quarterly sector accounts are compiled within the same division of the NBB, as well as the most important inputs such as main aggregates and government accounts.

Financial accounts are established within the "Financial statistics" division of the General Statistics Department.

An organization chart of the General Statistics Department is provided below.



## 1.2. SOURCES

Two main pre-existing quarterly data sets serve as input when establishing QSA:

- The quarterly main aggregates for the whole economy (S1) which are published each quarter by the NAI, with a delay of 70 days after the closing date of the quarter. These data also include aggregates that are useful to build up the quarterly accounts for the rest of the world (S2).
- The quarterly accounts for general government (S13) which are compiled independently of the accounts for other sectors, with a delay of 3 months after the closing date of the quarter<sup>1</sup>.

These two pre-existing data sets incorporate the following short-term information:

- industrial production indices (first version available at t+40 days);
- VAT data (first confidential version available at t+50 days);
- social security data (first version available at t+4 months);
- balance of payments data (first version available at t+45 days);
- indicators related to general government taxes and expenditure :
  - o tax revenue (available at t+85 days)
  - o non-fiscal and non-parafiscal revenue: specific information is available for certain headings (inter-municipal body dividends, non-recurrent exceptional payments, etc);
  - o interest payments on the federal authority's public debt (available at t+60 days);
  - o other expenditure by the federal authority, communities and regions: trend for total expenditure is available at t+45 days, together with certain non-recurrent exceptional expenditure;
  - o social contributions paid to the National Social Security Office (NSSO) (available at t+85 days);
  - o social benefits of social security funds (available at t+45 days).

Pre-existing data are not sufficient to compile complete QSA. To estimate quarterly missing direct information, different methods have been adopted depending on the availability of additional sources of information or indicators (cf. 1.3 below). In some cases, specific methods have been developed which take into account additional information stemming from the balance sheets of non-financial companies, the reporting schemes of financial corporations, the balance of payments and the National Social Security Office. In some other cases (when no indicator is available), a simple linear trend is defined.

To guarantee the overall consistency of sector accounts, some transactions are also calculated as residual items to balance the system throughout the institutional sectors and on the basis of the identity that, for the total of institutional sectors, the resources must equal the uses.

As most of the pre-existing quarterly data are already available for the total economy (S1), the general government (S13) and the rest of the world (S2), the estimate of the remaining transactions based on additional information and specific methods mainly concerns the accounts for non-financial corporations (S.11), financial corporations (S.12) and households<sup>2</sup> (S.1M). Defining linear trends or calculating items as balancing transactions occur for a set of transactions which are not amongst the most critical one, as illustrated in Box 1.

Thanks to the approach used, an efficient production of robust QSA in a short time can be ensured. This also allows to meet the requirements set out in Article 5/2 of the European Parliament and Council Regulation 1161/2005 which imposes QSA to be consistent with the quarterly non-financial accounts for the general government and the quarterly main aggregates of the total economy. As

<sup>1</sup> The government's quarterly accounts are published by the National Accounts Institute since April 2007.

<sup>2</sup> As stated in the European Parliament and Council Regulation 1161/2005, quarterly sector accounts are built up for households (S.14) together with NPISH's (S.15). In the present document, the grouping of both institutional sectors is mentioned with the codification S.1M.

stated in the same regulation (Article 5/3), QSA are also always completely aligned with the corresponding annual data transmitted under the data transmission programme of the ESA Regulation.

---

**Box - Relative importance of pre-existing data and appropriate estimates of missing data for non-financial corporations, financial corporations and households**

QSA are build up by incorporating pre-existing data which have to be filled in with appropriate estimates when items (transactions) are missing.

The relative importance of pre-existing data is illustrated below for non-financial and financial corporations separately and for households. The tables resume, for the account of each of these institutional sectors, the number of transactions<sup>3</sup> and the total and average amount of these transactions which come directly from pre-existing data i.e. quarterly main aggregates for the whole economy or counterpart of quarterly accounts for general government. If the transactions for which a specific estimate method using ad hoc information has been developed are consolidated with the pre-existing data sets, it appears that the backdata represent the substance of the accounts as they count for some 75 to 88% of the total amount of transactions, depending on the institutional sector<sup>4</sup>. The transactions that are taken from backdata generally concern the main items as their average amount is quite large. On the other side, the average amount of transactions which are estimated with a trend or as residual item is more limited. These transactions count for some 22% to 25% of the total amount of all the relevant transactions for households and financial corporations. They only represent some 12% of the relevant flows in the case of non-financial corporations.

**Components of the quarterly non-financial corporations account (S.11)**

	Pre-existing data and specific estimates	Other (trends and residual items)
Number of relevant variables	13	20
Cumulative amount (millions euro)	95,212	12,590
% of total	88.3%	11.7%
Average amount per relevant variable (millions euro)	7,324	630

**Components of the quarterly financial corporations account (S.12)**

	Pre-existing data and specific estimates	Other (trends and residual items)
Number of relevant variables	13	22
Cumulative amount (millions euro)	27,810	7,929
% of total	77.8%	22.2%
Average amount per relevant variable (millions euro)	2,139	360

---

<sup>3</sup> When methods have been defined for sub-transactions, higher-level transactions have not been considered as relevant transactions in the present assessment exercise. The relevant transactions appear on the resources or on the uses side of the account.

<sup>4</sup> Calculations have been drawn for the four quarters of 2005 (as established for the January 2007 transmission) and averaged.

**Components of the quarterly households account (S.1M)**

	Pre-existing data and specific estimates	Other (trends and residual items)
Number of relevant variables	16	20
Cumulative amount (millions euro)	112,772	38,034
% of total	74.8%	25.2%
Average amount per relevant variable (millions euro)	7,048	1,902

### 1.3. METHODS

#### 1.3.1. General description: availability / unavailability of pre-existing quarterly data

Three sets of transactions can be drawn according to their quarterly availability.

(A) For the following transactions, quarterly data are available by institutional sector:

- final consumption expenditure (P.31 and P.32)
- exports and imports of goods and services (P.6 and P.7)
- taxes and subsidies on products (D.21 and D.31)
- current taxes on income, wealth, etc (D.5)
- social contributions relating to the State social security system (part of D.61)
- social benefits other than transfers in kind and relating to the State social security system (part of D.62)
- social transfers in kind (D.63)
- current international cooperation (D.74)
- capital taxes (D.91)
- complete sequence of government account.

(B) The following transactions are available on a quarterly basis for the total economy (S.1) but have to be broken down amongst the institutional sectors:

- value added (B.1.g) (availability by industry branches)
- gross capital formation (P.5)
- compensation of employees (D.1)
- other taxes on production (D.29)
- other subsidies on production (D.39)
- consumption of fixed capital (K.1)
- acquisitions less disposals of non-financial non-produced assets (K.2)

For the first three items of this second group, a specific method to break down quarterly data by institutional sector has been developed: the breakdown by institutional sectors of quarterly value added and quarterly gross fixed capital formation is estimated with reference to the available corresponding annual key that is applied to quarterly data; the breakdown of quarterly compensation is estimated on the basis of a specific indicator coming from the National Social Security Office.

For the other transactions, a simple smoothing method of annual figures (Chow and Lin method with a linear temporal series as indicator) is used together with balancing procedures that preserve consistency with the whole economy quarterly constraint.

(C) For the following transactions, no pre-existing quarterly information is known:

- interest income (D.41)
- distributed income from corporations (D.42)
- reinvested earnings on direct foreign investment (D.43)
- rent (D.45)
- items related to insurance transaction (D.44, part of D.61 and D.62, D.71, D.72, D.8)
- miscellaneous current transfers (D.75)
- capital transfers other than capital taxes (D.92+D.99)

A specific method to build up quarterly data has been developed for the first three transactions of this group (D.41, D.42, D.43) by collecting information coming from the balance sheets of non-financial companies, the reporting schemes of financial corporations and the balance of payments data.

In the other cases, a simple smoothing method of annual figures is used (Chow and Lin method with a linear temporal series as indicator) with due regard for accounting constraints.

### 1.3.2. Consistency with other submissions of the transmission program

#### 1.3.2.1. Consistency with main aggregates of sector S1 (Table 1 of the transmission program)

Some main aggregates transmitted to Eurostat in Table 1 (70 days after the end of the quarter) are integrated into QSA for the whole period of transmission and represent so many constraints to establish QSA. This concerns the following transactions:

- final consumption expenditure of households and NPISH's (P.3\_S.1M);
- exports of goods and services (P.6\_S.1);
- imports of goods and services (P.7\_S.1);
- consumption of fixed capital (K.1\_S.1);
- compensation of employees (D.1\_S.1);
- acquisitions less disposals of non-financial non-produced assets (K.2\_S.1);
- current transfers receivable from the rest of the world (D.5 to D.7use\_S.2);
- current transfers payable to the rest of the world (D.5 to D.7res\_S.2);
- capital transfers receivable from the rest of the world (D.9use\_S.2);
- capital transfers payable to the rest of the world (D.9res\_S.2).

For other items, discrepancies between data transmitted in Table 1 and QSA might occur. This relates to the establishment of priorities in the available sources of data when QSA are compiled: general government data transmitted in Table 25 (cf. 1.3.2.2 below), 3 months after the end of the quarter, always have priority over the data transmitted in Table 1. This applies, for instance, for the following items:

- final consumption expenditure by the general government (P.3\_S.13);
- gross fixed capital formation by the general government (P.51\_S.13);
- taxes less subsidies on products (D.21-D.31).

In these cases, as QSA incorporate the information included in Table 25 (which is transmitted some 20 days after Table 1 and incorporates updates for government transactions), discrepancies between Table 1 and QSA occur generally for the latest quarters<sup>5</sup>.

<sup>5</sup> Government data for former quarters are indeed generally stable and have not been revised, when compiling QSA, since the latest transmission of Table 1. More extended discrepancies (for the whole period of transmission) could however occur in the case of revised annual (hence quarterly) general government data that are not yet incorporated in the main aggregates. In this specific case, priority is also given in QSA to the newly released government data.



Transactions relating to property income with the rest of the world can also differ because they are updated for the latest quarters when establishing QSA. This element, together with updated data relating to taxes and subsidies with the rest of the world (using general government data) implies that "primary incomes receivable from the rest of the world" and "primary incomes payable to the rest of the world" can also differ between Table 1 and QSA.

As QSA refer to the most recent information for consumption and investments of the general government, the differences with figures transmitted in Table 1 are compensated by adjusting the amount of changes in inventories for the total economy (P.52\_S1) which therefore differ from the one transmitted in Table 1. This adjustment helps to keep consistency with quarterly estimates on the production side of the economy and to preserve quarterly GDP transmitted in Table 1. However, quarterly GDP can finally differ from the one transmitted in Table 1 because of possible discrepancies in taxes less subsidies (using general government data when compiling QSA<sup>6</sup>). To avoid any confusion with official data included in Table 1, which are also officially released by the NAI, quarterly GDP and its components as it emerges from the version of QSA transmitted 90 days after the end of the quarter has to be considered as non publishable and confidential.

#### 1.3.2.2. Consistency with government data (Table 25 of the transmission program)

As mentioned above, QSA are fully consistent with the quarterly non-financial accounts for general government as transmitted to Eurostat in Table 25. These are integrated as such without any correction. This implies that QSA can only be built up when government data are finalized. Those data always have priority over data transmitted in Table 1 and hence can interfere with them (cf. 1.3.2.1 above).

#### 1.3.3. Use of econometric modelling

Given the large availability of quarterly information and the chosen approach, there is no need for an econometric modelling in the Belgian QSA. In the cases of missing quarterly data i.e. when there is no pre-existing quarterly data, when no specific methodology has been developed, when a transaction can not be estimated as a residual item to balance the system and when there is no appropriate indicator, quarterly data are estimated by smoothing out the corresponding annual figure over the four quarters of the year, by applying a linear trend<sup>7</sup>. The smoothing out of annual data is obtained by using the Chow and Lin method with a linear temporal series as indicator. The choice of a smooth distribution is not only justified by the unavailability of adequate quarterly indicators but also by the limited annual amounts involved or by the fact that the transaction concerned by the smoothing method can reasonably be considered as quite stable from quarter to quarter.

If the smoothing method generates quarterly negative values, manual adjustments are introduced, generally by dragging, within a same year, the negative value to the previous or next quarter that displays a positive value. When annual accounts are not yet available, quarterly data for the transactions concerned by the smoothing method are built up by extending the linear trend.

---

<sup>6</sup> Differences in the value added of the general government are counterbalanced with an equivalent adjustment (with the opposite sign) in the value added of non-financial companies. This helps to limit the divergence between the GDP released in the main aggregates and the one which is considered in the QSA.

<sup>7</sup> The annual amounts are not divided by 4 in order to avoid an artificial break between the fourth quarter and the first quarter of the subsequent year.

### 1.3.4. Description of procedures

Procedures are systematically applied to guarantee that:

- The sum of the data for the four quarters of a year is equal to the annual data :

$$\boxed{\sum Q_i = Y}$$

This is de facto the case when using pre-existing quarterly data which are consistent with annual data. In the cases where new released annual data have not been converted yet in new official quarterly data that must be incorporated within the QSA as an external input, a procedure for the specific purpose of QSA is proceed to generate new quarterly series that are aligned with the new annual data<sup>8</sup>. This procedure generates a new quarterly time series aligned on the new annual one by using the "old" quarterly time series as an indicator.

The smoothing method mentioned above (cf. 1.3.3 above) also guarantees that the sum of quarters equals the annual data.

The only exception to the identity  $\sum Q_i = Y$  is due to consolidation rules in the accounts for general government accounts. These rules, in accordance with European recommendations, are at the time being different in QSA and in the annual national accounts (cf. 1.5.1 below).

- Accounting constraints are met.
  - (a) for each transaction, quarterly data for the whole economy are equal to the sum of quarterly data for the different domestic institutional sectors:

$$\boxed{S.1 = S.11 + S.12 + S.13 + S.1M} \quad \text{and}$$

- (b) for each distributive transaction, total resources equal total uses:

$$\boxed{\text{TOT}_{\text{res}}(S.1 + S.2) = \text{TOT}_{\text{use}}(S.1 + S.2)}$$

Whether the total is calculated on the resources side or on the uses side of an account depends for each transaction on the information available on each side. The total is calculated on one side, as the sum of the data for the domestic sectors and the rest of the world. It is then used as a constraint on the other side of the account and an institutional sector is chosen to be the residual sector which balances the system. The "residual sector" is either S.11 or S.1M, depending on the transaction<sup>9</sup>. As it allows balancing the system, the "residual sector" can be considered as absorbing the discrepancies.

No residual sector is defined for transactions whose quarterly pattern is built up using a specific method (D.41, D.42, D.43, D.75, D.92+D.99).

<sup>8</sup> In this case, QSA incorporate a set of provisional quarterly data that will be updated once the new official quarterly data are available. Up to 2009, this situation occurred when producing QSA at the end of September : new annual national accounts were then just released but new quarterly official data for a number of critical main aggregates (value added, components of demand, compensation of employees) were not yet available. From 2010 onwards, new annual figures for the main aggregates are released in July and the set of corresponding new quarterly time series some weeks later. They can be incorporated in the QSA produced at the end of September.

<sup>9</sup> This depends on the "expert judgment". The greater the relative size of one sector for a specific transaction is, the better it is to be chosen as a residual item. It can then absorb the changes in the data imputed to the others sectors without being too much affected (in relative terms) and with a limited risk to become negative.

**Table 1 - Residual sector selected to balance QSA**

Transaction	Total constraint (S1+S2) calculated on :	Residual sector
P.52+P.53 (=P.5N)	----	S.11
D.1	uses side	S.1M_res
D.29	resources side	S.11_use
D.39	uses side	S.11_res
D.44	uses side	S.1M_res
D.45	uses side	S.1M_res
D.61	resources side	S.1M_use
D.62	uses side	S.1M_res
D.63	uses side	S.1M_res
D.71	resources side	S.1M_use
D.72	uses side	S.1M_res
D.8	uses side	S.1M_res
K.1	----	S.11
K.2	----	S.11

ESA95 balancing items in the sequence of accounts are calculated on the basis of the upstream transactions except value added (B.2, B.5, B.6, B.8 and B.9). Value added (B.1) for the total economy is calculated as the sum of the value added of the domestic sectors.

### 1.3.5. Integration financial and non-financial accounts

The general rule is that statistical discrepancies between net lending/ borrowing according to financial accounts on the one hand and according to non-financial accounts on the other hand are not hidden (except for S.2; cf. below). The inconsistencies are the most important for households (S.1M) and non-financial corporations (S.11), even if the methodological changes introduced in both sets of accounts since 2005 have helped to reduce them.

Specific rules are defined in financial accounts for two (sub-)sectors :

- S.2: the net lending/borrowing in the financial accounts is by construction set equal to the one that is determined in the non-financial accounts and the adjustment is imputed in other accounts receivable/payable. By construction, there is no statistical discrepancy for the rest of the world.
- S.121 and S.122 (part of S.12): the balance for these two sectors is still nil by construction in the financial accounts<sup>10</sup>, contrary to non-financial accounts in which the net lending/borrowing is not imposed.

## 1.4. RELEASE AND REVISION POLICY

### 1.4.1. Release policy

Since April 2007 the quarterly accounts for general government (S.13) are officially released<sup>11</sup>. The release of the accounts for general government take place at t+120 days on the online database

<sup>10</sup> For the time being, B9 for S121 and S122 is always assumed to be 0 in the financial accounts data (not in non-financial accounts). This assumption results from an analytical approach traditionally used in the Belgian financial accounts, which tries to isolate the function of intermediation of financial institutions. To respect this assumption, the difference between the registered assets and liabilities is recorded in the item "Other accounts receivable" (AF.7). Such an approach, which does not comply with the ESA95 methodology, should be removed in the future when an analysis will have been conducted on the topic, as it has been done for the OFI and ICPF sectors.

<sup>11</sup> The accounts for general government are published according to 'Short-Term Public Finance Statistics' (STPFS) synoptic tables (receipts, expenses and balance with some details), not according to the full QSA sequence of accounts.

'Belgostat on line', together with the paper-publication "Comptes nationaux-Comptes trimestriels" "Nationale rekeningen-Kwartale rekeningen".

Moreover, a quarterly publication of key indicators relating to QSA is foreseen from October 2010 onwards. The key indicators selected should be the same than the one selected by Eurostat when releasing the European sector accounts.

Both national releases (government accounts and key indicators) should be merged.

## **1.4.2. Revision policy**

### **1.4.2.1. Major revisions (consistency with updated annual data)**

When new annual national accounts are released, QSA are updated to be consistent with them. In this case, QSA can be revised for several years backwards. This occurs when producing QSA at the end of September : QSA are then updated to be aligned on the new set of ASA also released in September (including new government accounts) and to incorporate the new national accounts (main aggregates) which were released earlier in July.

QSA are always consistent with revised quarterly data for the general government. Any updating of these data for general government is incorporated into QSA, even if this updating involves not being consistent any longer with other transmission programs (notably Table 1).

### **1.4.2.2. Revisions of data for the latest quarters**

When annual national accounts are not yet available, quarterly data can be revised when a new quarter is estimated. The revision of QSA mainly depends on the revisions brought to pre-existing data for the latest quarters.

### **1.4.2.3. Methodological revisions**

Methodological improvements can be brought to QSA, up to now on the occasion of any transmission during the year. Such revisions are implemented for the whole period of transmission (backwards to 1999Q1). Methodological revisions to QSA never go against other data transmission programs.

When QSA will be published, a more restrictive revision policy will be applied.

## **1.5. REMARKS**

### **1.5.1. Consolidation rules**

- In accordance with European recommendations, data for interest flows, current transfers and capital transfers within general government are consolidated in QSA, as well as in the ASA transmitted to Eurostat<sup>12</sup>.

This consolidation rule prevails for the following transactions:

- D.41 on the resources side and on the uses side of the accounts for general government (S.13) and for the whole domestic economy (S.1);
- D.7<sup>13</sup> on the resources side and on the uses side of the accounts for general government (S.13) and for the whole domestic economy (S.1);

---

<sup>12</sup> On the contrary, the ASA released in the national publications are not consolidated.

- D.92+D.99 on the resources side and on the uses side of the accounts for general government (S.13) and for the whole domestic economy (S.1).

This has no impact on the balancing items in the sequence of accounts.

- Households (S.14) and NPISH's (S.15) are not distinguished in QSA and constitute a single sector S.1M. Miscellaneous current transfers (D.75) between S.14 and S.15 are nevertheless not consolidated in QSA and are, for the same quarterly amount, registered on the resources side and on the uses side of the account S.1M<sup>14</sup>.

### 1.5.2. FISIM allocation

As for annual sector accounts, FISIM are in QSA allocated amongst the different sectors.

## 1.6. FUTURE PLANS

The efficient production of robust QSA in a very short time is ensured thanks to the approach chosen which is easy to work out. This general principle should not be departed from at the risk of compromising timeliness.

Smoothing procedures should be, as far as possible, avoided even if these only apply in Belgium for transactions which are limited in size and hence do not have a substantial effect on quarterly accounts. Explanatory works, run in 2006, suggested that it would be difficult to find relevant quarterly indicators for insurance transactions and private social security schemes. As these are still estimated with smoothing out the annual data, the Belgian NAI will continue to pay due attention to the developments that could occur in these fields to find out appropriate quarterly indicators.

---

<sup>13</sup> Transaction D.73 is not part of QSA.

<sup>14</sup> Thanks to this "non-consolidation", the identity  $\sum Q_i = Y$  (cf. 1.3.4) is met for transaction D.75 at the level of the total economy (on the uses and on the resources side). Consolidating D.75 within the sector S14/15 would have broken this identity. This treatment could be modified if Eurostat would recommend to apply consolidation rules.

## 2. DESCRIPTION BY TRANSACTION

### 2.1. GENERAL REMARKS

The establishment of quarterly accounts for the general government (S.13) is described in the quarterly publication of the National Accounts Institute "Comptes nationaux-Comptes trimestriels" "Nationale rekeningen-Kwartale rekeningen", edition 2006-IV, released on 25 April 2007. This publication contains an annex in English entitled "Technical description of Belgian practice, Year 2002" which is an updated version of the *"Manual on quarterly non-financial accounts for general government"*<sup>15</sup>. Cross-references are made in the present document to the article published in April 2007 by the NAI; the reader is invited to refer to it for an extended view of the techniques used to compile the general government accounts.

The building up of the quarterly main aggregates is described in the specific Manual *"Quarterly national accounts of Belgium - Methodological inventory: Description of sources and methods used - December 2007"*. The document is available on the NBB web-side ([http://www.nbb.be/doc/DQ/E\\_method/M\\_InvCN\\_E.pdf](http://www.nbb.be/doc/DQ/E_method/M_InvCN_E.pdf))<sup>16</sup>. The present description does not dwell on methodologies which are detailed in the Manual on quarterly main aggregates. Cross-references to this document are mentioned in the following text.

### 2.2. OVERALL PICTURE

An overall picture for each transaction is provided in Annex 1 and Annex 2.

### 2.3. DETAILED REVIEW OF TRANSACTIONS

---

#### 2.3.1. Output (P.1) and intermediate consumption (P.2)

---

These two optional items are not compiled by institutional sector so far on a quarterly basis and are not transmitted to Eurostat. This is due to the lack in Belgium of quarterly Supply-Use tables that could enable P.2 to be calculated using technical coefficients. At the time being, short-term indicators (VAT data, industrial production indices etc.) are used to estimate value added.

If P.1 and P.2 had to be included in QSA, a specific methodology to split the annual data into quarterly data would have to be drawn up.

---

#### 2.3.2. Value added, gross (B1.g)

---

##### Sources

On the basis of short term information such as VAT data and industrial production indices, quarterly gross value added is estimated by industry for more than 30 branches (the detailed methodology to estimate quarterly value added by industry is described in the specific Manual mentioned under 2.1 above). This data set is translated into a sector breakdown using appropriate keys.

---

<sup>15</sup> Manual published in 2006 by Eurostat: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-BE-06-001/EN/KS-BE-06-001-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-BE-06-001/EN/KS-BE-06-001-EN.PDF)

<sup>16</sup> Manual published in 2008 by Eurostat : [http://epp.eurostat.ec.europa.eu/portal/page/portal/national\\_accounts/documents/quarterly\\_accounts/20080528\\_QNA\\_I\\_NVENTORY\\_FOR\\_EUROSTAT\\_%28VMARCH\\_2008%29.pdf](http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/documents/quarterly_accounts/20080528_QNA_I_NVENTORY_FOR_EUROSTAT_%28VMARCH_2008%29.pdf)

## Methods

### Total economy (S.1) and domestic sub sectors (S.11, S.12, S.13, S.1M)

The keys that allow distributing the quarterly value added amongst the institutional sectors are established using, for each industry, the *annual* breakdown of the value added between the institutional sectors. This means that quarterly value added is allocated among the sectors S.11, S.12, S.13 and S.1M according to the allocation of the corresponding amount registered on an annual basis.

$$VA_i^S = \sum_b VA_{b,i}^S$$

$$\text{with } VA_{b,i}^S = \frac{VA_b^S}{VA_b} \times VA_{b,i}$$

where S : institutional sector  
 b : activity branch  
 i : quarter

The following keys were used, for each quarter of 2005, to distribute the quarterly value added by industry amongst the institutional sectors:

**Table 2 - Breakdown of value added by industry between institutional sectors (annual keys for 2005)**

	S.11	S.12	S.13	S.14(*)	S.15(*)
Agriculture and fishing	24.3%			75.7%	
Mining and quarrying	99.5%			0.5%	
Food products, beverages and tobacco	93.7%			6.3%	
Textile and leather	98.8%			1.2%	
Wood furniture	95.2%			4.8%	
Wood	97.0%			3.0%	
Paper	99.9%			0.1%	
Publishing and printing	96.3%		1.6%	2.1%	
Coke, refined petroleum products and nuclear fuel	100%				
Chemicals	100%				
Rubber and plastic products	99.8%			0.2%	
Other non-metallic mineral products	99.3%			0.7%	
Basic metals and fabricated metal products	99.9%			0.1%	
Machinery and equipment	97.8%			2.2%	
Electrical and optical equipment	99.3%			0.7%	
Transport equipment	99.9%			0.1%	
Recycling	95.7%			4.3%	
Manufacturing n.e.c.	89.1%			10.9%	
Electricity and gas	100%				
Water supply	100%				
Construction	83.2%			16.8%	
Wholesale and retail trade	92.2%		...	7.8%	
Hotels and restaurants	70.6%			29.4%	
Transport and communication	80.6%		18.1%	1.3%	
Financial intermediation		97.7%		2.3%	
Insurance		95.9%		4.1%	
Dwelling services				100%	
Business service activities	82.4%			17.3%	0.2%

	S.11	S.12	S.13	S.14(*)	S.15(*)
Public administration and education	0.7%		98.7%		0.6%
Personal service activities	74.2%		1.4%	16.9%	7.5%

(\*) The sectors S.14 and S.15 are merged in QSA but the calculation of quarterly value added is first made separately.

When annual data for value added by institutional sector are not yet available, the keys calculated according to the last available year are kept unchanged<sup>17</sup>. This can lead, for sector S13, to an estimate of the value added which is different from the figure available in the government data (part of Table 2501 of the transmission program). As these data have priority and, in order to avoid disturbing the GDP (production side), the difference in the valuation of B.1g-S13 is counterbalanced by an equivalent correction (with the opposite sign) in the valuation of the value added for non-financial corporations (B.1g-S11).

#### *Rest of the world*

Not relevant.

### **2.3.3. Final consumption expenditure (P.3)**

#### Sources

Quarterly pre-existing data are used (main aggregates and general government accounts). A review of the detailed methods to establish these data can be found in the above mentioned documents (cf. 2.1 above).

#### Methods

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3months, just before the establishment of QSA (part of Table 2501 of the transmission program).

General government accounts include P.3 breakdown between P.31 and P.32 (individual and collective consumption expenditure).

*Households and NPISH's (S.1M)*

Data are directly taken from the quarterly main aggregates data set released 70 days after the end of the quarter (part of Table 0104 of the transmission program).

*Total economy (S.1)*

Sum of domestic sectors. As the data used for general government (cf. supra) are updated compared to the one used to compile the main aggregates, final consumption expenditure for the total economy is not necessarily in line for the latest quarters with the one appearing in the last released main aggregates<sup>18</sup>.

<sup>17</sup> This means that the same distribution keys are applied for a maximum of 9 successive quarters: when annual accounts are published at the end of September of year Y, the keys calculated for the last published year Y-1 are used to split up the value added for the four quarters of Y-1, the four quarters of Y and the first quarter of Y+1. When QSA for the second quarter of Y+1 will be released, newly released annual keys relating to year Y will be used.

<sup>18</sup> If required, a counterpart adjustment is brought to changes in inventories (part of P.5N); cf. 2.3.5.2.



---

### 2.3.4. Actual final consumption (P.4)

---

#### Sources

Quarterly pre-existing data are used (main aggregates and general government accounts). A review of the detailed methods to establish these data can be found in the above mentioned documents (cf. 2.1 above).

#### Methods

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3months, just before the establishment of QSA (part of Table 2501 of the transmission program).

*Households and NPISH's (S.1M)*

Data are indirectly available, on the basis of the following identity for each quarter i:  
 $P.4\_S.1M_i = P.3\_S14/15_i + P31\_S.13_i$  (cf. 2.3.3 above).

*Total economy (S.1)*

Sum of domestic sectors.

---

### 2.3.5. Gross capital formation (P.5)

---

Gross capital formation is defined as the sum of gross fixed capital formation (P.5) and the changes in inventories together with acquisitions less disposals of valuables (P.5N)

---

#### 2.3.5.1. Gross fixed capital formation (P.51)

---

#### Sources

Quarterly pre-existing data are used (main aggregates and general government accounts). A review of the detailed methods to establish these data can be found in the above mentioned documents (cf. 2.1 above).

The available quarterly data in the main aggregates are:

- housing investments;
- government investments ;
- 'private' investments (excl. housing).

Housing investments have to be totally imputed to households. QSA require breaking down 'private' investments (excl. housing) between non-financial corporations (S.11), financial corporations (S.12) and households incl. NPISH's (S.1M). Public investments are taken from general government accounts.

## Methods

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M), rest of the world (S.2)*

Quarterly 'private' investments (excl. housing) are broken down between non-financial corporations (S.11), financial corporations (S.12), households (S.14) and NPISH's (S.15) by considering the annual share of each of these sectors in the corresponding annual aggregate. Those data for the sector S14 refer to investments attributed to self-employed workers. They are added to housing investments - available in the main aggregates and which are totally attributed to households - to estimate the total investments for the sector S.14.

The splitting of quarterly private investment between institutional sectors is not proceeded in a detailed approach by industries as quarterly figures of investment by industries are not available.

The quarterly splitting of private investment between sectors is made using the following formula :

$$I_i^S = \frac{I^S}{I} \times I_i$$

with  $\frac{I^S}{I}$  referring to the annual share of the institutional sector S in the total annual private investment;

where I : private investment (excl. housing)

S : institutional sector (S11, S12, S14 or S15)

i : quarter

### *General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3months, just before the establishment of QSA (part of Table 2501 of the transmission program).

### *Total economy (S.1)*

Sum of domestic sectors. As the data used for general government (cf. supra) are updated compared to the one used to compile the main aggregates, gross fixed capital formation for the total economy is not necessary in line for the latest quarters with the one appearing in the last released main aggregates<sup>19</sup>.

---

## 2.3.5.2. Changes in inventories and acquisitions less disposals of valuables (P.5N)

---

### Sources

Quarterly pre-existing data, coming from the main aggregates, are used as starting point for the whole economy.

For the latest quarters, those data for the whole economy are adjusted to take into account differences between the figures coming from the quarterly main aggregates (Table 1) and those coming from the general government accounts (Table 25) for government final consumption (P.3\_S13), government investments (P.51\_S.13) and taxes less subsidies on products (D.21-

<sup>19</sup> If required, a counterpart adjustment is brought to changes in inventories (part of P.5N); cf. 2.3.5.2.

D31\_S.1). The objective of this adjustment is to get back, in QSA, to quarterly data for GDP which are consistent with the figures published in the main aggregates, except for updated taxes less subsidies on products. As a consequence, quarterly GDP data in QSA are closed to the one transmitted in Table 1 of the transmission program but its decomposition into the different categories of expenditure can be different for the latest quarters<sup>20</sup>.

Quarterly data for the whole economy have to be broken down amongst the institutional sectors S.11, S.12, S.13 and S.1M.

### Methods

#### *Non-financial corporations (S.11)*

This is the residual item for transaction P.5N.

For each quarter  $i$  :

$$P.5N\_S.11_i = P.5N\_S.1_i - P.5N\_S.12_i - P.5N\_S.13_i - P.5N\_S.1M_i$$

#### *Financial corporations (S.12)*

The small corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

As specified in 1.3.3., when annual accounts are not yet available, quarterly data for transactions estimated by a smoothing method are built up by extending the linear trend.

#### *General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at  $t+3$  months, just before the establishment of QSA (part of Table 2501 of the transmission program).

#### *Households and NPISH's (S.1M)*

The small corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

#### *Total economy (S.1)*

For each quarter  $i$  :

$$\begin{aligned} P.5N\_S.1_{iQSA} &= P.5N\_S.1_{iTable1} + [P.3\_S.13_{iTable1} - P.3\_S.13_{iTable25}] \\ &+ [P.51\_S.13_{iTable1} - P.51\_S.13_{iTable25}] \\ &+ [(D.21 - D.31)\_S.1_{iTable25} - (D.21 - D.31)\_S.1_{iTable1}] \end{aligned}$$

#### *Rest of the world*

Not relevant.

---

### **2.3.6. Exports (P.6) and imports (P.7) of goods and services**

---

Data are directly taken from the quarterly main aggregates (part of Table 0102 of the transmission program). A review of the detailed methods to establish these data can be found in the above mentioned document (cf. 2.1 above).

---

<sup>20</sup> In the case of revised annual (hence quarterly) general government data that are not incorporated yet in the main aggregates, more extended discrepancies (for the whole period of transmission) can occur. In this case, adjustments to changes in inventories should be brought for each quarter of the period of transmission.

---

### 2.3.7. Compensation of employees (D.1)

---

(A) Uses side

*Total economy (S.1) and domestic sub sectors (S.11, S.12, S.13, S.1M)*

#### Sources

Quarterly pre-existing data, coming from the main aggregates published 70 days after the end of the quarter, are used as starting point for the whole economy. Compensation of employees paid by the government is taken from the general government accounts set up just before the establishment of QSA. The difference between those two aggregates represents the wage bill of the private sector that has to be split up amongst the institutional sectors S.11, S.12 and S.1M.

#### Methods

Compensation of employees paid by the general government is estimated within the general government accounts. The difference between the total wage bill and those compensations has to be split up amongst the private institutional sectors. This breakdown is made by using an indicator built up on quarterly information coming from the NSSO. This information is available, in a first version, with a time lag of 4 months and, in a second version, with a time lag of 7 months<sup>21</sup>.

Depending on the quality and the exhaustiveness of the NSSO indicator, the annual total for each institutional sector arising from this method diverges more or less from the annual data that prevails in the ESA95 accounts. The quarterly results have to be adjusted in a second step to fit the annual released data.

For each 'private' institutional sector, the difference between the sum of the four quarters calculated according to the NSSO indicator and the annual released data is distributed according to the weight of the quarter within the year.

The very limited residual difference that could remain between the sum of the three sectors (S.11, S.12 and S.1M) and the total constraint for S.1-S.13 is attributed to wages paid by non-financial corporations (S.11).

When annual data by institutional sector are not yet available, quarterly estimates are built up by considering the evolution of the NSSO indicator compared to the corresponding quarter of the previous year and adjusting the result to fit the quarterly released data for the whole domestic economy.

For the very last quarter, for which no information coming from the NSSO is available, the indicator is prolonged on the basis of the development of the wage bill estimated for the whole economy and the respective developments by institutional sector observed in the recent past.

For the last quarter, an indicator is build using extrapolated growth rates: for S.11, we consider the growth estimated for the whole private sector (whole economy wage bill after deduction of government data), as past data for both indicators show a very similar pattern; for S12, S14 and S.15, an average of the indicator growth for the three previous quarters is used. By doing this, the structure of the wage bill by sector is not necessarily the same as the one prevailing one year ago.

---

<sup>21</sup> Quarterly data for the whole economy (S.1) published in the main aggregates are based on the same information coming from the NSSO.

**Table 3 - Breakdown of the quarterly domestic wage bill between institutional sectors**

(estimates for 2005)

	S.11	S.12	S.13	S.1M
Q1-2005	66.1%	6.0%	24.9%	3.1%
Q2-2005	67.6%	5.8%	23.3%	3.3%
Q3-2005	66.7%	5.1%	24.8%	3.4%
Q4-2005	68.9%	4.9%	22.9%	3.3%

*Rest of the world (S.2)*

The data come directly from the quarterly main aggregates. When annual data are available, the quarterly profile is defined by using, as indicator, information coming from the balance of payments. When annual data are not yet available, the year-on-year evolution of the indicator is considered.

## (B) Resources side

*Non-financial corporations (S.11), financial-corporations (S.12), general government (S.13)*

Not relevant.

*Households and NPISH's (S.1M)*

The wage bill for the whole domestic economy [cf. supra (A)] adjusted for compensation paid and received by the rest of the world totally benefit the sector of households and NPISH's.

For each quarter  $i$  :

$$D.1\_S1M_i = D.1\_S.1_i + \left( D.1\_S.2_i - D.1\_S.2_i \right)$$

<sub>res</sub>                      <sub>use</sub>                      <sub>use</sub>                      <sub>res</sub>

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

*Rest of the world (S.2)*

The data come directly from the quarterly main aggregates. When annual data are available, the quarterly profile is defined by using, as indicator, information coming from the balance of payments. When annual data are not yet available, the year-on-year evolution of the indicator is considered.

**2.3.8. Taxes on production and imports (D.2)**

Taxes on production and imports are defined as the sum of taxes on products (D.21) and other taxes on production (D.29)

**2.3.8.1. Taxes on products (D.21)**

## (A) Uses side

Quarterly taxes on products that are estimated on the resources side for the total economy (S.1) and the rest of the world (S.2) [cf. infra (B)] are entirely paid by the total economy (S.1) without distinction of institutional sectors, in accordance with ESA95.

For each quarter  $i$  :

$$D.21\_S1_i = D.21\_S.1_i + D.21\_S.2_i$$

<sub>use</sub>                      <sub>res</sub>                      <sub>res</sub>

(B) Resources side

### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

### Methods

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA.

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13). As the data used for general government (cf. supra) are updated compared to the one used to compile the main aggregates, taxes on products for the total economy are not necessary in line for the latest quarters with the one appearing in the last released main aggregates<sup>22</sup>.

*Rest of the world (S.2)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA. This data set reports taxes that are paid to EU institutions (mainly part of VAT, taxes from the common agricultural policy and customs duties).

## 2.3.8.2. Other taxes on production (D.29)

(A) Uses side

### Source

No information on the decomposition of other taxes on production paid by the different institutional sectors is available on a quarterly basis. Estimates must be made.

### Methods

*Non-financial corporations (S.11)*

This is the residual item for transaction D.29.

For each quarter i :

$$D.29_{\text{use}} \_ S.11_i = D.29_{\text{use}} \_ S.1_i - D.29_{\text{use}} \_ S.12_i - D.29_{\text{use}} \_ S.13_i - D.29_{\text{use}} \_ S.1M_i$$

*Financial corporations (S.12)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

<sup>22</sup> If required, a counterpart adjustment is brought to changes in inventories (part of P.5N); cf. 2.3.5.2.

*General government (S.13)*

Nil in Belgian accounts: this item is not registered separately in the annual accounts; it has a limited importance, and the relevant amounts are compiled under the item intermediate consumption (P.2).

*Households and NPISH's (S.1M)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend. The annual amounts for other taxes on production paid by households are quite large and mainly concern taxes on the ownership or use of buildings. The smoothing treatment to estimate quarterly data can be considered as appropriate according to the accrual recording concept, as those taxes refer to a production of housing services that are evenly spread over time.

*Total economy (S.1)*

Other taxes on production paid by the total economy are equal to the amount received by the general government and the rest on the world.

For each quarter  $i$  :

$$D.29_{\text{use}} S.1_i = D.29_{\text{res}} S.13_i + D.29_{\text{res}} S.2_i$$

*Rest of the world (S.2)*

Not relevant.

(B) Resources side

Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

Methods

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at  $t+3$  months, just before the establishment of QSA.

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13).

**2.3.9. Subsidies (D.3)**

Subsidies are defined as the sum of subsidies on products (D.31) and other subsidies on production (D.39).

---

### 2.3.9.1. Subsidies on products (D.31)

---

(A) Uses side

#### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

#### Methods

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA.

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13). As the data used for general government (cf. supra) are updated compared to the one used to compile the main aggregates, subsidies on products for the total economy are not necessarily in line for the latest quarters with the one appearing in the last released main aggregates<sup>23</sup>.

*Rest of the world (S.2)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA. These report subsidies that are received from EU institutions.

(B) Resources side

Quarterly subsidies on products that are estimated on the uses side for the total economy (S.1) and the rest of the world (S.2) [cf. supra (A)] are entirely received by the total economy (S.1) without distinction of institutional sectors, in accordance with ESA95.

For each quarter i :

$$D.31_{res} S1_i = D.31_{use} S.1_i + D.31_{use} S.2_i$$

---

### 2.3.9.2. Other subsidies on production (D.39)

---

(A) Uses side

#### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

---

<sup>23</sup> If required, a counterpart adjustment is brought to changes in inventories (part of P.5N); cf. 2.3.5.2.



Methods

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA.

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13).

(B) Resources side

Source

No information on the decomposition of other subsidies on production received by the different institutional sectors is available on a quarterly basis. Estimates must be made.

Methods

*Non-financial corporations (S.11)*

This is the residual item for transaction D.39.

For each quarter i :

$$D.39_{res} S.11_i = D.39_{res} S.1_i - D.39_{res} S.12_i - D.39_{res} S.13_i - D.39_{res} S.1M_i$$

*Financial corporations (S.12)*

The limited corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Actually, the transaction is nil in Belgian accounts.

*Households and NPISH's (S.1M)*

The limited corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*Total economy (S.1)*

Other subsidies on production received by the total economy are equal to the amount paid by the general government and the rest on the world.

For each quarter i :

$$D.39_{res} S.1_i = D.39_{use} S.13_i + D.39_{use} S.2_i$$

*Rest of the world (S.2)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA.

---

### 2.3.10. Interest (D.41)

---

Unless otherwise stated, quarterly interest flows are defined after FISIM allocation.

#### Sources

The only pre-existing quarterly information comes from the quarterly general government accounts: interest paid and received by the sector S.13 must be considered as constraints in QSA. For the other institutional sectors, as well as for the whole economy, quarterly estimates of interest flows have to be produced in respect of the identity according to which the sum of the quarters must equal the annual data.

For the years from 2003 onwards and for which annual accounts have already been published, this identity is met as the released annual data are based on the summation of quarterly estimates for interest received and paid by each institutional sector. The summation of quarterly unbalanced interest matrices results in an annual matrix. After balancing the annual balance, the quarterly totals are realigned to fit the annual ones. The initial quarterly totals are themselves estimated through the establishment of quarterly interest matrices built up with information about quarterly outstanding amounts of assets and liabilities and corresponding interest rates. When annual data are not available yet, a simplified procedure, based on the evolution of outstanding amounts and interest rates, is followed to estimate a balanced quarterly matrix. For the quarters of the years before 2003 for which quarterly matrices have not been built up because this work proved to be very time-consuming, a simplified ad hoc procedure, which relies on smoothing trends, is applied to get quarterly estimates of total interest received and paid by each institutional sector without information on the counterpart sector.

#### Methods

##### **Quarterly estimates before 2003**

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts (these data are "consolidated" i.e. they exclude interest flows within entities of the government).

*Households and NPISH's (S.1M)*

This is the residual item for transaction D.41, on the uses side.

For each quarter  $i$  :

$$D.41\_S.1M_i = D.41\_S.1_i - D.41\_S.11_i - D.41\_S.12_i - D.41\_S.13_i$$

use
use
use
use
use

*Total economy (S.1)*

The corresponding annual figure (excluding interest payments within entities of the general government sector) is smoothed out over the four quarters of the year, by applying a linear trend.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts (these data are "consolidated" i.e. they exclude interest flows within entities of the government).

*Households and NPISH's (S.1M)*

This is the residual item for transaction D.41 on the resources side.

For each quarter i :

$$D.41\_S.1M_i = D.41\_S.1_i - D.41\_S.11_i - D.41\_S.12_i - D.41\_S.13_i$$

res
res
res
res
res

*Total economy (S.1)*

Quarterly interests received by the total economy are defined accordingly to quarterly interests paid by the domestic sectors adjusted for net interest with the rest of the world.

For each quarter i :

$$D.41\_S.1_i = D.41\_S.1_i + \left( D.41\_S.2_i - D.41\_S.2_i \right)$$

res
use
use
res

**Quarterly estimates from 2003 onwards**Availability of annual accounts

As annual data relating to interest flows are built up on the basis of quarterly matrices combining the uses side and the resources side, these quarterly matrices are used for the purpose of QSA and are fully consistent with the corresponding annual figures.

Quarterly matrices are defined before FISIM allocation and take into account the following constraints:

- quarterly interest paid and received by the central bank, other monetary financial institutions and mutual funds. The quarterly available information, coming from accounting data and reporting schemes, does not include information about counterpart sectors (except for the interbank payments that are taken on board);
- quarterly interest paid and received by the general government without information about counterpart sectors;
- annual interest flows for insurance corporations and pension funds that are assessed mainly on the basis of information coming from the Banking, Finance and Insurance Commission without information about counterpart sectors.

Regarding the availability of data in the balance of payments, the only direct information, coming from an inquiry made for the purposes of the balance of payments, concerns interest flows arising from direct investments. This information is used as constraint when building the interest matrices. Those interest matrices are estimated within the "National & regional accounts" division to meet the wish to be consistent with financial accounts. The results of this complex estimate are integrated into the balance of payments as far as interest flows with the rest of the world are concerned. Thus, for interest flows, the balance of payments is aligned to fit the national accounts statistics.

The breakdown of quarterly interest flows by counterpart sector is estimated on the basis of the outstanding amounts of assets and liabilities and associated interest rates. The most detailed level of financial accounts classification is used so that the most appropriate return by instrument can be applied. Adjustments to fit the above mentioned constraints are made to the estimated matrix by combining a manual balancing procedure and, for small residual amounts, a RAS procedure<sup>24</sup>.

As the quarterly matrices relate to interest flows before FISIM allocation, corrections have to be made in order to reclassify part of the interest payments as payments for financial services. They

<sup>24</sup> In contrast to procedures applied for many transactions, no specific residual sector is defined to balance the system.

are estimated on the basis of quarterly detailed data about assets and liabilities coming from the financial accounts and associated interest rate margins<sup>25</sup>.

#### Unavailability of annual accounts

When annual national accounts are not yet available (for the latest quarters), estimates of interest flows (before FISIM allocation) are produced as follows :

A complete and balanced interest matrix is constructed, for which each cell is estimated by extrapolating the interest amount of the same cell of the last quarter in the balanced matrix of the last year based on annual data. The extrapolation factor is obtained as follows: a) for each cell the most important underlying interest generating outstanding amounts are selected; b) on each of this outstanding amounts a value indicator is applied, which is obtained by multiplying the evolution of the outstanding amount with the evolution of the corresponding interest rate (or the most useful proxy interest rate if the original is not available); c) the sum of the interest estimated for the most important outstanding amounts of the quarter to be estimated is divided by the corresponding sum of the last definitive quarter. In other words, the extrapolation factor for each cell of the interest matrix is a weighted average of the most important components of this cell.

For the estimation of FISIM an ad hoc procedure is followed. Pending the outcome of further methodological discussions (at the European level) on an appropriate method for FISIM, a definitive method will be developed.

---

### **2.3.11. Property income other than interest (D.4N)**

---

Property income other than interest are the summing up of the components : D.42, D.43, D.44 and D.45.

---

#### 2.3.11.1. Dividends (D.421)

---

##### Sources

When annual data are available, quarterly profiles of dividends are determined using information coming from the balance sheets of Belgian companies and from the balance of payments. For the latest quarters (when annual accounts are not yet available), an ad hoc methodology has been developed.

##### Methods

##### Availability of annual accounts

A quarterly allocation key is calculated for dividends paid and dividends received.

##### (A) Uses

##### *Non-financial corporations (S.11), financial corporations (S.12)*

The quarterly profile is determined on the basis of information coming from the balance sheets of companies, the balance of payments and ad hoc information relating to prepaid dividends. According to the collected information, the major part of dividends is paid by Belgian companies during the second quarter of the year.

---

<sup>25</sup> A detailed review of the methodology to allocate the FISIM has been released in the statistical publication "National accounts - Detailed accounts and Tables", 2004 edition (only available in French and Dutch).

**Table 4 - Quarterly profile of dividends paid by Belgian corporations**

	1999	2000	2001	2002	2003	2004	2005
<b>Non-financial corporations (S.11)</b>							
Q1	11%	11%	11%	10%	8%	8%	8%
Q2	66%	62%	68%	67%	72%	64%	64%
Q3	13%	15%	11%	12%	10%	15%	15%
Q4	11%	12%	11%	11%	10%	13%	13%
<b>Financial corporations (S.12)</b>							
Q1	7%	7%	8%	8%	8%	8%	9%
Q2	81%	79%	77%	79%	78%	63%	63%
Q3	6%	7%	7%	6%	7%	15%	15%
Q4	6%	7%	7%	7%	7%	14%	14%

Prepaid dividends are dividends not paid in the weeks following the annual general meeting of shareholders, but usually several months before the general meeting, following an internal decision of the enterprise.

---

**Box - Additional explanation for the estimation of quarterly profile of dividends paid by resident enterprises**

*Non-financial corporations (S11)*

The annual accounts contain information on the date of the annual general meeting of shareholders (AGM). As a rule, dividends are not paid out until several weeks after the AGM, but precise information on this is not available. On the basis of the date of the AGM, the quarterly pattern of dividends paid out (annual accounts code 694) was calculated separately for the full-format and abridged-format accounts [an enterprise is regarded as large under company law (full-format accounts) if: a) its average workforce on an annual basis exceeds 100, or b) it exceeds more than one of the following thresholds: b1) annual average workforce: 50, b2) annual turnover (excluding VAT): € 6,250,000 b3) balance sheet total: € 3,125.000. An enterprise with separate legal personality which does not fulfil these criteria comes under SMEs (small and medium-sized enterprises: abridged format)]. To take into account the case of enterprises whose general meeting takes place in the second half of June, and for which the dividends will usually only be paid in July, 50% of the dividends of enterprises with a general annual meeting in June are transferred to July. For the other months, such an adjustment appeared to have no significant influence on the end results, since the bulk of the dividends is paid out in the second quarter, and the other quarters exhibit a more or less similar pattern.

The dividend pattern for the abridged format accounts is more or less the same as that for the full format.

Dividends paid out in year t relate to activities in t-1. The allocation key is therefore lagged by 1 year.

*Central Bank (S121)*

Information is available on the annual account of the National Bank.

*Other monetary financial institutions (S122) + Financial auxiliaries (S124)*

Subsector S124 is heterogeneous and the dividends paid out for the period 1995-2003 average only 13% of dividends paid out by S122. The allocation key for S122 is therefore also applied to S124.

The quarterly allocation key for S122 is based on the date of filing the annual accounts of the financial institutions in question. Since no annual accounts are filed in June for the period 2000 to 2003, there is no need for any shift from the second to the third quarter, in contrast to S11. The allocation key appears to be constant.

*Other financial intermediaries, except insurance corporations and pension funds (S123)*  
*Insurance corporations and pension funds (S125)*

The calculations are performed in the same way as for S11.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

An agreement has been concluded between national accounts experts and balance of payments experts to use identical quarterly allocation keys for dividends paid by the rest of the world. The general profile that has been set, according to a combination of companies' balance sheets and balance of payments information, ensures a global consistency of dividend flows amongst all the institutional sectors (including plausible results for the residual sector S.1M on the resources side). These common keys apply from 2004 onwards.

The agreed general pattern for quarterly profiles has also been adopted in QSA for the years before 2004, so that continuous allocation keys are used.

**Table 5 - Quarterly profile of dividends paid by the rest of the world according to national accounts**

	1999	2000	2001	2002	2003	2004	2005
Q1	7%	9%	9%	7%	6%	9%	10%
Q2	70%	63%	64%	71%	75%	66%	64%
Q3	10%	13%	13%	10%	9%	12%	13%
Q4	12%	15%	14%	12%	10%	13%	13%

(B) Resources

*Total economy (S.1) and domestic sub sectors (S.11, S.12, S.13, S.1M)*

Quarterly dividends received by the total economy are defined accordingly to quarterly dividends paid by the domestic sectors adjusted for net dividend flows with the rest of the world.

For each quarter  $i$  :

$$D_{res} . 421\_ S.1_i = D_{use} . 421\_ S.1_i + \left( D_{use} . 421\_ S.2_i - D_{res} . 421\_ S.2_i \right)$$

Quarterly dividends received by the total economy are allocated to the domestic sectors as follows:

- dividends received by the government (S13) are directly taken from the quarterly general government accounts set up at  $t+3$  months, just before the establishment of QSA;
- black dividends are entirely imputed to the benefit of households (S14). Black dividends are the part of the black value added that is not paid out in the form of black wages to households. Since the value added out of which black dividends are paid is realised entirely by non-financial corporations, the quarterly pattern of dividends paid by S.11 is applied in order to determine the quarterly pattern of black dividends received by households.

- the residual amount  $\left( D_{res}^{421\_S.1}_i - D_{res}^{421\_S.13}_i - blackdiv\_S.14_i \right)$  is allocated pro rata among the sectors S.11, S.12 and S.1M according to the amounts received on an annual basis (the black dividends being eliminated from the allocation key).

#### *Rest of the world (S.2)*

As already mentioned for dividends paid by the rest of the world [cf. supra (A)], quarterly allocation keys are common to QSA and balance of payments from 2004 onwards. For the former period, quarterly dividends received by the rest of the world are calculated in QSA with the ultimate objective to keep net dividend flows with the rest of the world (arising from quarterly balance of payments data) unchanged. The quarterly profile of dividend received by the rest of the world in QSA is the following:

**Table 6 - Quarterly profile of dividends received by the rest of the world according to national accounts**

	1999	2000	2001	2002	2003	2004	2005
Q1	8%	8%	8%	8%	8%	8%	8%
Q2	61%	61%	61%	61%	61%	61%	61%
Q3	17%	17%	17%	17%	17%	17%	17%
Q4	14%	14%	14%	15%	15%	15%	15%

#### Unavailability of annual accounts

If the dividends calculated for the purpose of the annual national accounts are not yet available, an estimate is produced which is updated on the basis of the latest information at the time of each quarterly calculation.

#### (A) Uses

##### *Non-financial corporations (S.11)*

The method used relies on the fact that dividends paid in year Y by resident corporations depend on the profit generated in Y-1. The link that can be established between those two aggregates has been analysed on the basis of the following regression<sup>26</sup> :  $D_{Y+1}^{421} = a + b \times B_{2g_Y}$  . This regression has been examined on an annual basis (published data from 1995 onwards) for six industry groups<sup>27</sup>. When it proved not to be significant, a moving average of the ratio D.421/B.2g is applied. The annual projection of dividends is, in a second step, allocated amongst the quarters on the basis of the quarterly pattern of the latest available annual data.

**Table 7 - Method used to estimate annual dividends (when annual national accounts are not yet available)**

NACE		
01_05	agriculture/fisheries	$D_{421}(Y) = D_{421}(Y-1)$
14_37	manufacturing	regression on B.2g (Y-1)
40_41	electricity, gas, water	moving average of D.421/B.2g over 3 years
45	construction	moving average of D.421/B.2g over 3 years
50_52	trade	regression on B.2g (Y-1)
55_90	services	regression on B.2g (Y-1)

<sup>26</sup> This regression is a simplified view of the determinants underlying payments of dividends.

<sup>27</sup> Data relating to B.2g are taken from published annual accounts until year Y. When annual accounts are not available yet, annual aggregation of quarterly estimates of B.2g for year Y+1 is considered to estimate D.421 for Q1/Y+2 and Q2/Y+2.

*Financial institutions (S.12)*

Since financial institutions have to meet strict and timely reporting obligations, sufficient information is generally available to estimate dividends paid during the latest quarters. Dividends relating to quarters of year Y+1 after the final year of available national accounts are estimated on the basis of accounting reports for year Y that are already available around April Y+1.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Dividends paid by the rest of the world and resulting from portfolio investment of Belgian residents are estimated on the basis of data coming from the balance of payments. Those resulting from direct investment are estimated within the national accounts division, according to partial information on balance sheets of Belgian companies and an "expert knowledge". Co-operation with balance of payments experts is however valuable to ensure a consistent view of flows on the resources and the uses side.

## (A) Resources

*Total economy (S.1) and domestic sub sectors (S.11, S.12, S.13, S.1M)*

Dividends received by Belgian residents are calculated as a residual figure per quarter, in the same way as for the years for which annual data are already available (cf. supra). They are allocated to sectors via the outstanding amounts of shares and other equity (information available in the financial accounts).

*Rest of the world (S.2)*

Both dividends resulting from portfolio and direct investment made by non-residents in Belgium are estimated on the basis of data coming from the balance of payments.

## 2.3.11.2. Withdrawals from the income of quasi-corporations (D.422)

Quarterly amounts of withdrawals from the income of quasi-corporations are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA (S13/resources side) with, as full and single counterpart, expenditure for resident non-financial corporations (S.11/uses side).

## 2.3.11.3. Reinvested earnings on direct foreign investment (D.43)

Sources

When annual data are available, quarterly profiles of reinvested earnings on direct foreign investment are determined using information coming from the balance sheets of Belgian companies and from the balance of payments. For the latest quarters (when annual accounts are not yet available), an ad hoc methodology has been developed.



## Methods

### Availability of annual accounts

A quarterly allocation key is calculated for reinvested earnings paid and reinvested earnings received.

#### (A) Uses

##### *Non-financial corporations (S.11)*

The calculations comprise the following stages:

(a) For each year since 1999 the percentage allocation per quarter of the value added per industry (industry breakdown of the quarterly accounts) is calculated.

(b) The following data from the direct investment enterprises included in the database used to calculate the annual figures for D.43 are aggregated at NACE 2-digit level:

- the net current result (current operating profit) x control percentage
- dividends x control percentage

(c) The corresponding quarterly allocation key (cf. (a)) is applied to the annual figure of the "net result x control%" under (b), which gives the quarterly net result of the direct investment enterprises per NACE 2-digit heading.

(d) The quarterly pattern of dividends paid per NACE 2-digit heading is available from the information in the annual accounts.

(e) The corresponding quarterly allocation key is applied to the annual figure of the "dividends x control %" under (b), giving the dividends per quarter.

(f) Per NACE 2-digit heading, this gives per quarter:  $D.43 = \text{net result} - \text{dividends}$ . Summing across all sectors gives 4 quarterly amounts which, except for minor rounding errors and any adjustment effects, correspond to the figure calculated annually for D.43, and can therefore be applied as an allocation key to that annual figure.

The assumptions underlying these calculations are :

- the allocation of the gross operating surplus (for which the value added B.1g is used as a proxy) for all enterprises (cf. (a)) is representative for direct investment enterprises. The gross operating surplus is itself a proxy for the net current result.
- the information on the quarterly pattern of dividends paid, based on information for *all* annual accounts available at the Central Balance Sheet Office, is representative for direct investment enterprises.

##### *Financial corporations (S.12)*

In the case of financial institutions (S.122), other financial intermediaries except insurance corporations and pension funds (S.123), financial auxiliaries (S.124) and insurance corporations (S.125), the quarterly patterns of dividends paid, calculated for the purpose of the quarterly accounts for dividends, are taken as a proxy for the quarterly patterns of the direct investment enterprises.

The quarterly patterns of the net result for S.122, S.123 and S.124 are calculated in a similar way as for S.11, i.e. on the basis of the quarterly pattern of the value added of NACE 65+67 (financial institutions + insurance sector). For the quarterly pattern of the net result for S.125, the quarterly pattern of NACE 66 (insurance sector) is used.

For each sub sector of S.12, the quarterly figures for D.43 thus obtained (= net result - dividends) are used as the allocation key for the purpose of the quarterly allocation of the D.43 calculated in the annual national accounts.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Rest of the world is the counterpart sector of corresponding quarterly transactions recorded as resources for Belgian corporations.

For each quarter i :

$$D.43_{\text{use}} S2_i = D.43_{\text{res}} S.11_i + D.43_{\text{res}} S.12_i$$

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12)*

The Balance of Payments data on the foreign direct investment survey for non-financial corporations and financial institutions are adopted.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Rest of the world is the counterpart sector of corresponding quarterly transactions recorded as uses for Belgian corporations.

For each quarter i :

$$D.43_{\text{res}} S2_i = D.43_{\text{use}} S.11_i + D.43_{\text{use}} S.12_i$$

Unavailability of annual accounts

(A) Uses

*Non-financial corporations (S.11), financial corporations (S.12)*

Currently, quarterly estimates relating to the latest year for which annual accounts are available are kept unchanged for the corresponding quarters relating to the following years.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Rest of the world is the counterpart sector of corresponding quarterly transactions recorded as resources for Belgian corporations.

For each quarter i :

$$D.43\_S2_i = D.43\_S.11_i + D.43\_S.12_i$$

use
res
res

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12)*

The Balance of Payments data on the foreign direct investment survey for non-financial corporations and financial institutions are adopted.

*General government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Rest of the world is the counterpart sector of corresponding quarterly transactions recorded as uses for Belgian corporations.

For each quarter i :

$$D.43\_S2_i = D.43\_S.11_i + D.43\_S.12_i$$

res
use
use

#### 2.3.11.4. Property income attributed to insurance policy holders (D.44)

Sources

No quarterly information is available and a simple smoothing method is used.

Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA.

*Households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Quarterly general government accounts set up a t+3 months, just before the establishment of QSA, give data on property income attributed to insurance policy holders (D.44) together with rents (D.45). For the purposes of QSA, this information is allocated pro rata amongst both transactions according to the amounts registered on an annual basis. When annual accounts are not yet available, the most recent annual distribution key is kept unchanged.

*Households and NPISH's (S.1M)*

This is the residual item for transaction D.44.

For each quarter i :

$$D.44\_S.1M_i = D.44\_S.1_i - D.44\_S.11_i - D.44\_S.12_i - D.44\_S.13_i$$

res
res
res
res

*Total economy (S.1)*

Quarterly property income attributed to insurance policy holders received by the total economy are defined according to quarterly property income attributed to insurance policy holders paid by the domestic sectors adjusted for net corresponding flows with the rest of the world.

For each quarter i :

$$D.44\_S.1_i = D.44\_S.1_i + \left( D.44\_S.2_i - D.44\_S.2_i \right)$$

res
use
use
res

### 2.3.11.5. Rents (D.45)

#### Sources

No quarterly information is available and a simple smoothing method is used.

#### Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Nil in Belgian accounts: this item is not registered separately in the annual accounts and compiled under the item intermediate consumption (P2).

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Not relevant.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Quarterly general government accounts set up at t+3 months, just before the establishment of QSA, give data on property income attributed to insurance policy holders (D.44) together with rents (D.45). For the purposes of QSA, this information is allocated pro rata amongst both transactions according to the amounts registered on an annual basis. When annual accounts are not yet available, the most recent annual distribution key is kept unchanged.

*Households and NPISH's (S.1M)*

This is the residual item for transaction D.45.

For each quarter  $i$  :

$$D.45_{res} S.1M_i = D.45_{res} S.1_i - D.45_{res} S.11_i - D.45_{res} S.12_i - D.45_{res} S.13_i$$

*Total economy (S.1)*

Quarterly rents received by the total economy are defined according to quarterly rents paid by the domestic sectors, as transactions with the rest of the world are nonexistent.

For each quarter  $i$  :

$$D.45_{res} S.1_i = D.45_{use} S.1_i$$

*Rest of the world (S.2)*

Not relevant.

### **2.3.12. Current taxes on income, wealth, etc. (D.5)**

#### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

#### Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12)*

Quarterly general government accounts give information about current taxes paid by corporations, whether these are non-financial or financial enterprises. For the purposes of QSA, this information is allocated pro rata amongst both sub sectors according to the amounts paid on an annual basis. When annual accounts are not yet available, the most recent annual distribution key is kept unchanged.

*General government (S.13)*

Quarterly general government accounts give information about current taxes within the government.

*Households and NPISH's (S.1M)*

Quarterly general government accounts give information about current taxes paid by households and NPISH's.

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Quarterly general government accounts give information about current taxes paid by non-residents.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13).

*Rest of the world (S.2)*

Current taxes paid by residents to the rest of the world are available in the quarterly main aggregates dataset.

**2.3.13. Social contributions (D.61)****2.3.13.1. Actual social contributions (D.611)**Sources

The quarterly pattern for actual social contributions relating to public schemes comes from quarterly general government accounts. For private schemes, no information is at present available on a quarterly basis and a simple smoothing method of annual data is used.

Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), general government (S.13)*

Not relevant.

*Households and NPISH's (S.1M)*

Actual social contributions on the resources side of the whole domestic economy [cf. infra (B)] adjusted for net corresponding flows with the rest of the world are totally supported by households and NPISH's.

For each quarter  $i$  :

$$D.611\_S1M_i = D.611\_S.1_i + \left( D.611\_S.2_i - D.611\_S.2_i \right)$$

use                      res                      res                      use

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

*Rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Households and NPISH's (S.1M)*

Not relevant.

*Total economy (S.1)*

Sum of domestic sectors.

### 2.3.13.2. Imputed social contributions (D.612)

Sources

The only available quarterly information comes from quarterly general government accounts.

Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), general government (S.13), rest of the world (S.2)*

Not relevant.

*Households and NPISH's (S.1M)*

Imputed social contributions on the resources side of the whole domestic economy [cf. infra (B)] adjusted for imputed social contributions paid to non-residents are totally supported by households and NPISH's.

For each quarter  $i$  :

$$D.612\_S1M_i = D.612\_S.1_i + D.612\_S.2_i$$

use
res
res

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

(B) Resources side

*Non-financial corporations (S.11)*

The following accounting identity is used:

For each quarter i :

$$D.612_{res\_S11_i} = D.62b_{use\_S11_i} + D.62c_{use\_S11_i} + D.8_{S11_i} - D.611_{res\_S11_i} - D.75_{res\_S11_i} \text{ from S.13}$$

For most of the different items, see below.

*Financial corporations (S.12), households and NPISH's (S.1M), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts (annual amount distributed in a smoothed way).

*Total economy (S.1)*

Sum of domestic sectors.

---

### **2.3.14. Social benefits other than social transfers in kind (D.62)**

---

#### Sources

Information coming from quarterly general government accounts and from the balance of payments are used. No quarterly information relating to Belgian private social schemes is available and smoothing procedures are used with due regards to ESA95 accounting constraints.

On the uses side, quarterly estimates are built up for the three following items:

- D.62a : all social benefits supported by the general government  
( $D.62a_{S.1} = D.621_{S.1} + D.622_{S.13} + D.623_{S.13} + D.624_{S.13}$ )
- D.62b : private funded social benefits and social assistance benefits in cash, excl. S.13  
( $D.62b_{S.1} = D.622_{S.1} - D.622_{S.13} + D.624_{S.1} - D.624_{S.13}$ )
- D.62c : unfunded employee social benefits, excl. S.13  
( $D.62c_{S.1} = D.623_{S.1} - D.623_{S.13}$ )

On the resources side, a quarterly estimate for total social benefits (D.62) is established.

#### Methods

(A) Uses side

*Non-financial corporations (S.11)*

D.62a : not relevant.

D.62b and D.62c : the corresponding annual figure (respectively D.622 and D.623 according to the ESR95 codification) is smoothed out over the four quarters of the year, by applying a linear trend.

*Financial corporations (S.12)*

Total of D.62 is smoothed out over the four quarters of the year, by applying a linear trend.

The decomposition between the three mentioned categories is the following:



D.62a: not relevant.

D.62b: residual category:  $D.62b_{\text{use}} S.12_i = D.62_{\text{use}} S.12_i - D.62c_{\text{use}} S.12_i$

D.62c: the following accounting identity is used, for each quarter i:

$D.62c_{\text{use}} S12_i = D.612_{\text{res}} S12_i$  (cf. 2.3.13.2 above)

*General government (S.13)*

D.62a: quarterly estimates are directly taken from the quarterly general government accounts.

D.62b and D.62c: not relevant.

*Households and NPISH's (S.1M)*

D.62a and D.62b: not relevant.

For D.62c, the following accounting identity is used, for each quarter i:

$D.62c_{\text{use}} S1M_i = D.612_{\text{res}} S1M_i$  (cf. 2.3.13.2 above)

*Total economy (S.1)*

Sum of domestic sectors.

*Rest of the world (S.2)*

Quarterly pre-existing data, coming from the main aggregates, are used as starting point. These data hold for the total D.5 and D.6. When annual data are available, they are built up by using, as indicator, information coming from the balance of payments. When annual data are not yet available, the year-on-year evolution of the indicator is considered.

To get quarterly estimates for D.62 only, the data coming from the main aggregates are adjusted by deducting quarterly estimates for D.5 and D.61 (cf. supra). Estimates for D.62 paid by the rest of the world are totally imputed to sub transaction D.62a.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), general government (S.13)*

Not relevant.

*Households and NPISH's (S.1M)*

Social benefits on the uses side of the whole domestic economy [cf. supra (A)] adjusted for net social benefits paid by the rest of the world are entirely recorded as resources for households and NPISH's.

For each quarter i :

$D.62_{\text{res}} S1M_i = D.62_{\text{use}} S.1_i + \left( D.62_{\text{use}} S.2_i - D.62_{\text{res}} S.2_i \right)$

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

*Rest of the world (S.2)*

Quarterly pre-existing data, coming from the main aggregates, are used as starting point. These data hold for the total D.5 and D.6. When annual data are available, they are built up by using, as indicator, information coming from the balance of payments. When annual data are not yet available, the year-on-year evolution of the indicator is considered.

To get quarterly estimates for the only D.62, the data coming from the main aggregates are adjusted by deducting quarterly estimates for D.5 and D.61 (cf. supra).

---

### 2.3.15. Social transfers in kind (D.63)

---

#### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

#### Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at t+3 months, just before the establishment of QSA. Quarterly social transfers in kind are equal to quarterly individual consumption expenditure by the general government (P.31\_S.13).

*Households and NPISH's (S.1M)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*Total economy (S.1)*

Sum of domestic sectors.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), general government (S.13), rest of the world (S.2)*

Not relevant.

*Households and NPISH's (S.1M)*

Quarterly social transfers in kind paid by the government and households and NPISH's entirely benefit the latter.

For each quarter  $i$  :

$$D.63\_S1M_i^{\text{res}} = D.63\_S.13_i^{\text{use}} + D.63\_S.1M_i^{\text{use}}$$

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

---

**2.3.16. Other current transfers (D.7)**


---



---

**2.3.16.1. Net non-life insurance premiums (D.71)**


---

Sources

No specific quarterly information is available relating to net non-life insurance premiums. Smoothing methods are used.

Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Households and NPISH's (S.1M)*

This is the residual item for transaction D.71.

For each quarter  $i$  :

$$D.71\_S.1M_i = D.71\_S.1_i - D.71\_S.11_i - D.71\_S.12_i - D.71\_S.13_i$$

use                      use                      use                      use                      use

*Total economy (S.1)*

Quarterly non-life insurance premiums paid by the total economy are defined accordingly to quarterly non-life insurance received by the domestic sectors adjusted for net corresponding flows with the rest of the world.

For each quarter  $i$  :

$$D.71\_S.1_i = D.71\_S.1_i + \left( D.71\_S.2_i - D.71\_S.2_i \right)$$

use                      res                      res                      use

(B) Resources side

*Non-financial corporations (S.11), general government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*Total economy (S.1)*

Sum of the domestic sectors (here limited to S.12)

---

 2.3.16.2. Non-life insurance claims (D.72)
 

---

Sources

No specific quarterly information is available relating to non-life insurance claims. Smoothing methods are used.

Methods

(A) Uses side

*Non-financial corporations (S.11), general government (S.13), households and NPISH's (S.1M)*

Not relevant.

*Financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*Total economy (S.1)*

Sum of the domestic sectors (here limited to S.12).

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Households and NPISH's (S.1M)*

This is the residual sector for transaction D.72.

For each quarter  $i$  :

$$D.72\_S.1M_{i, \text{res}} = D.72\_S.1_{i, \text{res}} - D.72\_S.11_{i, \text{res}} - D.72\_S.12_{i, \text{res}} - D.72\_S.13_{i, \text{res}}$$

*Total economy (S.1)*

Quarterly non-life insurance claims received by the total economy are defined accordingly to quarterly non-life insurance claims paid by the domestic sectors adjusted for net corresponding flows with the rest of the world.

For each quarter  $i$  :

$$D.72\_S.1_{i, \text{res}} = D.72\_S.1_{i, \text{use}} + \left( D.72\_S.2_{i, \text{use}} - D.72\_S.2_{i, \text{res}} \right)$$

---

### 2.3.16.3. Other current transfers, n.e.c. (D.7N)

---

These transfers are estimated on a quarterly basis by distinguishing current international cooperation (D.74) and miscellaneous current transfers (D.75).

---

### Current international cooperation (D.74)

---

#### Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

#### Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Total economy (S.1)*

Sum of the domestic sectors (here limited to S.13).

*Rest of the world (S.2)*

Quarterly flows are the direct counterpart of current international cooperation receipts for the general government. This information comes directly from quarterly general government accounts.

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.

*Total economy (S.1)*

Sum of the domestic sectors (here limited to S.13).

*Rest of the world (S.2)*

Quarterly flows are the direct counterpart of current international cooperation expenditure by the general government. This information comes directly from quarterly general government accounts.

---

 Miscellaneous current transfers (D.75)
 

---

Sources

Except quarterly pre-existing data coming from the general government accounts and from the main aggregates (flows between the domestic economy and the rest of the world), no quarterly specific information is known. Estimates must be made. To ensure a consistency of these redistributive flows, a complete quarterly matrix is build up. It relies mainly on smoothing procedures and on the hypothesis that no transactions exist between some institutional sectors.

A review of the detailed methods to establish pre-existing data (quarterly general government transactions and main aggregates) that are used to build up the QSA matrix can be found in the above-mentioned documents (cf. 2.1 above).

Methods

The general procedures underlying the establishment of quarterly matrices for D.75 are the following:

- to avoid the appearance of negative flows, smoothing out methods of annual data are applied on internal components of the matrices. Total on the lines and columns are the sum of the components;
- quarterly data for general government represent constraints to draw up the matrix;
- flows between S.1 and S.2 have to be consistent with information contained in the main aggregates.

A summary of the methods used to establish the matrix, which combines the uses side and the resources side, is provided below.

received by: from :	S.11	S.12	S.13	S.1M	Total S.1	S.2	S.1+S.2
S.11		0	vertical residual item (S1-S12-S14/15-S.2)	annual data smoothed with linear trend	(horizontal) sum of domestic sectors	annual data/4 (*)	horizontal sum
S.12	0		annual data/4 (*)	annual data smoothed with linear trend	(horizontal) sum of domestic sectors	0	horizontal sum
S.13	data S.13	data S.13		data S.13	(horizontal) sum of domestic sectors	data S.13	horizontal sum
S.1M	0	0	annual data smoothed with linear trend	(**)	(horizontal) sum of domestic sectors	(vertical) residual item	horizontal sum
Total S.1	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors		quarterly main aggregates (a)	horizontal or vertical sum
S.2	annual data smoothed with linear trend	annual data smoothed with linear trend	0 (allowing for exceptions) (***)	horizontal residual item (S1-S11-S12-S13)	quarterly main aggregates (a)		
S.1+S.2	vertical sum	vertical sum	data S.13 (b)	vertical sum	horizontal or vertical sum		

(\*) This concerns very limited annual data.

(\*\*) Transfers between households (S.14) and NPISHs (S.15) are not consolidated. Internal transfers within the sector S.1M are registered, for an equivalent amount, on the uses side and on the resources side (cf. 1.5.1 above).

(\*\*\*) In 2003 and 2005, annual data have been registered as amounts returned by the Belgian government to European institutions. These amounts have been attributed to the fourth quarter, to be consistent with quarterly general government accounts.

Quarterly miscellaneous current transfers paid (resp. received) by the rest of the world (components **(a)** of the above matrix) are defined to ensure consistency with quarterly main aggregates. These provide information for the total current transfers (D.7) paid (resp. received) by non-residents. The sub component D.75 is defined by subtracting from this constraint D.7 the quarterly estimates for D.71, D.72 and D.74 supported by (resp. benefiting to) non-residents (cf. supra).

Quarterly miscellaneous current transfers received by the general government (component **(b)** of the above matrix) are defined to ensure the constraint coming from the S.13 quarterly accounts. This constraint concerns the total current transfers (D.7). The sub component D.75 is defined by subtracting from this constraint D.7 the quarterly estimates for D.72 and D.74 benefiting to the general government (cf. supra).

---

### **2.3.17. Adjustment for the change in net equity of households in pension funds reserves (D.8)**

---

#### Sources

As for social contributions and benefits related to private pension schemes, no information is for the time being available on a quarterly basis to estimate changes in the net equity of households in pension funds reserve and a simple smoothing method of annual data is used.

#### Methods

(A) Uses side

##### *Non-financial corporations (S.11)*

The very limited corresponding annual figure is divided into four equivalent quarters.

##### *Financial corporations (S.12)*

Quarterly estimates are based on the following accounting identity:

For each quarter i:

$$D.8_{\text{use}} S12_i = D.611_{\text{res}} S12_i - D.62b_{\text{use}} S.12_i \quad (\text{cf. 2.3.13 and 2.3.14 above})$$

##### *General government (S.13)*

Data are directly taken from the quarterly general government accounts.

##### *Households and NPISH's (S.1M), rest of the world (S.2)*

Nil in Belgian accounts.

##### *Total economy (S.1)*

Sum of domestic sectors.

(B) Resources side

##### *Non-financial corporations (S.11), financial corporations (S.12), general government (S.13)*

Not relevant.

*Households and NPISH's (S.1M)*

Households are the only counterpart for this transaction registered on the uses side for the total economy.

$$D.8\_S.1M_i^{\text{res}} = D.8\_S.1_i^{\text{use}}$$

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

*Rest of the world (S.2)*

Nil in Belgian accounts.

**2.3.18. Capital transfers (D.9)**

## 2.3.18.1. Capital taxes (D.91)

Sources

Quarterly pre-existing data taken from the general government accounts are used. A review of the detailed methods to establish these data can be found in the above-mentioned document (cf. 2.1 above).

Methods

(A) Uses side

*Non-financial corporations (S.11), financial corporations (S.12), rest of the world (S.2)*

Nil in Belgian accounts.

*General government (S.13)*

Non relevant.

*Households and NPISH's (S.1M)*

Households are the only counterpart for this transaction registered on the resources side for the general government.

$$D.9\_S.1M_i^{\text{use}} = D.9\_S.13_i^{\text{res}}$$

*Total economy (S.1)*

Sum of domestic sectors (here limited to S.1M).

(B) Resources side

*Non-financial corporations (S.11), financial corporations (S.12), households and NPISH's (S.1M), rest of the world (S.2)*

Not relevant.

*General government (S.13)*

Data are directly taken from the quarterly general government accounts.



*Total economy (S.1)*

Sum of domestic sectors (here limited to S.13).

---

**2.3.18.2. Investments grants and other capital transfers (D.9N)**


---

Sources

Except quarterly pre-existing data coming from the general government accounts, no quarterly specific information is known. Estimates must be made. To ensure a consistency of these redistributive flows, a complete quarterly matrix is build up, as for quarterly estimates of D.75. It also relies mainly on smoothing procedures and on the hypothesis that no transactions exist between some institutional sectors.

A review of the detailed methods to establish pre-existing data (quarterly general government transactions and main aggregates) that are used to build up the QSA matrix can be found in the above-mentioned documents (cf. 2.1 above).

Methods

The general procedures underlying the establishment of quarterly matrices for D.9N are the following:

- to avoid the appearance of negative flows, smoothing out methods of annual data are applied on internal components of the matrices. Total on the lines and columns are the sum of the components;
- quarterly data for general government represent constraints to draw up the matrix;
- flows between S.1 and S.2 have to be consistent with information contained in the main aggregates.

A summary of the methods used to establish the matrix, which combines the uses side and the resources side, is provided below.

received by: from :	S.11	S.12	S.13	S.1M	Total S.1	S.2	S.1+S.2
S.11		annual data smoothed with linear trend	vertical residual item (S1-S14/15-S.2)	0 (allowing for exceptions) (*)	(horizontal) sum of domestic sectors	annual data smoothed with linear trend	horizontal sum
S.12	0		0	annual data smoothed with linear trend	(horizontal) sum of domestic sectors	0 (allowing for exceptions) (*)	horizontal sum
S.13	data S.13 (a)	data S.13 (a)		data S.13	(horizontal) sum of domestic sectors	data S.13	horizontal sum
S.1M	0	0	annual data smoothed with linear trend		(horizontal) sum of domestic sectors	(vertical) residual item	horizontal sum
Total S.1	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors	(vertical) sum of domestic sectors		quarterly main aggregates	horizontal or vertical sum
S.2	annual data smoothed with linear trend	0	annual data smoothed with linear trend	horizontal residual item (S1-S11-S12-S13)	quarterly main aggregates		
S.1+S.2	vertical sum	vertical sum	data S.13	vertical sum	horizontal or vertical sum		

(\*) Exceptional transactions can be registered on the basis of ad-hoc collected information.

Quarterly general government accounts give information about investments grants and other capital transfers paid to corporations, whether these are non-financial or financial enterprises. For the purposes of QSA, this information is allocated pro rata amongst both sub sectors (components (a) of the above matrix) according to the amounts paid on an annual basis. When annual accounts are not yet available, the most recent annual distribution key is kept unchanged.

Capital transfers other than capital taxes can be the result of exceptional transactions. This is notably the case for exceptional receipts collected by the government. By construction, the counterpart sector is non-financial corporations (S.11) which is defined as a residual item. Specific attention has to be devoted to such exceptional transactions if it appears that they are not concluded with non-financial corporations. Manual corrections can be brought to the usual drawing of the matrix.

---

### **2.3.19. Consumption of fixed capital (K.1)**

---

#### Sources

In view of the lack of information, quarterly data are estimated on the basis of a linear trend. Since these series are calculated with a model using the lifespan of past investments, they have a regular profile.

#### Methods

##### *Non-financial corporations (S.11)*

This is the residual item for transaction K.1.

For each quarter  $i$  :

$$K.1\_S.11_i = K.1\_S.1_i - K.1\_S.12_i - K.1\_S.13_i - K.1\_S.1M_i$$

##### *Financial corporations (S.12), households and NPISH's (S.1M)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

##### *General government (S.13)*

Data are directly taken from the quarterly general government accounts set up just before the establishment of QSA.

##### *Total economy (S.1)*

The data come directly from the quarterly main aggregates.

##### *Rest of the world (S.2)*

Not relevant.

---

### **2.3.20. Acquisitions less disposals of non-financial non-produced assets (K.2)**

---

#### Sources

No quarterly information is available and a simple smoothing method is used, except for specific operations generally implying the general government and for which payment dates are known.

## Methods

### *Non-financial corporations (S.11)*

This is the residual item for transaction K.2. If required, due attention is given to be sure that the counterpart for exceptional transactions registered at the level of general government is correctly registered (cf. infra).

For each quarter  $i$  :

$$K.2\_S.11_i = K.2\_S.1_i - K.2\_S.12_i - K.2\_S.13_i - K.2\_S.1M_i$$

### *Financial corporations (S.12)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

### *General government (S.13)*

Data are directly taken from the quarterly general government accounts set up at  $t+3$  months, just before the establishment of QSA. These data take into account specific transactions such as sales of land and sales of mobile telecom licences (mainly before 1999 for the latter).

### *Households and NPISH's (S.1M)*

The corresponding annual figure is smoothed out over the four quarters of the year, by applying a linear trend.

### *Total economy (S.1)*

Sum of domestic sectors.

### *Rest of the world (S.2)*

The data come directly from the quarterly main aggregates. From 2006 onwards, this transaction is mainly influenced by the development of purchases or sales of CO2 emission rights. The counterpart sector for these transactions is non-financial corporations. The development observed in K2\_S.2 is mainly imputed to the sector S.11 as this latter is considered as the residual item.

### Annex 1 : Methodology by transaction - Overall picture

Transaction	Already available	To be calculated	Comment
P.1 P.2	-	-	Lack of quarterly Supply-Use tables that would enable P2 to be calculated using technical coefficients.
B.1g	B.1g_S.13	B.1g_S.11 B.1g_S.12 B.1g_S.1M	Availability of quarterly estimates of value added for more than 30 branches. To split up value added amongst the institutional sectors, the annual breakdown of value added per sector, for each branch, is defined as allocation key for quarterly data.
P.31 et P.32	P.31_S.13 P.32_S.13 P.31_S.1M	-	
P.4	P.4_S.13 P.4_S.1M	-	
P.51	P.51_S.13 P.51_S.1M (housing)	P.51_S.11 P.51_S.12 P.51_S.1M (excl. housing)	The breakdown of quarterly 'private' gross fixed capital formation (excl. housing) amongst S.11, S.12 and S.1M is estimated by considering the share of each sector in the annual corresponding aggregate.
P.5N	P.5N_S.13	P.5N_S.1 (adjusted) P.5N_S.11 P.5N_S.12 P.5N_S.1M	If required, quarterly data for the whole economy are adjusted for the latest quarters to fit quarterly released GDP (apart from updated D.21-D.31). The breakdown per institutional sector is estimated by using smoothing methods and defining a residual sector (S.11).
P.6	P.6	-	
P.7	P.7	-	
D.1	D.1_S.1 res & use D.1_S.13 use D.1_S.2 res D.1_S.2 use	D.1_S.11 use D.1_S.12 use D.1_S.1M use D.1_S.1M res	A specific methodology has been developed using NSSO data. Since information coming from NSSO is only available with a 4-month delay, the last quarter is subject to an ad-hoc estimate.
D.21	D.21_S.1 res & use D.21_S.13 res D.21_S.2 res	-	
D.29	D.29_S.1 res & use D.29_S.13 res D.29_S.2 res	D.29_S.11 use D.29_S.12 use D.29_S.1M use	In view of the lack of information, the small sums involved and/or the relatively regular profile of the series, quarterly data are estimated by using smoothing methods and defining a residual sector (S.11).
D.31	D.31_S.1 res & use D.31_S.13 use D.31_S.2 use	-	
D.39	D.39_S.1 res & use D.39_S.13 use D.39_S.2 use	D.39_S.11 res D.39_S.12 res D.39_S.1M res	In view of the lack of information, the small sums involved and/or the relatively regular profile of the series, quarterly data are estimated by using smoothing methods and defining a residual sector (S.11).

D.41	D.41_S.13 res & use	complete quarterly matrix from 2003 onwards	A specific methodology has been developed on the basis of quarterly financial accounts and information on interest rates from different sources (stock outstanding x yield per instrument). For quarters relating to years before 2003, a simplified methodology, based on smoothing procedures, is used.
P.119			Interest flows are considered after FISIM allocation.
D.42	D.42_S.13 res & use	Others	A specific methodology has been developed.
D.43	-		A specific methodology has been developed.
D.45	D.45_S.13 res & use	Others	In view of the lack of information, the small sums involved and/or the relatively regular profile of the series, quarterly data are estimated by using smoothing methods and defining a residual sector (S.1M).
D.44, D.611 excl. NSSO, D.622, D.71, D.72, D.8	transactions for S.13	Others	No quarterly specific information or indicator is for the time being available for insurance and private pension funds transactions. Quarterly data are estimated on the basis of linear trends, with due regard for ESA95 accounting constraints.
D.5	D.5_S.1 res D.5_S.13 res & use D.5_S.1M use D.5_S.11+S.12 use D.5_S.2 res & use	D.5_S.11 use D.5_S.12 use	The breakdown of quarterly current taxes paid by companies between non-financial and financial corporations is estimated by considering the share of each sector in the annual corresponding aggregate.
D.611	D.611_S.13 res	Others	In view of the lack of information, the small sums involved and/or the relatively regular profile of the series, quarterly data are estimated by using smoothing methods and defining a residual sector (S.1M).
D.612	D.612_S.13 res	Others	Hence no quarterly specific information or indicator is available, quarterly data are estimated with an ad hoc method, combining linear trends and ESA95 accounting constraints.
D.62	D.621_S.13 use D.622_S.13 use D.623_S.13 use D.624_S.13 use	Others	Hence no quarterly specific information or indicator is available, quarterly data are estimated with an ad hoc method, combining linear trends and ESA95 accounting constraints.
D.63	P.31_S.13		
D.74	D.74_S.13 res & use	D.74_S.2 res & use	By definition, the rest of the world is considered as the only counterpart sector of general government transactions relating to international cooperation.
D.75	D.75_S.13 res & use	D.75_S.11 res & use D.75_S.12 res & use D.75_S.1M res & use D.75_S.2 res & use	To guarantee a consistent treatment of flows, a complete matrix is established mainly with the help of linear trends.

D.91	D.91_S.13 res D.91_S.1M use	-	
D.9N	D.9N_S.13 res & use D.9N_S.2 res & use	D.9N_S.11 res & use D.9N_S.12 res & use D.9N_S.1M res & use	To guarantee a consistent treatment of flows, a complete matrix is established mainly with the help of linear trends, with the exception of specific transactions generally implying the general government.
K.1	K.1_S.1 K.1_S.13	K.1_S.11 K.1_S.12 K.1_S.1M	In view of the lack of information, quarterly data are estimated on the basis of a linear trend. Since these series are calculated with a model using the lifespan of past investments, they have a regular profile. S.11 is defined as residual sector.
K.2	K.2_S.13 K.2_S.2	K.2_S.11 K.2_S.12 K.2_S.1M	In view of the lack of information and the small sums involved, quarterly data are estimated on the basis of a linear trend, except for specific operations for which information is known (payment date, sectors involved). S.1M11 is defined as residual sector.

## Annex 2 : Methodology by transaction - Overall picture

Code	Description	Uses							Resources						
		S.1	S.1N	S.11	S.12	S.13	S.1M	S.2	S.1	S.1N	S.11	S.12	S.13	S.1M	S.2
		Total Economy	Unspecified Total Economy	Non Financial Corporations	Financial Corporations	General Government	Households and NPISH	Rest of the World	Total Economy	Unspecified Total Economy	Non Financial Corporations	Financial Corporations	General Government	Households and NPISH	Rest of the World
<b>P</b>	<b>Production</b>														
P.1	Output								n.a.		n.a.	n.a.	n.a.	n.a.	
P.2	Intermediate consumption	n.a.		n.a.	n.a.	n.a.	n.a.								
B.1g	Added value (gross)														
P.31	Individual consumption expenditure														
P.32	Collective consumption expenditure														
P.51	Gross fixed capital formation														
P.5N	Changes in inventories + Net acquisitions of valuables														
P.6	Exports of goods and services														
P.7	Imports of goods and services														
<b>D</b>	<b>Distributive transactions</b>														
D.1	Compensation of employees														
D.21	Taxes on products														
D.29	Other taxes on production														
D.31	Subsidies on products														
D.39	Other subsidies on production														
D.21-D.31	Taxes less subsidies (on products)														
D.41	Interest														
D.42	Distributed income of corporations														
D.43	Reinvested earnings on direct foreign investment														
D.44	Property income attributes to policy insurance holders														
D.45	Rent														
D.5	Current taxes on income, wealth, etc.														
D.611	Actual social contributions														
D.612	Imputed social contributions														
D.62	Social benefits (State scheme)														
D.62	Social benefits (private schemes)														
D.63	Social transfers in kind														
D.71	Net non-life insurance premiums														
D.72	Non-life insurance claims														
D.74	Current international cooperation														
D.75	Other current transfers, not elsewhere specified														
D.8	Adj. for change in net equity of households in pens. funds res.														
D.91	Capital taxes														
D.9N	Investment grants and other capital transfers														
K1	Consumption of fixed capital														
K2	Acq. less disposals of non-fin. non-prod. assets														

n.a. Not available (and not required)  
 Available (pre-existing data)  
 Sum of domestic sectors  
 Equal to the total registered on other side of the account (adjusted for net flows with S.2)

Smoothing (linear trend)  
 Specific calculation method  
 Residual/balancing item