

Report

Sources and methods for non-financial Annual Sector Accounts

ASA- Inventory, The Netherlands, 2021

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CBS, sector ENR
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Section A - General Overview

1. Organisational aspects

Description of the organisation and responsibilities

Both annual and quarterly Sector Accounts are compiled as a joint effort by Statistics Netherlands (*Centraal Bureau voor de Statistiek*; CBS) and the Dutch Central Bank (*De Nederlandsche Bank*, DNB). As such, the Annual Sector Accounts (ASA) is a product of both institutions.

CBS

The Statistics Netherlands Act constitutes the legal basis for CBS, last updated in 2017. Statistics Netherlands is an independent governing body responsible for compiling national and European Union statistics. Statistics Netherlands is governed by a Director General, who, in this role determines the statistical methods used and methods of dissemination (Statistics Netherlands Act, article 18). The Director General is appointed for a period of 7 years. His or her term may be renewed once.

Contacts between Statistics Netherlands and the main users of official statistics are established via the *Advisory board*. The board has responsibilities laid down in article 20 of the statistics law. Among its tasks, the Advisory board is responsible for enhancing the accuracy and completeness of official statistics. Members of board are appointed for a period no longer than 4 years. This term may be renewed once.

According to the Statistics Netherlands Act (article 4), Statistics Netherlands is mandated to ensure the compilation of all statistics mandated by the European Union. The annual sector accounts have to be compiled and transmitted to Eurostat by the Member States according to the Regulation 549/2013 of the European Parliament and of the Council.

The EU General Data Protection Regulation (GDPR, Regulation 2016/679) and the GDPR Implementation Act in the Netherlands stipulate what is and what is not permissible with regard to personal data.

As an autonomous administrative authority (in Dutch: ZBO), CBS performs public service tasks but operates independently and not under the direct authority of a Dutch ministry. The Minister of Economic Affairs is politically responsible for relevant legislation, budget and conditions. CBS is financed from the state budget.

DNB

The independence of DNB (Dutch Central Bank), in its capacity as a member of the ESCB, is provided for in article 130 of the EU Treaty and article 7 of the Statue of the ESCB and of the ECB, which stipulate that:

When exercising the powers and carrying out the tasks and duties conferred upon them..., neither the ECB nor a national central bank nor any member of their decision making bodies shall seek or take instructions from Community institutions or bodies, from any government of a Member State or from any other body. The Community institutions and bodies and governments of the Member States undertake to respect this principle and not to seek to influence the members of the decision making bodies of the ECB or of the national central banks in the performance of their tasks.

At national level, the work programme covering the area of statistics is set out and determined in consultation with the User Council for Macro-economic Statistics (UC). The User Council is a high-level group composed of directors/senior management from the areas of statistics in Statistics Netherlands and the Dutch Central Bank as well as representatives from data suppliers and users.

Collaboration CBS-DNB

The formal start of the cooperation dates back to January 2006 and is renewed on September 18, 2017 "Cooperation Agreement CBS-DNB 2017" [1]. In addition, annual agreements fill in the details concerning planning, data requirements and delivery dates.

In the collaboration, CBS and DNB work together as equal partners, both having comparative advantages based on their specific professional tasks. The collaboration leads to a clear division of tasks between CBS and DNB regarding data collection.

DNB is responsible for the collection of data and compilation of financial (sub)sectors as well as securities.

CBS is responsible for the collection of data and compilation of non-financial sectors (non-financial corporations, general government and households and Non-profit institutions serving households), and Supply- and Use Tables (SUT).

The compilation of sector accounts, the balance of payments and the international investment position is a joined effort of CBS and DNB.

Milestones in the collaboration are:

- June 2018, publication of a fully integrated and revised dataset on national accounts, balance of payments and IIP.
- 2019, start of a joint CBS/DNB data collection survey on non-financial corporations, replacing two separate CBS and DNB surveys. The new survey is designed to serve both SA and BOP/IIP purposes.
- 2020, data collection by CBS on general government, households with details on foreign counterparts as inputs for both national accounts and BOP/IIP. Autonomous ROW input no longer required.
- 2018-2020: Gradual shift of tasks on the compilation of the financial sector from CBS to DNB. Commenced in 2018, completion expected in 2020.
- 2020 3rd quarter: start by DNB of a new Monthly Securities Statistics. This new source will serve as a building block for securities statistics but also for SA, and BOP/IIP.
- As a final step of the collaboration, a redesign of the surveys of financial institutions is expected in 2022. The new survey is designed to serve both SA and BOP/IIP purposes.

Data exchanges of microdata between CBS and DNB are in general open, meaning that micro data can be shared between CBS and the Statistics department of DNB for the aim of improving sector accounts and balance of payments/IIP through enhancing the balancing process. However, individual data sources and information from registers may have more rigid regimes in both CBS and DNB limiting the ability to share.

Sector Accounts

In CBS, responsibility for statistics is divided between two divisions:

• EBN: Division of Economic and Business Statistics and National Accounts;

SER: Division of Socio-Economic and Spatial Statistics.

Furthermore, there is a Corporate services, IT and methodology division, a division for CBS Communication and news, and a Data collection division.

Within the division of Economic and Business Statistics and National Accounts, the National Accounts department is responsible for compiling integrated statistics which provide a coherent overview of socio-economic developments in the Dutch society at both macro and meso levels. The Dutch national accounts system includes the Supply and Use Tables (SUTs), the Institutional Sector Accounts, including financial accounts and the Labour Accounts, as well as the compilation of satellite accounts linked to the core system such as environmental accounts and regional accounts. The National Accounts department relies on a large number of statistics compiled by other departments of CBS, DNB, and tax authorities for the compilation of its statistical output.

The **National Accounts department** consists of about 105 employees, of which approximately 65% have an academic background. The other 35% predominantly have a higher vocational training close to academic level. The department is composed of the following four sections:

- Section Publication, Co-ordination and Research;
- Section Supply and Use Tables;
- Section Labour, Environment and Region;
- Section Sector Accounts

The **section Sector Accounts** coordinates the compilation procedures for Sector Accounts. Furthermore, it is responsible for processing building blocks for non-financial corporations, households and non-profit institutions serving households (NPISH). In addition, it is responsible in the balancing procedures for a number of transactions. The data sources for non-financial corporations are obtained from the Business Statistics departments, also part of EBN-division. Data sources for households are obtained from the department of Labour, income and quality of life statistics. This department is part of the SER-division.

The department of **Government Finance and Consumer Price Statistics**, also part of EBN-division, provides an important building block by collecting source data and compiling statistics for (the subsectors of) general government. Furthermore, it actively takes part in the balancing procedures for transactions that are largely related to government sectors like taxes and other current transfers.

In **DNB**, responsibility for statistics is concentrated in the Statistics department. Four out of five sections in this department are participating in the compilation of Sector accounts:

- Monetary and Banking statistics
- Insurance companies & pension funds statistics
- Other financial intermediate statistics
- Balance of Payments and securities statistics

The first three sections provide important building blocks by collecting source data and compiling sector statistics for (the subsectors of) financial corporations. The last section provides two contributions: the section participates in the compilation process to validate relations of the Netherlands with the rest of the world, by which the full integration of sector

accounts' Rest of the World (ROW) with the Balance Of Payments and International investment position Investment Position (BoP/IIP) is realized. Also, this section compiles source data and securities statistics, another important building block for Sector accounts. Starting from 1 July 2020, integration of securities and related incomes is performed by DNB. Table 1 provides an overview of the organisational aspects.

Table 1: Sector Accounts: organisational overview

Sector Accounts	Institution	Department	Section
S.11	CBS	National Account	Sector Accounts
S.12	DNB	Statistics	Monetary and Banking
			statistics
			Insurance companies &
			pension funds statistics
			Other financial
			intermediate statistics
S.13	CBS	Government Finance and	Balancing Government
		Consumer Price Statistics	Finance
S.1A	CBS	National Accounts	Sector Accounts
S.2	DNB	Statistics	Balance of Payments and
			securities statistics
Coordination	CBS	National Accounts	Sector Accounts
Balancing	CBS	National Accounts	Sector Accounts
		Government Finance and	Balancing Government
		Consumer Price Statistics	Finance
	DNB	Statistics	Balance of Payments and
			securities statistics
Publishing	CBS	National Accounts	Sector Accounts
			Publishing and
			coordination

Please note the separation of activities is less strict than section names suggest. For instance, the section in National Accounts for Sector Accounts is also responsible for compiling data for the SUTs with respect to the financial institutions.

There are no separate teams for quarterly or annual estimates. A Sector Accountant is responsible for the quarterly and annual compilations of a consistent set of data for a certain group of economic actors.

There are no separate processes for non-financial accounts and financial accounts. Productions cycles and teams are responsible for the both accounts for a certain group of economic actors.

All this requires close co-operation and planning between the sections at CBS (processing and analysis of business statistics, and household sources, NPISH sources and government sources), and the relevant sections at the DNB (financial sectors, BoP/IIP, and securities). To facilitate the governance chain-management is introduced linking managers from CBS and DNB in a single decision making forum. The 'chain' reflects the linkages from source data to final compilation.

Organisation chart

In total, the number of staff at CBS (National Accounts and the Government Finance and Consumer Price Statistics department) and DNB Statistics directly involved in the compilation process of the non-financial ASA is about 40 persons. This number cannot be interpreted as 'full time occupied with Annual Sector Accounts'. Most of the staff is also concerned with work on financial accounts and almost everyone works on annual and quarterly estimates. In addition, the same team is, amongst other tasks, also responsible for the SUTs data of financial institutions, and households' satellite-accounts.

The next chapter will elaborate on how work is organized.

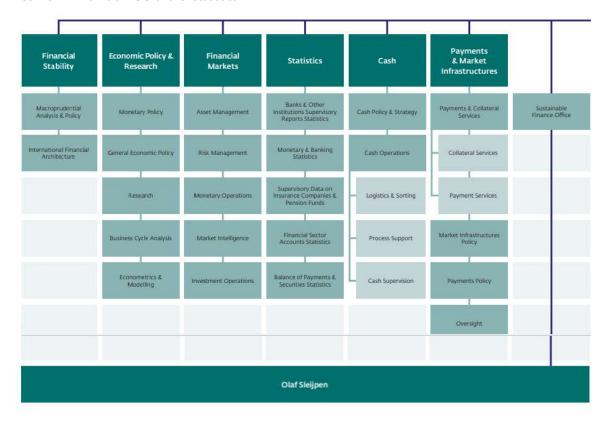
The following staff members should be mentioned as contact persons:

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Statistics Netherlands

Full organisation chart DNB Organisation (dnb.nl) [3]

Zoom on DNB division relevant for statistics:



2. ASA compilation overview

Data sources

The description of data sources and compilation methods as discussed in this Annual Sector Accounts inventory apply to the final annual estimation for 2018. The final estimate is the last part of three regular annual estimates. More information on revision policy is included in section A, chapter 5 Revision policy. The first two estimates have a provisional character while the third represents the final estimate based on a complete set of annual and quarterly data sources.

A general summary of data sources used for Annual Sector Accounts follows below. A more extended list of data sources by sector is provided in section C.

Non-financial corporations (S.11)

The main data source for the sector S.11 non-financial corporations is the annual "Statistics Finances of Enterprises" (SFO: Statistick Financiën van Ondernemingen), which is based on a survey for the larger corporations (SFGO), combined with tax register data for the smaller corporations (SFKO). In addition, annual corporate reports are used to deconsolidate head offices from non-financial corporations. Another source represents the annual information on housing corporations provided by the Authority Housing Corporations. Information on healthcare institutions is taken from the supply-use table (SUT).

During the balancing procedures, the SFO results are often adjusted to fit counterpart information from the supply-use tables (and the underlying data from business surveys) and data sources for financial corporations, government and rest-of-the-world. For the non-financial corporations a detailed analysis of dividends and retained earnings is conducted, confronting balance of payments data with SFO data

In 2019Q1, a redesign of the kSFO survey has started. The quarterly survey serves both SA and BoP purposes, and includes for example specific information on foreign ownership relations, and foreign counterpart sectors, in addition to full profit& loss accounts and balance sheets. The 350-380 entities reporting on a quarterly basis, are exempt from the annual SFGO survey. To conclude, from 2019 onwards, annual sector data for S.11 is the sum of quarterly data, and the regular annual data sources. Full implementation of the new source is expected at the benchmark revision 2021.

Financial corporations (S.12)

The data sources available for the financial corporations sector are mixed in terms of type, coverage and quality. The monetary financial institutions (S.121+S.122+s.123) are covered by direct (quarterly and annual) sources: the annual corporate statement of the Dutch Central Bank (S.121) and a survey for the receipts and payments of the MFIs and MMF's (S.122+S.123). For non-MMF investment funds (S.124), insurance corporations and pension funds (S.128 and S.129) and special purpose entities (part of S.127) the direct reporting system (DRA, Directe Rapportage) of the Dutch Central Bank is available, a quarterly and annual survey (direct source).

For the remaining parts of S.12, other financial intermediaries, special purpose vehicles, captive financial institutions not covered by DRA, head offices and financial holdings, annual estimates are based on various sources including SPV-statistics and annual corporate reports.

In 2020Q1, the DRA survey is extended to the population of S.125, S.126 and S.127, collecting both profit& loss accounts, balance sheets and specific information of the relation with foreign counterpart sectors. From 2020 onwards, annual sector data for S.125, S.126 and S.127 is available as the sum of quarterly data as the regular annual data sources. Full implementation of the new source is expected at the benchmark revision 2021.

In 2022Q1, the DNB will start to collect data for the MESRAP survey for all S.12 entities using a new IT system. Aim it to collect both profit & loss accounts, balance sheets and specific information of the relation with foreign counterpart sectors. From 2022 onwards, annual sector data for S.12is available as the sum of quarterly data as the regular annual data sources. As the new source on 2022 is available during the benchmark revision 2021, it will be surely be used as a reference. Full implementation into SA and BoP might take a bit longer.

Public, private and foreign corporations (S.11001/2/3 and S.12001/2/3)

According to ESA2010, non-financial or financial public corporations are subsectors of S.11 and S.12 respectively. The Dutch system of Annual Sector Accounts does not include the public, private and foreign controlled sub-sectoring.

However, preliminary results from research on the subsectoring of S.11 shows that linking macro data to micro characteristic concerning ownership, allows for far more detailed analysis of for instance reinvested earning. Further research and development will lead to decision on how to proceed for future processes.

General government (S.13)

Sector S.13 general government is well covered by direct annual sources. For the main part of S.1311, the Dutch State, direct sources are available on an administrative level at t+5 months and included in the publication of summer t+1. Administrative data is verified with other sources, such as Treasury publications, parliamentary reports and additional information liaised with the Ministry of Finance.

Other parts of S.1311 such as agencies, universities and non-profit institutions controlled by central government are also covered by annual sources. The universities provide administrative sources that are recoded into ESA2010 transactions. Annual financial reports are used as a source for the non-profit institutions (NPI). The data are available in year t+1 and included in the publication of summer t+2.

For subsector S.1313 local government three groups are distinguished: local public authorities, non-profit institutions and schools. The local public authorities supply data in a dedicated questionnaire. The data are recoded into ESA2010 transactions. Additionally, annual financial reports are used to verify, clarify or further detail data. The data are available in year t+1 and included in the publication of summer t+2.

The schools supply administrative sources that are recoded into ESA2010 transactions. Annual financial reports are used as a source for NPIs. The data are available in year t+1 year and included in the publication of summer t+2.

Three executive bodies provide information on S.1314 Social security funds. These bodies cover almost all transactions in annual financial reports. The data are available in year t+1 year and included in the publication of summer t+2.

Estimates of non-S.13 sectors may benefit indirectly from S.13 sources (counterpart information) if these are available at an earlier stage. In this way, the State may be used as indirect input for other sectors as well.

A new quarterly survey is introduced in 2019 for some non-profit institutions belonging to the government sector, with the aim of having more timely, and quarterly data. This also provides an additional reference for the annual final estimates from 2019 onwards.

Households (S.14)

The sources used for the compilation of the quarterly and annual sector accounts for S.14 households are rather heterogeneous.

For the estimate of mixed income, an annual source from tax receipts of own-account workers by industry is available (SZO: statistics of unincorporated enterprises). A preliminary estimate is available in year t+1 and included in the publication of June year t+2. If revisions based on the final estimate, available in year t+2, exceed a threshold of 0,1 % gdp, updates are published in the June year t+3.

The Integral Income and Wealth Statistic (IIWS) is mainly based on administrative records of the tax authorities on income tax. This source allows checking and validating numerous variables in the household account. It also provides the opportunity to link macro and micro data on households, providing insight into disparities.

The Household Budget Survey (HBS) measures the consumption expenditures on the household level. For the household sector, this data source is used for some specific tax components (dog tax, vehicle tax, etc.). The HBS is held once every 5 years, the last time for the survey year 2015. These data are used and extrapolated to later years using the consumer price index.

For other current transfers within the household sector, between households and NPISH, or to and from abroad (remittances) three data sources are used. The Giving in the Netherlands Panel Survey (GINPS) collected by the Centre for Philanthropic Studies at VU University Amsterdam focuses on giving behaviour to NPISH mainly. The most recent data covers 2015; this is extrapolated to later years using the use of tax deduction for gifts according in the IIWS. The Longitudinal Internet Studies for the Social sciences panel administered by CentERdata is a representative sample of Dutch individuals who participate in monthly internet surveys. This data source is used to estimate transfers between households. Finally, Money Transfer Operators (MTO) serve as the channel for remittances to and from the Netherlands. The Dutch Central Bank gathers information of these MTO's for the total flows per receiving and sending country. These are all annual data sources.

During the balancing procedure, estimates for households are sometimes adjusted based on SUT and counterpart information. For instance, the compensation of employees is taken from the SUT, which includes information from labour accounts.

Non-profit institutions serving households (S.15)

The main source for S.15 non-profit institutions serving households is data on fundraising, collected by the central bureau for fundraising (CBF). This annual source becomes available t+1, and is included in the publication of summer t+2. Production-related variables are derived from the SUTs, where estimates for NPISH are generally based on the estimated labour input.

During the balancing procedure, estimates for NPISH are sometimes adjusted based on counterpart information.

Rest of the World (S.2)

The main source for transactions of resident with non-resident institutional units is the Balance of Payments (BoP). The Dutch Central Bank surveys on a monthly basis (in some cases quarterly or annually) most types of crossing border flows of all domestic sectors. Foreign trade in goods

and services (for the rest of the world accounts as well as the balance of payments) is covered by the statistics on international trade in goods and in services from CBS. These transactions are integrated within the supply-use framework.

The balancing procedure includes a detailed analysis of estimates of dividend and retained earnings for non-financial corporations, confronting BoP and SFO data.

Methods

Compilation procedures

Sector data

As a first step, based on available direct data sources, a dataset for each sector is compiled for non-financial accounts, financial accounts, other changes (in volume, exchange rates and other price), and balance sheets. If available, the datasets also include counterpart information. The compilation process consists of source data collection, transformation to ESA2010 codes, analyses and quality assessment. If necessary the expert contacts the representative of the (internal or external) source and adjustments are executed, after which the sector data is stored in a database environment (Integration System Sector Accounts, iSR). Adjustments are made for major conceptual issues, such as super dividends and capitalization of R&D. For exhaustiveness, estimates for illegal activities are made, based on which additional income is attributed to households, and corporations.

In ASA, 27 (sub)sectors are distinguished: S.11 (1), S.12 (10), S.13 (11), S.14 (1), S.15 (1) and S.2 (3). A short report on each sector is placed in a central folder, describing the economic situation of the sector concerned (developments, outliers, etc.), and explains revisions compared to earlier estimates. Additionally, a quantitative description of all steps from the data source to the data set entering iSR is stored in a second database (Process table Sector Accounts).

Processing of regular adjustments

As a second step, a large number of regular adjustments are made by a tool called SIM (Standard Inpas Machine), along with a comment on the justification/explanation. One type of regular adjustments concerns the choice between two sources providing information for one relation in the whom-to-whom matrices. Regular adjustments allow for reallocations between (counterpart) sectors and instruments. Some matrices are fully balanced after the SIM. This means all balancing decisions are regular, "business as usual". In principle, regular adjustments are executed every reporting period, in the same way. If new sources become available or if quality shifts in sources occur, regular decisions are evaluated. Regular decisions can be revised annually, and are evaluated are every benchmark revision. The outcome of a decision is based on the quality of sources and research into the reasons to account for differences.

Analysis and adjustments of large differences

As a third step, inconsistencies within the data are identified, analyzed and solved. This process is supported by reports, showing irregular size in regular adjustments and remaining inconsistencies above 500 million euro. A number of experts who are assigned one or more transactions judges these differences. Small differences on the transaction-identity (total uses vs. total resources for each transaction) and within matrices (whom-to-whom data vs totals for each sector) can remain. Large issues are investigated and the additional research often leads to an adjustment in iSR, combined with a short comment with the justification/explanation for this specific adjustment.

SUT and ASA

Transactions in services and goods and the value added components are accounted for in fully integrated quarterly and annual SUTs. The supply and use framework in the Dutch national account contains at most detailed level 143 industries and 617 product groups. Based on a cross-classification table, transactions as recorded in the SUTs, at the level of 143 industries, are reclassified into institutional sectors before entering the sector accounts framework, assuring a fully integrated SUT and ASA at macro level. The general business register, labour accounts, and sector data on financial corporations and general government are the main sources underlying the cross-classification table. This also means the total of non-financial corporations and households sources are adjusted to align to the SUT.

Data of SUT transactions (P.1 output, P.2 intermediate consumption, D.11 wages and salaries, D.12 employers' social contributions, D.29 Other taxes on production, D.39 other subsidies on production) is cross-classified from the SUT database (iAGT) to the ASA database (iSR), using the cross-classification table. Also, other supply-use based transactions (some of them including more detailed categories) are transferred from iAGT to iSR: D.21 taxes on products, D.31 subsidies on products, P.3 final consumption expenditure, P.5 gross capital formation, P.51c consumption of fixed capital, P.6 exports of goods and services, P.7 imports of goods and services. Data integrated in SUTs totals for the entire economy are transferred to the sector accounts production process without further adjustments.

Solving remaining differences

The final step consist of automated balancing to solve all remaining differences. A tool called 'Balancing Machine' solves all remaining differences. Based on a set of rules and weights, sector accounts are made consistent, adhering to constraints for horizontal and vertical budget-identities, whom-to-whom consistencies, and statistical relations between ESA transactions (such as for employer's social contributions).

After the Balancing Machine has produced a consistent data set, all (sector and transaction) experts are asked to assess the results. A set of standard reports supports this task. If errors or implausible data are detected, manual adjustments are made and the Balancing Machine is run again. The process is organized to allow for 3 or 4 runs.

The analysis of vertical statistical discrepancies is part of this iterative process, as they may arise during the balancing procedure, and non-financial and financial accounts are compiled simultaneously. For each of the S.12 sectors, vertical statistical discrepancies above 500 million euro are analyzed and specific adjustments for the budget identity are made. Adjustments are typically done in the financial accounts. Smaller vertical statistical discrepancies for sectors within S.12 are reduced to zero through the 'Balancing Machine'. The vertical statistical discrepancies for other sectors are analyzed as well although the discrepancies are not reduced to zero. For the sectors S.11 and S.14 adjustments are made to keep the vertical discrepancies within 4 billion Euro. For the government sector no vertical balancing is performed.

Meetings and results

At the start and at the end of an estimation cycle a session with all experts is organized to evaluate the data. The data of each (sub)sector are displayed at a big screen and examined plenary. For each (sub)sector an expert of another (sub)sector is invited to scrutinize the data. At the start, the focus is on missing items and outliers in time series. At the end of the process, the focus is on consistency, completeness and economic interpretation. A dashboard and process tables support the data analysis. The latter has the advantage of starting with data sources, showing a quantitative description of all steps from the data source to the data

compilations entering iSR. Both dashboard and process tables quantify and document the steps during the balancing phase (SIM adjustment, adjustments to solve large differences, adjustments to align to SUT and all balancing machine adjustments). For all sectors, annual compilations are fully quantified by process tables. However, further refinement of the process tables is an on-going process.

The establishment of the data is formalised in a meeting, attended by the product owner of sector accounts, senior sector accountants and experts not involved in the compilation process. The final results are checked and evaluated. Errors or improvements encountered in this phase are solved by making adjustments and a subsequent run of the Balancing Machine. For this meeting, a document is prepared for each sector including economic developments, major events and major revisions. After the outcomes are approved, topics for news articles are selected, after which articles are drafted and released together with the new data releases.

Quarterly and annual data consistency

The production process for the quarterly and the annual estimates follow practically the same process described above, although for annual estimates more time is available for the process. However, the following issues are worth mentioning.

The sum of four quarterly estimates form the first annual estimate. Between the first annual estimate (end of March year t+1) and the first (separate) provisional year (June t+1) only a limited number of new sources become available. So, for this annual estimate, as well as the final estimate, new sector data for step 1 are only compiled if new information is available. If there is no new information, the previously processed data are used excluding any adjustments made by the Balancing Machine during those previous estimates.

After both the provisional and final annual estimates (June *t+1* and June *t+2*), quarterly data are readjusted in order to align with the annual data. For this process a model named 'Quarter Machine' is developed. Actually, this model works just like the Balancing Machine but facilitates adjusting multiple periods (quarters) and alignment between quarterly and annual data. The Quarter Machine produces quarterly data consistent with annual data, without adjusting the annual data.

To align the quarterly data a similar process is followed as for regular annual estimates. First, sector data is gathered and updated if available, second the regular adjustments are made, third, large inconsistencies are adjusted manually, the link to quarterly SUT is made, and the Quarter Machine ensures full consistency.

Revisions (regular)

Annual and quarterly estimates are evaluated in the same way as the quarterly ones; both include the analyses of revisions compared to previous estimates. For annual estimates the first estimate (June year t+1) is compared to the sum of the quarterly estimates (March t+1). The second annual estimates is compared with the preceding one. For quarterly estimates, in September and December the previous quarter is also revised, in March the preceding three quarters are revised to gain the best possible first annual estimate.

Estimation of back data

The main production process of a benchmark year/revision is quite similar to a regular annual estimate. But in addition, it is a moment to reconsider and adjust if necessary the use of sectorand transaction classifications, the use of sources, the standard decision rules in the Standard

Adjustment Machine, and the balancing model. During a revision the system is benchmarked to the newest level estimates found in the data sources.

As a general principle, CBS will maintain a series of data that is comparable over time. It completely depends on the changes made in the benchmark year how the time series are backcasted. If a discrepancy in source data is being ignored for continuity reasons until the next benchmark year, the length of the time series depends on the reasons behind the break in the series. In case of a conceptual change, time series adjustments will generally run to the starting year of the series. At the moment ESA2010 compliant time series are available from 1995 onwards.

3. ASA data sets consistency

Integration of financial and non-financial ASA accounts

In the Netherlands, non-financial and the financial accounts are compiled in one process, in a joint effort by CBS and DNB. The non-financial and the financial accounts are compiled simultaneously within the same iSR database environment.

This combined approach allows for the checking of errors between both types of account, for instance for consistent detection and treatment of super dividends, for which adjustments in both non-financial and financial accounts are required.

One of the indicators used for error detection is the vertical discrepancy, i.e. the difference between net lending/borrowing per sector, B.9 versus B.9F. One of the final steps in the integration process is evaluating the statistical discrepancies caused by inconsistencies between net lending/borrowing per sector. At the end of compilation the statistical discrepancy for the financial corporations sector (S.12) have been completely eliminated through manual and automated adjustments. For the other (sub)sectors statistical discrepancies are not completely eliminated but their size is minimized as far as possible. In case of non-financial corporations and households adjustments are made to make sure that the statistical discrepancy is not larger than a predefined threshold of 4 billion Euros.

Consistency with non-financial QSA data

Consistency between the sector Annual Sector Accounts (ASA) and sector Quarterly Sector Accounts (QSA) is ensured as the QSA is benchmarked on ASA as soon as (updates of) the annual accounts become available. The Annual Sector Accounts are not simply the sum of the Quarterly Sector Accounts estimates. Provisional annual estimates are based on quarterly data sources. However, over time, annual data sources become available and may differ from the sum of the quarterly data sources. The quarterly data are subsequently benchmarked to the annual totals by using quarterly data sources as much as possible. Note that for some sectors data sources are essentially based on quarterly reporting, so in such cases the new annual totals are simply updates of the quarterly data.

Consistency with other data sets

Consistency with main aggregates (table 1 of ESA2010 Transmission Program (TP)) In the Dutch national accounts, consistency is ensured between the annual sector accounts and main aggregates of table 1 of the ESA2010 TP. Relevant transactions from the SUTs are transferred to the sector accounts production environment by using a cross-classification table for industries and institutional sectors, without making further adjustments at macro level in the sector accounts. However, there is also a feedback loop to the SUT. If SUT data leads to implausible results in the sector accounts, SUTs can be adjusted. As sector accounts subsequently use the new SUT data, consistency is always ensured.

Consistency with main aggregates general government (table 2 of ESA2010 TP)
In principle, Sector Accounts and Government Finance Statistics data are fully consistent, and follow the same revision policy, including annual data revisions only once a year (in June). The sector accounts for S.13 general government are compiled as an integral part of Annual and Quarterly Sector Accounts. In general, transactions of the general government remain

unadjusted when applying the balancing machine. However, temporary differences can occur if revisions are made on EMU deficit or debt to be included in the bi-annual EDP notifications and table 2 Main aggregates for the general government. If these differences occur, they are resolved in June as part of the fully integrated and consistent ASA and GFS.

Consistency with BoP data

From 2015 onwards, Dutch Annual and Quarterly Sector Accounts and BoP data are fully consistent. This is one of the main objectives of the collaboration between Statistics Netherlands (CBS) and the Dutch Central Bank (DNB).

During the 2015 benchmark revision a number of issues had to be solved, in order to accommodate the alignment. One important step was splitting the ROW account (S.2) into three, in order to support the (5) functional categories required for the BoP.

- S.2D: Relates to transactions related to Foreign Direct Investment,
- S.2E: transactions related to securities, and
- S.20: Other ROW transactions.

This also required all domestic sectors to make the additional split for counterpart information on ROW in the sector data.

A second step was to have full consistent revision policies, which suited both statistics. See section 5 for details.

A third step was the redesign of the BOP process. For 2015 -2018 BoP data sources are important for both Sector Accounts and BoP. The redesign of the BoP process was to include changes made on the ROW account during the balancing process of Sector Accounts. This means the final ROW data is an input to the BoP, serving as a restrictions to which BoP specifications that are not part of the central balancing system, such as details on geography and foreign subsectors, are aligned.

As a final step, DNB sends CBS a subset of details required for Euro/not-Euro splits in ESA2010 TP Table 8/801, and foreign subsectors to fulfil MUFA-requirements.

BoP-ROW consistency for the time series 1995-2014 is an ambition for the future.

4. Release policy

The Dutch sector accounts are published nationally and internationally.

National publication

Quarterly and annual sector accounts are published on StatLine, the online databank of CBS, in both Dutch and English [6]:

https://opendata.cbs.nl/statline/#/CBS/en/navigatieScherm/thema?themaNr=81966

Sector accounts data are presented in five tables:

- Key data by sector; national accounts
- Current transactions by sectors; National Accounts
- Financial balance sheets and transactions by sectors; national accounts
- Financial instrument: From-whom-to-whom matrices; national accounts
- Sector accounts; seasonally adjusted data; National Accounts

Most tables contain time series from 1995 onwards for both non-financial and financial accounts. The time series of the quarterly data start in 1999Q1 for the non-financial accounts and financial accounts.

The provisional annual estimate is released at June t+1, the final annual estimate at June t+2. Quarterly data are released at t+85 days.

A short note on Sector accounts and metadata is published, but only available in Dutch [7]:

https://www.cbs.nl/nl-nl/onze-diensten/methoden/onderzoeksomschrijvingen/korteonderzoeksbeschrijvingen/sectorrekeningen

Furthermore, additional annual tables and metadata are for National Accounts are published in both English and Dutch in July. The publication also contains metadata and can be found on the CBS-website [8]: National Accounts 2019 (cbs.nl)

In general, the data of the last 6 years are displayed of which the last year is provisional. Sector accounts (non-financial and financial) are presented in the following tables:

- Sector accounts overview table by year;
- Transactions by sector (S.1, S.11, S.12, S.13, S.14, S.15, S.2), including key figures and balancing items
- Financial balance sheets including financial transactions, holding gains/losses and other changes in volume, by sector (S.1, S.11, S.12, S.13, S.1A, S.2);

ESA-2010 transmission program

Data is distributed to Eurostat, as part of the ESA 2010 transmission program. All data in Table 8 (annual data) and Table 801 (quarterly data) are checked and validated by Eurostat.

For annual data (Table 8) mandatory items OTE/OTR and EMP for government are added to core sector accounts data. Two voluntary splits are also available: Dividends / Withdrawals from the income of quasi-corporations, and Social transfers in kind – non-market production/ – purchased market production.

For quarterly data (table 801), all mandatory and voluntary data is provided for in table 801.

After validation data is published on Eurostat's online Database, under the theme economy and finance, National Accounts [9].

Database - Eurostat (europa.eu)

5. Revision policy

Routine revisions

The annual estimation cycle has three estimates, the first two having a provisional character while the third represents the final estimate based on a complete set of annual data sources.

The first estimate of year t is compiled as the sum of the four quarterly estimates of year t and released together with de publication of the fourth quarter in March t+1. In June of t+1 a new estimate of year t is published using updates of quarterly data sources and the first annual data sources. Usually the publication of the final estimate in June of t+2 can be fully based on annual data sources regarding sector accounts specific variables. An exception is SZO (measuring mixed income), for which final data is available only after the final annual estimate in June of t+2.

As an outcome of the intensified collaboration between CBS and DNB, an additional possibility to revise quarterly data was introduced. This allows for additional updates of the previous quarter in September and December. In March, all three previous quarters can be updated in order to gain the best annual estimate possible. In June, revised data on t+2 and t+1 is also published.

Benchmark revisions

From the 2010 benchmark revision onwards, non-financial accounts are benchmarked every 5 or 6 years, following the Harmonized European Revision Policy. Financial accounts and balance sheets are benchmarked annually.

In 2018, the benchmark revision of 2015 was published. The next benchmark revision is set for the year 2021, with publication in 2024.

During a benchmark revision, new level estimates are determined and subsequently time series are compiled. Non-financial and financial annual transactions currently are calculated back to 1995, quarterly data is available from the first quarter of 1999 onwards. All this is in in line with European requirements.

6. Remarks or problems

Four key issues can be identified that are a challenge to the Dutch Sector Accounts.

Renewal data source landscape

In principle all main sectors are covered by direct data sources, sometimes supplemented with counter-section information or estimates. The sector data source landscape is redesigned, in order to serve both Sector accounts and Balance of Payments requirements. In addition, sources containing granular information on securities and loans are building blocks to strengthen the quality of the whom-to-whom relations. New sources are expected to be implemented at the next benchmark revision on 2021.

Reinvested earnings

Some series, notably data on dividend and reinvested earnings, are very much dependent on multinationals. Due to the complexity of these multinationals, not in the least also for those working in the companies themselves, getting the correct data can be a challenge. Any revisions typically are immediately very visible in the overall results. Two initiatives try to address this issue:

- Two separate surveys for non-financial corporations (SFO for sector accounts and one survey specifically for BoP) are replaced by a single survey, serving both data needs.
 The results from the new quarterly SFO, is available from 2019Q1 onwards.
- A project linking macro data from Sector Accounts on S.11 to micro characteristics
 concerning ownership, specifically foreign ownership, allows for far more detailed
 analysis of reinvested earnings. Further research is needed to determine how
 subsectoring can serve as an aid for the compilation of correct levels of reinvested
 earnings.

Special purpose entities

Large revisions are an issue for Special Purpose Entities, as a result of the difficulty for a timely identification of relevant SPEs in a large and volatile population, and once identified, the difficulty for SPEs to provide accurate data. Additionally, the ECB in her medium term strategy wished to receive a data split into its constituents for the OFI sector (currently s125+s126+s127).

A new, quarterly survey is introduced in 2020K1 for SPEs, serving both data needs for Sector Accounts and BoP details, allowing for more quality checks by reporting entity. However, as problems of timely identification and accurate reporting are hard to solve, large revisions might remain a problem in the near future.

Need for a coordinated business register for institutional units

In relation to the SPE issue, a more general population issue is identified. The collaboration between CBS and DNB has led to a clear division of tasks and responsibilities. In order to do so a coordinated business register is required to distinguish, amongst other, non-financial from financial corporation. Such a business register (ABR) is available at the CBS, which provides as

the backbone against which Structural Business Statistics for the SUT are coordinated, based on the NACE-classification. The ABR also includes institutional sector codes, but these codes are not validated by or the starting point for all sources of the sector accounts. In 2018, the department of Government Finance and Consumer Price Statistics has validated S.13 sector codes in the ABR. In 2020, the CBS Business Register department and DNB have started to work on the validation of S.12 sector codes. Furthermore, a project on eliminating inconsistent combinations of NACE and Sector code has been initiated. Also, research is done on the introduction of the institutional unit as a statistical unit in the business register. These initiatives aim at a new coordinating role of the ABR for institutional units.

Consistency issues

The administrative use of Sector Accounts data for the purposes of EDP, GNI and MIP is putting quite some stress on the production processes. The administrative use typically calls for accurate level estimates with revisions and improvements to be implemented as quickly as possible. This may be to the detriment of time series consistency. Any timely adjustment of the time series is putting stress on the available resources and may interfere with the overall revision policy used for the Sector Accounts.

The issue has become even more stringent in the quarterly production planning, where BoP/IIP deadlines (t+82) days are not coordinated with QSA (t+85 days), but more specifically EDP (t+3 months). As a result, temporary differences between QSA/BoP on the one hand and GFS/EDP on the other are more likely to occur more frequently in the future.

7. Future plans

CBS-DNB Cooperation

During the long term CBS-DNB cooperation, quite a number of milestones have been reached. To facilitate all redesigns, DNB has started a large IT-program. The first milestone was a new BoP/IIP process, delivered end of 2019. In the end of 2020, the MER delivered granular data on securities using the new IT system. All effort is now focused on facilitating the full redesign of the DNB survey on S.12 serving both SA and BoP requirements. This survey is expected to come into force mid-2022, after which the redesign of the landscape of sources is complete.

Business register improvements

As a result of the problem mentioned in the previous paragraph, a number of initiatives are in place to improve the quality of the sector codes in the business register (ABR). The Government Finance and Consumer Prices Statistics has validated S.13 sector codes in the ABR. The Business Register department at CBS and the Statistics department at DNB have started to work on the validation of S.12 sector codes. Another initiative focusses on eliminating inconsistent combinations of NACE and Sector code. Also, research is done on introducing the institutional unit as a statistical unit.

Section B - Sector delineation

1. List of the (sub)sectors

In the table below those (sub)sectors distinguished in the Dutch sector accounts compilation process are marked with a cross ('x'). The third column indicates any additional breakdowns of the (sub)sectors and, where relevant, provide further comments. For all sector, consolidated and non-consolidated data are published.

Table 2: Sectors included in the Dutch Sector Accounts integration system (iSR)

X: included in the Dutch Sector Accounts		Additional breakdowns and comments
Non-financial corporations (S.11)	Х	
- Public non-financial corporations (S.11001)		Source data is partially available but not integrated in the sector accounts.
- National private non-financial corporations (S.11002)		Source data is partially available but not integrated in the sector accounts.
- Foreign controlled non-financial corporations (S.11003)		Source data is partially available but not integrated in the sector accounts.
Financial corporations (S.12)	х	meegrated in the sector decounts.
- Central bank (S.121)	Х	
- Deposit-taking corporations (S.122)	х	Separate publication of S.122 and S.123 from June 2021
- Money Market Funds (S.123)	х	Separate publication of S.122 and S.123 from June 2021
- Non-MMF investments funds (S.124)	х	
- Other financial intermediaries, except insurance corporations and pension funds (S.125)	х	Compilation of S.125 and S.126 separately, publication together as "other financial intermediaries"
- Financial auxiliaries (S.126)	х	Compilation of S.125 and S.126 separately publication together as "other financial intermediaries"
- Captive financial institutions and money lenders (S.127)	х	Plus separately, for compilation purposes: S.127A brass plate companies and S.127B other CFI's and moneylenders
- Insurance corporations (S.128)	х	
- Pension funds (S.129)	Х	
- Public financial corporations (S.12x01)		Source data is partially available but not integrated in the sector accounts.
- National private financial corporations (S.12x02)		Source data is partially available but not integrated in the sector accounts.
- Foreign controlled non-financial corporations (S.12x03)		Source data is partially available but not integrated in the sector accounts.
General government (S.13)	Х	
- Central government (S.1311)	x	Plus separately: The State (S.1311A), Universities (S.1311B), Public Corporate Organisations (S.1311C, dissolved in 2015), Other non- profit institutions and organisations (NPIs) controlled and financed by other central government units and having a national function, including public corporations operating on non-market basis (S.1311D).
- State government (S.1312)	-	Not applicable in the Netherlands
- Local government (S.1313)	x	Plus separately: Municipalities, excluding 'quasicorporations' (S.1313A), Local intergovernmental organisations (S.1313B), Provinces (S.1313C), Public Water Boards (S.1313D), Educational institutions (S.1313E), Other non-profit institutions and organisations (NPIs) controlled and financed by other government units and/or having a regional function, including public corporations

X: included in the Dutch Sector Accounts		Additional breakdowns and comments			
		operating on non-market basis (S.1313F).			
- Social security funds (S.1314)	х				
Households and Non-profit institutions serving households (S.14+ S.15)	х	For the period 1995-2011, S.14 and S.15 are combined in the financial account.			
Households (S.14)	х	Satellite account available for income and wealth into household categories, from 2015 onwards, integrating macro and micro statistics.			
- Employers (including own-account workers) (S.141+S.142)		Main source of income: mixed income			
- Others than employers (S.143 + S.144+ S.145)		Main source of income: compensation of employee, old age benefits, other			
Non-profit institutions serving households (S.15)	х	For the period 1995-2011, S.14 and S.15 are combined in the financial account.			
Rest of the world (S.2)	x	Plus separately, for compilation of BoP purposes: S.2D: transactions related to foreign direct investment S.2E: transactions related to securities S.2O: other transactions			

2. Importance of institutional sectors in domestic economy

Following Eurostat guidance for the ASA Inventory, the table 3 below contains information on the employment by sector. The employment is measured according to the domestic concept, measured in full-time equivalence units.

Table 3 Employment by institutional sector, reference year 2018

Sector	Employment (1,000 full-time equivalence units)	Share in total economy (%)
S.11	4,744	62.7%
S.12	182	2.42%
S.13	957	12.9%
S.14+S.15*	1,679	22.2%
Total	7,563	100%

^{*}Data for S.14 and S.15 are not collected separately.

3. Sector allocation of institutional units

Non-financial corporations (S.11)

The non-financial corporations sector includes all (quasi-)corporations which are principally engaged in the production of goods and marketable non-financial services. Basis for the identification of the units in this sector is the General Business Register (ABR) of CBS. The ABR is constructed based on information on companies registered with the Dutch Chamber of Commerce. Registration is obligatory for all corporate and unincorporated businesses.

Unincorporated enterprises are included in sector S.14 households. Quasi corporations with foreign ownership, such as foreign owned real estate and branches are classified according to their activities either as part of S.11 or S.12.

In summary, the non-financial corporations include:

- All corporations, quasi-corporations and co-operative organisations, which do not belong to the financial corporations.
- All non-profit institutions serving households (NPISH) which do not pertain to the S.15 sector as their market revenue exceeds the cost threshold of 50%. Examples are old people's homes, hospitals and housing corporations.
- Public enterprises, which are fully or partly owned by the government but are independent institutional units, like Dutch Railways.

Financial corporations (S.12)

The sector financial corporations consists of all (quasi-)corporations which are principally engaged in intermediation, insurance and financial auxiliary services. Also included are institutional units providing financial services, where most of either their assets or their liabilities are not transacted on open markets. The population of regulated financial institutions such as banks, investment funds, insurers and pension funds is determined by DNB, which is also responsible for most of the S.12 source data collection. From 2020 forward, this also includes the OFI sector S.125/S.126. For data on 2019 and back data some parts of the population are principally based on the business.

General Government (S.13)

The CBS department of Government Finance and Consumer Price Statistics maintains a register of units belonging to the sector general government. Possible (borderline) cases are continuously being examined leading to further improvement of government units register. If necessary, Eurostat is consulted when cases are encountered.

Households (S.14)

The sector households consists of all natural persons who are resident for more than one year in the Netherlands, irrespective of their nationality. If persons engage in unincorporated businesses, whether legal or illegal, their production and value added is classified under the sector households (except in case the company has a legal status of corporation).

A key data source for the production account of households and for the sector delimitation in practice is the Statistics of unincorporated enterprises (SZO) that are derived from tax reporting data of the self-employed obtained from the Dutch Tax Office.

Non-Profit Institutions Serving Household, NPISH (S.15)

The sector non-profit institutions (NPI) serving households consists of foundations and clubs whose resources are principally derived from voluntary contributions from households or from property income. At the start of each benchmark period this group is determined based on the General Business Register supplemented with external information (annual reports).

4. Matrix of industries by (sub)sectors

In the table 4 gross value added (GVA) is cross-classified by industries and institutional sectors. In the Dutch national accounts such reclassification schemes are used to assign all variables (goods and services transactions, value added components, including consumption of fixed capital) estimated within the supply-use framework to institutional sectors. The matrices assure that at macro level supply-use and sector accounts provide identical results.

Table 4 Matrix of industries by (sub)sectors. Data refer to 2018

Mer and	Sectors (in GVA) Percentages of total GVA				Ά	
NACE Rev2	Total	S.11	S.12	S.13	S.14	S.15
01 Crop and animal production, hunting and related service activities	1,8	0,5			1,2	
02 Forestry and logging	0,0	0,0		0,0	0,0	
03 Fishing and aquaculture	0,0	0,0			0,0	
05 Mining of coal and lignite	1,0	1,0			0,0	
06 Extraction of crude petroleum and natural gas	↑	↑			1	
07 Mining of metal ores	1	1			1	
08 Other mining and quarrying	1	1			1	
09 Mining support service activities	1	↑			1	
10 Manufacture of food products	2,3	1,9			0,4	
11 Manufacture of beverages	↑	↑			↑	
12 Manufacture of tobacco products	1	↑			↑	
13 Manufacture of textiles	0,2	0,2			0,0	
14 Manufacture of wearing apparel	↑	↑				
15 Manufacture of leather and related products	↑	↑				
16 Manufacture of wood and of products of wood and cork, except						
furniture; manufacture of articles of straw and plaiting materials	0,2	0,1			0,0	
17 Manufacture of paper and paper products	0,3	0,3			0,0	
18 Printing and reproduction of recorded media	0,2	0,2			0,0	
19 Manufacture of coke and refined petroleum products	0,2	0,2			0,0	
20 Manufacture of chemicals and chemical products	1,7	1,7		0,0	0,0	
21 Manufacture of basic pharmaceutical products and						
pharmaceutical	0,4	0,4			0,0	
Preparations						
22 Manufacture of rubber and plastic products	0,4	0,4			0,0	
23 Manufacture of other non-metallic mineral products	0,3	0,3			0,0	
24 Manufacture of basic metals	0,4	0,3			0,0	
25 Manufacture of fabricated metal products, except machinery and	1,1	1,0			0,1	
Equipment	-,-	1,0			0,1	
26 Manufacture of computer, electronic and optical products	0,7	0,7			0,0	
27 Manufacture of electrical equipment	0,4	0,4			0,0	
28 Manufacture of machinery and equipment n.e.c.	1,7	1,7			0,0	

0,4	0,4			0,0	
0,2	0,2			0,0	
0,8	0,3		0,4	0,1	
1	1		1	1	
0,6	0,5			0,1	
1,2	1,1		0,0	0,1	
0,1	0,1				
0,5	0,4		0,1	0,0	
1	1		1	1	
↑	1		1	↑	
1,6	1,1			0,5	
0,7	0,6			0,1	
2,5	1,7			0,8	
1,3	1,0			0,3	
8,6	8,1			0,4	
3,9	2,9			0,9	
1,8	1,5		0,1	0,2	
0,4	0,3		0,0	0,1	
0,6	0,6			0,0	
1,7	1,4		0,2	0,1	
0,3	0,2			0,0	
2,1	1,3		0,0	0,9	
1	1		1	↑	
0,4	0,4			0,0	
0,3	0,2			0,1	0,0
↑	1			↑	1
1,1	1,1			0,0	
3,1	2,9		0,0	0,3	
↑	1		1	↑	
4,8		4,8	0,0		
1,1		1,1			
0,9		0,8		0,1	
7,3	3,2		0,0	4,1	
5,3	4,4		0,0	0,9	
↑	↑		↑	↑	
1,4	1,2		0,0	0,2	
	0,2 0,8 ↑ 0,6 1,2 0,1 0,5 ↑ ↑ 1,6 0,7 2,5 1,3 8,6 3,9 1,8 0,4 0,6 1,7 0,3 2,1 ↑ 0,4 0,3 ↑ 1,1 3,1 ↑ 4,8 1,1	0,2 0,2 0,8 0,3 ↑ ↑ 0,6 0,5 1,2 1,1 0,1 0,1 0,5 0,4 ↑ ↑ 1,6 1,1 0,7 0,6 2,5 1,7 1,3 1,0 8,6 8,1 3,9 2,9 1,8 1,5 0,4 0,3 0,6 0,6 1,7 1,4 0,3 0,2 2,1 1,3 ↑ ↑ 0,4 0,4 0,3 0,2 2,1 1,3 ↑ ↑ 1,1 1,1 3,1 2,9 ↑ ↑ 4,8 1,1 0,9 7,3 3,2 5,3 4,4 ↑ ↑	0,2 0,2 0,8 0,3 ↑ ↑ ↑ 0,6 0,5 1,2 1,1 0,1 0,1 0,5 0,4 ↑ ↑ ↑ 1,6 1,1 0,7 0,6 2,5 1,7 1,3 1,0 8,6 8,1 3,9 2,9 1,8 1,5 0,4 0,3 0,6 0,6 1,7 1,4 0,3 0,2 2,1 1,3 ↑ ↑ ↑ 0,4 0,4 0,3 0,2 2,1 1,3 ↑ ↑ ↑ 1,1 1,1 3,1 2,9 ↑ ↑ ↑ 4,8 4,8 1,1 1,1 1,1 0,9 0,8 7,3 3,2 5,3 4,4 ↑ ↑ ↑	0,2 0,2 0,4 0,8 0,3 0,4 ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑	0,2 0,2 0,0 0,8 0,3 0,4 0,1 ↑ ↑ ↑ ↑ 0,6 0,5 0,1 0,1 1,2 1,1 0,0 0,1 0,5 0,4 0,1 0,0 ↑ ↑ ↑ ↑ ↑ ↑ ↑ ↑ 1,6 1,1 0,5 0,1 0,7 0,6 0,0 0,1 2,5 1,7 0,8 0,3 1,3 1,0 0,3 0,3 8,6 8,1 0,4 0,4 3,9 2,9 0,9 0,8 1,8 1,5 0,1 0,2 0,4 0,3 0,0 0,1 0,6 0,6 0,0 0,0 1,7 1,4 0,2 0,1 0,3 0,2 0,0 0,9 ↑ ↑ ↑ ↑ 1,1 1,1 1,1 0,0 3,1 2,9 0,0 0,3

72 Scientific research and development	0,3	0,2		0,1	0,0	
73 Advertising and market research	0,5	0,4		0,0	0,1	
74 Other professional, scientific and technical activities	0,5	0,2		0,0	0,3	
75 Veterinary activities	1	↑		1	↑	
77 Rental and leasing activities	1,3	1,2			0,1	
78 Employment activities	3,4	3,3		0,0	0,1	
79 Travel agency, tour operator reservation service and related activities	0,8	0,8		0,0	0,0	
80 Security and investigation activities	1,7	1,2		0,0	0,5	
81 Services to buildings and landscape activities	↑	↑		1	↑	
82 Office administrative, office support and other business support Activities	1	↑		+	↑	
84 Public administration and defence; compulsory social security	7,0			7,0		
85 Education	4,9	0,3		4,3	0,3	
86 Human health activities	4,9	3,6		0,1	1,1	
87 Residential care activities	4,2	3,7		0,2	0,3	0,0
88 Social work activities without accommodation	↑	↑		1	↑	
90 Creative, arts and entertainment activities	0,5	0,2		0,1	0,2	0,0
91 Libraries, archives, museums and other cultural activities	↑	↑		↑	↑	1
92 Gambling and betting activities	0,6	0,5		0,0	0,1	0,1
93 Sports activities and amusement and recreation activities	↑	↑		↑	↑	1
94 Activities of membership organisations	0,5	0,2		0,1	0,0	0,2
95 Repair of computers and personal and household goods	0,1	0,0			0,1	
96 Other personal service activities	0,5	0,1			0,4	
97 Activities of households as employers of domestic personnel	0,1	0,0			0,1	
98 Undifferentiated goods- and services-producing activities of						
private	1				↑	
households for own use						
99 Activities of extraterritorial organisations and bodies	0.0					
Total (Share in %)	100	64,6	6,6	12,8	15,6	0,4
		447685				2838

In the Netherlands, the cross classification is performed on the A64 industries classification as prescribed by Eurostat for the SUT. As table 4 subscribes using the NACE 2 digit for the industries classification, some industries are grouped together. Within such a group, the lowest industry number in the NACE classification shows the data for the entire group. Higher NACE numbers within the same industry grouping are indicated with an arrow pointing upwards towards the total for the overall industry group.

Section C - Data sources

This section provides a list of the main data sources (surveys, register data or administrative information) used for each of the (sub)sectors. The DS.* codes are used when referring to data sources in Section D.

Table 4: List of data sources used in the annual sector accounts

Nr.	Data source name	Data source description	Used for sector(s)*
DS.1	Statistics of finances of large non-financial corporations (SFGO)	Type of source and collection method Survey Population and reporting units The population consists of about 2500 non-financial enterprises. Together these corporations cover about 56% of the production value of S.11. The response to the questionnaire is quite good, namely over 80%. Content and valuation principles Represents the most important source for the annual accounts of the non-financial corporations (SFGO). This survey is based on a questionnaire sent to all non-financial corporations with a minimum balance sheet total of € 40 million. The questionnaire contains the profit and loss account, as well as the complete balance sheet and an extensive breakdown of the mutations in some balance sheet items. In this way, the SFGO gives a consistent view of the current and financial transactions of the corporations involved. In other words, it draws a coherent picture of the current and financial accounts. Responsible organisation CBS Frequency and timeliness	S.11
DS.2	Statistics of finances of small non-financial corporations (SFKO)	This annual survey is available in December of the year t+1. Type of source and collection method The Statistics of finances of small non-financial corporations (SFKO) is based on fiscal data from the corporate taxes information system (VIS), which is supplied by the Tax office Population and reporting units The SFKO consists of around 330.000 corporations that together represent around 37% of the production value of S.11. Content and valuation principles This secondary source contains corporation tax declarations and relates to the fiscal unit (one or more legal entities). The SFKO covers non-financial corporations with a balance sheet total of maximum € 40 million. In principle, VIS information is used to compile the SFKO. However, corporations can postpone their tax declaration for a number of months or even years, so the reports have to be grossed up to cover the whole population The SFKO, as the SFGO does, gives information on balance sheets as well as the profit and loss account. The SFKO however, is less detailed than the SFGO. The SFGO and SFKO together make up the statistics of finances of non-financial enterprises (SFO). Responsible organisation CBS Frequency and timeliness	S.11
DS.3	Statistics of finances of non-financial corporations on quarterly basis (kSFO)	This annual survey is available in February of the year t+2. Type of source and collection method Survey, redesign from 2019Q1 serving both SA and BoP requirements Population and reporting units The sample needs to cover a sufficient area of the SFGO for National Accounts to get a good view of the developments within a quarter, which has led to the criterion that the largest corporations in the SFGO measured	S.11

Nr.	Data source name	Data source description	Used for sector(s)*
		survey is very similar to the annual SFGO, which also uses balance sheet total as criterion for inclusion. By means of single ranking of balance total, the largest 350-380 corporations were chosen top-down to be included in the survey. These corporations represent 60% of the balance sheet total of all non-financial corporations.	
		Content and valuation principles The questionnaire contains the profit and loss account, as well as the complete balance sheet and an extensive breakdown of the mutations in almost all balance items, including those containing foreign relations. In this way, the kSFO gives a consistent view of the current and financial transactions of the corporations involved. In other words, it draws a coherent picture of the current and financial accounts, and BoP/IIP.	
		Responsible organisation CBS	
		Frequency and timeliness	
DS.4	Annual	This quarterly survey is available 60 days after the reference quarter. Type of source and collection method	S.11, S.125,
D3.4	corporate	Secondary information obtained from the annual corporate accounts database.	S.11, 3.123, S.126, S.127, S.1311D, S.1313F
		Population and reporting units	
		Contact and anticotics are in the	
		Content and valuation principles Profit and loss accounts, depending on the applied business accounting principles. The annual corporate reports are used to deconsolidate head offices and non-financial corporations in order to be ESA2010 compliant. Further, this source is used for missing S.12 units.	
		Responsible organisation The accounts are deposited at the Dutch Chamber of Commerce. The statistical data is compiled by CBS.	
		Frequency and timeliness Annual	
DS.5	Authority Housing Corporations	Type of source and collection method Primary/survey.	S.11
		Population and reporting units All housing corporations.	
		Content and valuation principles	
		Profit/loss account containing most required variables on accrual basis. The source from the Authority Housing Corporations provides annual information on housings corporations. These data replace the available corporate tax data.	
		Responsible organisation Authority Housing Corporations	
		Frequency and timeliness Periodicity: Annually; Timeliness: Year t + 2.	
DS.6	Finrep and profit-and-loss	Type of source and collection method Survey (financial reporting statement and profit-and-loss accounts).	S.121; S.122; Indirect
	accounts	Population and reporting units Financial reporting, or Finrep, is a European regulation, which applies to credit institutions. Profit-and-loss account: Twenty biggest banks. Standard Finrep: all other credit institutions Balance sheet and Income Statement	source for S.123 S.14; S.15
		Content and valuation principles There are two Finrep Statements: the profit-and-loss account and Standard Finrep. The profit-and-loss account is reported by the twenty biggest banks (with a market share of 95%) and contains many details of transactions required to compile sector accounts. Standard Finrep is reported by all other credit institutions and only contains main transactions.	

Nr.	Data source name	Data source description	Used for sector(s)*
		Profit-and-loss account includes details on interest, fees and commissions and staff expenses. Interest income and interest expenses are reported on an accrual basis. Dividend income and paid out dividend are not reported on an accrual basis.	
		Responsible organisation The Dutch Central Bank (DNB)	
		Frequency and timeliness Quarterly Finrep Statements are available 40 to 42 working days after the end of each quarter.	
DS.7	SE-reports	Type of source and collection method Primary/Survey	S.122
		Population and reporting units Partial data collection above certain threshold of deposit-taking corporations.	
		Content and valuation principles Balance sheet data.	
		Responsible organisation DNB.	
		Frequency and timeliness Monthly, Quarterly, Annually	
DS.8	DRA (Direct reporting)	Type of source and collection method Primary/Survey, partial data collection above certain threshold	S.124, S.127, S.128, S.129, S.2
		Population and reporting units Reporting units are Special Purpose Entities, Investment Funds, Custodians, Clearing members, Treasury centres, Pension Funds, Insurance companies, Health Care Insurance companies. In addition, DRA includes the balance of payments reporting for banks, OFI's, and Non-Financial Corporations as well as foreign holdings of Dutch securities.	
		The sample size is approximately 80% of total balance, non-optional. Content and valuation principles The main variables are covered. For some breakdowns, additional (supervision) data is being applied. The Valuation principle is accrual.	
		Responsible organisation DNB	
		Frequency and timeliness Periodicity: Monthly, Quarterly, Yearly; Timeliness: t+2 months, t+6 months, T+9, T+15, T+21	
DS.9	Dutch national accounts supply-use tables (SUT)	Type of source and collection method Integrated Statistics based on an array of administrative sources and surveys. Includes Input-Output Tables Population and reporting units	All sectors, SUT based transactions.
		Exhaustive description of production activities based on the CBS business register.	
		Content and valuation principles All P-transactions, D.11-D.3, recorded at accrual basis.	
		Responsible organisation CBS	
		Frequency and timeliness Periodicity is quarterly (t+45, t+90) and annual (t+1, t+2).	
DS.10	Administrative data on State	Type of source and collection method Secondary/Administrative data. The collection method is an integral electronic database.	S.1311A
		Population and reporting units All units concerned.	
		Content and valuation principles All main variables covered based on cash recording (interest is accrual)	

Nr.	Data source name	Data source description	Used for sector(s)*
		Responsible organisation CBS	
		Frequency and timeliness	
		Periodicity is quarterly and annual; Timeliness: of annual data is t+5	
		months.	
DS.11	Education	Type of source and collection method	S.1311B,
	survey	Primary data source based on a survey.	S.1313E
		Population and reporting units Contains complete coverage of all administered entities.	
		Content and valuation principles All main variables covered based on accrual recording.	
		Responsible organisation	
		Organisation collecting data is DUO (which is part of the Ministry of Education).	
		Frequency and timeliness	
		Periodicity: Y; Timeliness: t+12 months	
DS.12	IV3	Type of source and collection method	S.1313A,
	(Information	Administrative/Survey based on administration.	S.1313B,
	for third parties)	Population and reporting units All concerned (Local intergovernmental organisations partly).	S.1313C, S.1313D
		Content and valuation principles All main variables covered.	
		Responsible organisation CBS	
		Frequency and timeliness Periodicity: Q and Y; Timeliness: Y: t+8 months.	
DS.13	NPIGG	Type of source and collection method	S.1311D,
	Accounts	Accounting statements; collecting/downloading official accounts.	S.1313F
		Population and reporting units Most important units concerned.	
		Content and valuation principles	
		All main variables covered on accrual basis.	
		Responsible organisation CBS	
		CBS	
		Frequency and timeliness	
DS.14	Conint annumity	Periodicity is annual; Timeliness: t+6 to 18 months. Type of source and collection method	S.1314
D3.14	Social security funds (SSF)	Accounting statements; Collecting/downloading official accounts.	3.1314
	Accounts	Population and reporting units	
		All important units concerned.	
		Content and valuation principles	
		All main variables covered at accrual basis.	
		Responsible organisation CBS	
		Frequency and timeliness	
		Periodicity is annual; timeliness: t+ 6 to 24 months.	
DS.15	Statistics of	Type of source and collection method	S.14
	unincorporated	Secondary/Administrative based on tax statements.	
	enterprises (SZO)	Population and reporting units All units concerned (integral coverage).	
		Content and valuation principles	
		Reporting of mixed income based on accrual recording. Statements can be	1
		made until t+3.	

Nr.	Data source name	Data source description	Used for sector(s)*
		Responsible organisation Dutch tax authorities.	
		Frequency and timeliness Periodicity is annual; timeliness: t+24 months	
DS.16	Integral Income and Wealth	Type of source and collection method Administrative source	S.14, S.15
	statistics (IIWS)	Population and reporting units Integral dataset from tax authorities for raising tax on income and wealth	
		Content and valuation principles	
		Integral dataset from tax authorities for raising tax on income and wealth. Detailed information on income (wages, interest, dividends etc.) and wealth components (mortgages, financial, bank accounts, securities etc.).	
		Responsible organisation CBS	
		Frequency and timeliness This annual source becomes tentatively available in October T+1, and the definitive version in October t+2.	
DS.17	Household Budget Survey (HBS)	Type of source and collection method Survey	S.14
		Private households	
		Content and valuation principles The Household Budget Survey (HBS) measures the consumption expenditures on the household level. For the household sector this data source is used for certain tax components (dog tax, vehicle tax, etc.). The HBS is held once every 5 years, the last time for the survey year 2015. These data are used and extrapolated to later years using the consumer price index.	
		Responsible organisation CBS	
OS.18	GINPS	Type of source and collection method Survey	S.14, S.15
		Population and reporting units Households, individuals, funds, companies and charity lotteries	
		Content and valuation principles Giving in the Netherlands aims to chart the giving behaviour of households, individuals, funds, companies and charity lotteries. This not only involves monetary contributions, but also the time and effort in the form of volunteer work in many social fields. Income and wealth components are self-reported.	
		Responsible organisation Centre for Philanthropic Studies at VU University Amsterdam	
		Frequency and timeliness Bi-annual, with the exception that in the most recent years funding could not be obtained.	
DS.19	LISS panel	Type of source and collection method The LISS panel is a representative sample of Dutch individuals who participate in monthly internet surveys. The panel is based on a true probability sample of households drawn from the population register. Households that could not otherwise participate are provided with a computer and Internet connection.	Transfers between households S.14 –s.14
		Population and reporting units	

Nr.	Data source name	Data source description	Used for sector(s)*
		Content and valuation principles A longitudinal survey is fielded in the panel every year, covering a large variety of domains including work, education, income, housing, time use, political views, values and personality. The core, longitudinal, study is repeated yearly and is designed to follow changes in the life course and living conditions of the panel members. In addition to the LISS Core Study there is ample room to collect data for different research purposes. This source is used to estimate transfers between households. Responsible organisation	
DS.20	МТО	CentERdata Frequency and timeliness The core, longitudinal, study is repeated yearly. Type of source and collection method Survey	S.14
		Population and reporting units Money Transfer Operators Content and valuation principles Demittances to and from the Netherlands by sountry	
		Remittances to and from the Netherlands by country. **Responsible organisation** DNB	
		Frequency and timeliness Annual	
DS.21	CBF	Type of source and collection method Secondary/Annual reports Population and reporting units	S.15
		More than 1300 charity funds Content and valuation principles The Central Bureau on Fundraising (CBF) gathers financial information from annual reports for more than 1300 charity funds. The database is updated throughout the year; whenever new financial reports are received these are added.	
		Responsible organisation The Central Bureau on Fundraising (CBF) Frequency and timeliness	
		The annual data source is available in January t+2	
DS.22	ISIN Database	Type of source and collection method Secondary/Register Population and reporting units Granular data	D.443
		Content and valuation principles International Securities Database. Securities with which ISINs can be used include debt securities, such as notes or bonds as well as shares, such as common stock or shares of a fund.	
		Responsible organisation DNB Frequency and timeliness	
		- ' '	
DS.23	Investment survey	Type of source and collection method Primary/Survey	P.51G, P51C, S.151
		Population and reporting units A (grossed up) sample of approximately 60,000 establishments in the NACE categories B-N and category S. Sample is based on the business register.	
		Content and valuation principles	

Nr.	Data source name	Data source description	Used for sector(s)*
		Survey on gross fixed capital formation purchased and on own account based on ESA 2010 Guidelines and (mainly material) fixed asset categories.	
		Responsible organisation CBS	
DS.24	Dutch system	Frequency and timeliness Quarterly and annual Type of source and collection method	P.51C, P.52
	of non-financial balance sheets	Integrated statistics. Population and reporting units Accounts with a breakdown by industries and sectors.	
		Content and valuation principles Annual balance sheets and changes in balance sheets for fixed assets, inventories, land, natural gas and crude oil.	
		Responsible organisation CBS	
		Frequency and timeliness Annual	
DS.25	Statistics from the Dutch	Type of source and collection method Primary/Survey, partial data collection	S.128
	Association of Insurers	Population and reporting units Life insurance and non-life insurance corporations.	
		Content and valuation principles Life insurance corporations: number of newly underwritten life insurance policies and the corresponding premiums	
		Non-life insurance corporations (quarterly): number of newly underwritten non-life insurance policies (various branches of non-life insurance) and the corresponding premiums.	
		Non-life insurance corporations (yearly): number of non-life insurance policies underwritten/cancelled/portfolio (various branches of non-life insurance) and the corresponding premiums.	
		Responsible organisation Dutch association of insurers	
		Frequency and timeliness Life insurance corporations: monthly	
		Non-life insurance corporations: quarterly and yearly	
DS.26	Supervisory	Type of source and collection method	S.128, S.129
	data	Primary data source based on reports by insurance companies and pension funds to DNB.	
		Population and reporting units	
		All pension funds and insurance companies supervised by DNB.	
		Content and valuation principles Balance sheets and profit-loss calculations based on actual values. Data are used for certain required breakdowns.	
		Responsible organisation DNB	
		Frequency and timeliness Annual, released about nine months after the period under review.	
D\$.27	Tax data on foreign	Type of source and collection method Secondary/Administrative data	S.14, S.2
	dwellings under ownership of	Population and reporting units Households	
		Content and valuation principles Reported market values of foreign dwellings owned by households	

Nr.	Data source name	Data source description	Used for sector(s)*
	resident households	Responsible organisation Tax Authority	
		Frequency and timeliness Annual, T+2	
DS.28	DigiMV (source of health care institutions)	Type of source and collection method Survey	S.11
	institutionsj	Population and reporting units	
		Groups of enterprises with main activity hospital care, mental healthcare, care for the disabled, nursing home care, home care, residential care for other persons and youth care	
		Content and valuation principles	
		This source includes statistics on income and balance sheet data	
		Responsible organisation CBS	
		Frequency and timeliness	
DS.29	Euronext	Yearly Type of source and collection method	D.421
D3.23	Euronext	Primary	Dividends
		Population and reporting units	
		All Dutch quoted companies.	
		Content and valuation principles	
		All changes in listed shares (new shares, expired shares), price data and dividends	
		Responsible organisation Euronext	
		Frequency and timeliness	
	ļ	Monthly, Quarterly, Yearly	
DS.30	Insurance	Type of source and collection method Primary, full administration	all sectors
	Agency	Population and reporting units	
		Population: full coverage, not a sample	
		Reporting units: Enterprises reporting jobs to the National Tax Office	
		Contents and valuation principles	
		Job status, wages, hours worked. Administrative records employment and social insurance	
		Responsible organisation	
		Employee Insurance Agency	
		Frequency and timelines	
		Monthly, Quarterly, Annual	
DS.31	BAG	Type of source and collection method	all sectors
		Register of addresses and buildings	
		Population and reporting units	
		Population of real estate in the Netherlands Reporting units: real estate owners	

Nr.	Data source name	Data source description	Used for sector(s)*
		Contents and valuation principles	
		Register of addresses and buildings. Characteristics: year of construction,	
		municipality, floor area, capital value, rental or owner occupied	
		Responsible organisation	
		Cadastre	
		Frequency and timelines	
		Monthly	
DS.32	Labour Force	Type of source and collection method	All sectors
Su	Survey	Sample survey	
		Population and reporting units	
		Persons aged 15 years and older in the Netherlands, excluding persons in	
		homes and institutions. The reporting units are persons and households.	
		Contents and valuation principles	
		Information on the relationship between individuals and the labour	
		market. Characteristics of individual persons are connected to their	
		current or future position on the labour market. The labour accounts use	
		this additional source together with DS.15 and DS.30. The labour force	
		survey is important in the determination of self-employed, hours worked	
		(unpaid overtime).	
		Responsible organisation	
		CBS	
		Frequency and timelines	
		Monthly, Quarterly, Annually	
		Montany, Quarterry, Annually	

Section D - Description by transaction

1. Market output (P.11 excluding P.119)

Description of compilation procedures

Resources

Sector S.1

P.11, P.12 and P.13 are estimated by following a three step approach. Firstly, a detailed supply-use table (SUT) is compiled at the level of 143 industries and 617 product groups. Secondly the total for P.1 for sector S.1 taken from the supply-and-use-table is cross-classified into 28 subsectors. Thirdly for each subsector P.1 is subdivided into P.11, P.12 and/or P.13.

The data sources underlying the supply and use-tables are diverse. The GNI Inventory 2015 [4] gives a full description of these data sources. These data sources could be briefly summarised as follows:

- 1. Dedicated industry surveys for agricultural industries and health care industries;
- 2. VAT-data combined with survey data for all manufacturing industries and the main business services industries;
- Various surveys of financial institutions provided by the Dutch Central Bank combined with annual reports;
- 4. Administrative data for government entities combined with annual reports;
- 5. A wide range of supplementary data sources for industries with significant non-profit elements such as sports, leisure, unions, etc. as well as industries and activities for which no direct data sources are available such as owner occupied dwellings and illegal activities.

For the compilation of the annual sector accounts the SUT is taken as the point of departure which is why the above-mentioned data sources are not presented in Table 4. Instead the SUT is taken as the principle data source in Table 4 (**DS.9**). Please refer to chapter 3 of the GNI Inventory 2015 [4] and Annex A GNI Quality Report 2018, version 1.2. Report on A-action points resulting from the GNI information visit to the Netherlands on 6-9 December 2016 [5] for more details on the adjustments made to the various data-sources. For the purpose of this ASA inventory the result of the abovementioned first step (i.e. the availability of P.1 for S.1 including industry detail as well as goods and services details through the supply-and-use-table) is taken as a given.

Sector S.11

P.1 for S.11 is estimated as a residual from P.1 as recorded in the SUT and the P.1 as allocated to the other sectors. P.11 is estimated as a residual from P.1 as estimated for S.11 and the estimate for P.12 for S.11.

Recent research of CBS in cooperation with DNB into statistical units led to several businesses previously considered to be captive financial institutions (CFIs) being transferred to the non-

financial companies sector. This is due in part to a reinterpretation of the European guidelines (ESA 2010). The recommendations of an international 'Holdings and head offices' statistical task force led to refinements of the SNA and the ESA in this area. Some international companies or company units with substantial financial positions (including outside the Netherlands) combine channeling of funds with a degree of non-financial production activity in the Netherlands. In accordance with the task force's more stringent international guidelines, these businesses should be classified as non-financial institutions and not as financial institutions, as was the case hitherto in the Dutch national accounts. This shift means that the definition of production from the respective units has been changed in accordance with the applicable international guidelines from a sum-of-costs approach to a market approach. Since the ancillary activities were now explicitly included in the national accounts, this increases GDP.

Sector S.12

P.1 for S.12 is estimated as P.1 from the SUT NACE-industries 64, 65 and 66 minus the P.1 attributable to S.13 and S.14 from these industries plus any output from other industries attributable to S.12 (currently only head offices from NACE-industry 70 but in the past also a number of lease-activities from NACE-industry 77). P.11 is estimated as a residual from P.1 as estimated for S.12 and the estimates for P.12 for S.12.

In many financial industries households will typically not play a role, both for regulatory reasons as well as simply the risks associated with the activities involved related to intermediating large amounts of funds. The exception to this is the industry performing auxiliary financial services. In the Netherlands, independent entrepreneurs provide various auxiliary financial services, such as advice on mortgages and insurance. Data on the income earned by households in the auxiliary industry is taken from income tax statements provided to the tax authorities. This information on income, as well as on wages paid, is combined with the production structure of this industry from the SUTs to estimate output and intermediate consumption for the household sector. More detail on how this is done is described below as part of the description of S.14.

After the deduction of entities belonging to S.13 and S.14 certain entities are added which are unrelated to the industries dedicated to financial services. Firstly, an adjustment is made for head offices that are part of NACE-industry 70. The amounts concerned are small and are essentially an extrapolation of past estimates. The reason for the small amounts is that for the biggest head offices of financial institutions separate information on the output and costs of these entities is not available. In the Dutch business register some of the largest financial institutions are presented as one entity or a limited number of entities without a distinction between head offices and the various financial institutes they govern. As the amount of wages paid is classified according to the business register, most head offices are essentially part of the industry of the main subsidiary.

Sector S.13

P.1 for S.13 is estimated based on the main sources for government statistics. For SUT P.1 is classified into NACE industries, from which industry 84 Public administration and defense industry 85 Education are the main categories

For specifications on sources and methods for industry 84 and 85 reference is made to the GNI Inventory 2015 [4]. Further information can also be found in the EDP inventory [10].

For other industries, industry data needs to be subtracted from totals of the main data sources to compile the industry classification. For example, the data for social work places are included

in the data for local government and the above mentioned industry survey is therefore principally used for estimating specific details within the local government totals.

P.11 is determined by adding the revenue of a range of activities by the various layers of government. The main sources of revenue are research performed on a contractual basis, real estate rent, parking fees, part of the sales from social work places and revenue from waste collection and disposal. Most of the revenue from market output is received by local governments.

Sector S.14

The production account of the household sector is estimated through various steps. The first step is the estimation of gross mixed income as well as wages payable based on the information taken from the tax authorities on income tax (**DS.15**). By combining this information with the business register the data is allocated to NACE industries. Using the data on the production structure for each NACE industry output is subsequently calculated. This is done by multiplying the value added estimated for households with the ratio of value added to output taken from the SUT (**DS.9**) for each industry. The level of aggregation for industries in this calculation is higher than the available detail in the SUT. The data on households is grouped into 65 separate industries.

Data from the tax authorities have become available since the 2010 revision of the national accounts. To analyse the plausibility of the results, each year an alternative calculation is made for those industries for which data could be estimated using the data from industry surveys and the sector classification that is present in the business register. The use of the tax data was preferred above the calculated data. Firstly, the tax data covered far more industries, including industries that did not have industry surveys with sufficient detail. Secondly, the tax data needed only a limited amount of imputation and grossing up for late tax reporters whereas significant imputation and grossing up was needed to be able to use the survey data.

Although data coverage of the data source is good, four adjustments were needed.

- A. Rental income from real estate is for income tax purpose not treated as income from production activities but income from wealth. Tax statements on wealth do not show actual income received but show an assumed average income that can be taxed. To estimate the amount of rental income households received the total of rental income from the SUTs was allocated to the different owners based on the results of a survey on the rental market. This however was only possible for houses. For estimating rental income from non-house real estate no direct information was available. To estimate the rental income the total value of non-house real estate collected alongside income tax data for households was confronted with the total value of non-house real estate. The rental data for non-house real estate from the SUTs were multiplied by this ratio. By using the production structure of the rental industry from the SUTs intermediate consumption and mixed income was estimated.
- B. Next to actually received rents by housing corporations and 'private' landlords, dwelling services consist of imputed rents for owner occupied dwellings. The latter requires by definition a model approach for which an EU-regulation exists prescribing the requirements for admitted estimation methods. From 2012 onwards administrative data on buildings and dwellings are available (BAG, Register of addresses and buildings (DS.31) providing an overview on the population of real estate in the Netherlands, including characteristics like year of construction, municipality, floor area, capital value, rental or owner occupied. For the benchmark revision of 2015

the BAG (**DS.31**) in combination with the Rental survey is the basis for estimating imputed rents of owner occupied dwellings applying a stratification model as well as actually received rents by housing corporations and 'private' landlords. This includes estimates of rental income from non-house real estate. For a detailed description see par. 3.19 of the GNI Inventory 2015 [4].

- C. Some income is never reported to the tax authorities and therefore needs to be estimated:
 - Some activities earn limited amounts of money and therefore fall below the threshold above which income needs to be reported to the tax authorities.
 - Some income from productive activities will not be reported to prevent having to pay tax.
 - Some income is earned from illegal activities and will therefore not be reported to the tax authorities.

The data sources and methods used are described in the GNI Inventory 2015 [4]. All estimates that have been made for these three items have been allocated to the household sector.

The P.11 is estimated by subtracting P.12 from the P.1 that results from the above mentioned calculation.

Sector S.15

P.1 for S.15 is estimated by allocation of a share of P.1 from industries 59, 60, 88, 90, 91, 93 and 94 taken from the SUT to the S.15-sector. The starting point for this calculation is the consumption by NPISH for the main services provided by these industries taken from the SUTs. The data sources and methods for both are described in the GNI Inventory 2015 [4].

P.11 is determined by industry, and includes among others the sale of tickets and the catering services of NPISH, largely based upon annual reports.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Information on this Transaction is directly obtained from the SUTs and assigned to sectors without further balancing.

Additional details

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2. Financial intermediation services indirectly measured, FISIM (P.119)

Due to its specific technicalities the measurement of FISIM requires a separate chapter apart from Chapter 1 on market output (P.11 excluding P.119). This chapter also discusses the allocation of FISIM (intermediate consumption, consumption, export and import). Further, this chapter discusses the measurement of interest excluding FISIM.

Description of compilation procedures

Uses

Sector S.1

Data for sector S.1 are obtained as sum of all relevant subsectors.

Sector S.11-S.13 and S.15

Intermediate consumption of FISIM (P.2) is calculated on the basis of the ASA financial accounts balance sheets combined with information of market interest rates. Details on applied methods are explained in section 3 of this chapter.

Sector S.14

Intermediate consumption of FISIM (P.2) and final consumption expenditure (P.3) is calculated on the basis of the ASA financial accounts balance sheets combined with information of market interest rates. Details on applied methods are explained in section 3 of this chapter.

Sector S.2

Export of FISIM (P.62) is calculated on the basis of the ASA financial accounts balance sheets combined with information of market interest rates. Details on applied methods are explained in section 3 of this chapter.

Resources

Sector S.1

Data for sector S.1 are obtained as sum of all relevant subsectors.

Sector S.11

Not applicable.

Sector S.12

Output of FISIM (P.119) is calculated on the basis of the ASA financial accounts balance sheets combined with information of market interest rates. Details on applied methods are explained in section 3 of this chapter.

Sectors S.13-S.15

Not applicable.

Sector S.2

Export of FISIM (P.62) is calculated on the basis of the ASA financial accounts balance sheets combined with information of market interest rates. Details on applied methods are explained in section 3 of this chapter..

Balancing adjustments across all sectors

FISIM is calculated using a model which includes a consistent data for both SA dimensions (sectors) and SUT dimensions (industries). No further balancing is required.

Additional details

The following method description is obtained from Den Boer (2014) [11].

CBS calculates the FISIM transactions P.119 (output), P.2B (intermediate consumption), P.31AB (final consumption), P.62B (export), P.72B (import) and P.119C (FISIM correction on D.41A interest). These transactions are determined for each subsector S.11, S.12, S.13, S.14 and S.15. The following issues are discussed below: the reference rate used; corrections for interbank FISIM; the S.14 and S.15 split.

FISIM is subdivided into FISIM on loans *A* (the A from assets) and FISIM on deposits *D*. FISIM on loans is calculated as the interest spread on loans times the stock of loans. FISIM on deposits is the interest spread on deposits times the stock of deposits.

$$FISIM^{t} = FISIM_{A}^{t} + FISIM_{D}^{t} = \sum_{n=1}^{N} p_{An}^{t} q_{An}^{t} + \sum_{n=1}^{N} p_{Dn}^{t} q_{Dn}^{t}$$
(1)

The stocks of loans q_A and deposits q_D are average balance sheet totals. For each type of loan or deposit n the average of the balance sheet totals at the start and the end of period t is taken into account. The interest spread on loans p_A is the difference between the interest rate that banks receive on loans and the reference rate:

$$p_{An}^t = r_{An}^t - r_R^t \tag{2}$$

where r_A is the interest rate on loans and r_R is the reference rate. The interest spread on deposits p_D is usually written as the difference between the reference rate and the interest rate payable by banks to customers on their deposits:

$$p_{Dn}^t = r_R^t - r_{Dn}^t \tag{3}$$

 r_D being the interest rate on deposits.

Reference rate

CBS uses a reference rate that is a weighted average of different reference rates, depending on instrument, maturity and currency. For determining the reference rate the following market rates are used:

- Short-term loans: three-month Euribor;
- Long-term loans: latest ten-year government bonds;
- · Short-term deposits: call money euro area;
- Long-term deposits in euros: three-month Euribor;
- Long-term deposits in other currency: three-month euro-dollar deposits.

Regarding the different currencies, FISIM on deposits is calculated separately for each of the important currency groups euros and other currency (almost entirely consisting of U.S. dollars). It is therefore logical to use the three-month euro-dollar deposits rate for FISIM on deposits in other currency.

The weights used for the weighted average reference rate are the average balance sheet totals of loans and deposits. Only the balance sheet totals that are both assets and liabilities of financial intermediaries (domestic and abroad) are taken into account. So, these balance sheet totals refer to banks/OFIs borrowing from other banks/OFIs or banks/OFIs holding deposits at other banks. The sources of these balance sheet totals are the sector accounts.

Interest rate

The Dutch Central Bank (DNB) publishes interest rates on deposits and loans of households and non-financial corporations (NFC). For the government sector, the 'SE 9008' data (collected by the central bank) gives the profit-and-loss account of banks and provides the amount of interest payments on government loans to monetary financial institutions (MFI). In 2015, the central government subsector paid 0,04 percent on short term loans and 1,22 percent on long term loans. These interest percentages are much lower than the interest rates of NFC, which are respectively 1.85 and 3.13 percent. So, central government could lend at a 'discount' of 1.81 percent on short term loans and 1.91 on long term loans, leading to a relatively low FISIM. No discount has been applied to the interest margins on government deposits. This government discount has been applied to the interest margin of all FISIM producers (S.122, S.125, S.2).

Interbank FISIM

ESA 2010 does not allow the recording of interbank FISIM. The term 'interbank' relates to the user sectors S.122 (Banks), S.125 (OFIs) and part of S.2 (Rest of the world). Subsector S.2 can be divided into financial intermediaries (FI) and non-financial intermediaries (NFI). By convention, the domestic financial intermediaries (S.122 and S.125) and the financial intermediaries abroad (S.2 FI) are no user sectors of FISIM. This means that the balance sheet totals that are both assets and liabilities of these financial intermediaries do not belong to the stocks of loans q_A and deposits q_D . These 'cells' (f.e. Deposits assets S.122 liabilities S.2 FI) are only used to determine the weights for the weighted average reference rate.

The Dutch Central Bank provides detailed information on subsector S.2. This makes it possible to divide subsector S.2 into FI and NFI. Table p119-1 gives the shares of S.2 FI and S.2 NFI in the deposits of S.2 (assets) held by S.122. In table p119-2 the loans of S.122 to S.2 (liabilities) are divided into S.2 FI and S.2 NFI.

Table P.119-1: Interbank deposits, share in closing balance 2015, assets S.2 liabilities S.122 (%)

Transaction	Description	S.2 FI	S.2 NFI
AF.22A	Transferable deposits (euros)	53	47
AF.22B	Transferable deposits (other currencies)	24	76
AF.29AA	Saving accounts (euros)	0	100
AF.29AB	Saving accounts (other currencies)	0	100
AF.29BA	Other deposits (euros)	88	12
AF.29BB	Other deposits (other currencies)	89	11

Table P.119-2: Interbank loans, share in closing balance 2015, assets S.122 liabilities S.2 (%)

Transaction	Description	S.2 FI	S.2 NFI
AF.41B	Short-term consumer credit	0	100
AF.41C	Other short-term loans	48	52
AF.42B	Real estate loans	0	100
AF.42C	Long-term consumer credit	0	100
AF.42D	Other long-term loans	49	51

Source Table P.119-1 and P.119-2: Dutch Central Bank

Saving accounts, consumer credit and real estate loans relate only to households abroad, so they do not involve interbank operations. Export of FISIM on deposits is multiplied with the share of S.2 NFI in deposits to exclude interbank FISIM on deposits. Likewise, export of FISIM on loans is multiplied with the share of S.2 NFI in loans to exclude interbank FISIM on loans. After adjusting the user subsector S.2, the next step is to divide the producer subsector S.2 into S.2 FI and S.2 NFI. This is only done for loans, since deposits are held by financial intermediaries only. Table p119-3 gives the balance shares of S.2 FI and S.2 NFI in other short and long-term loans; in the Netherlands there is no import of consumer credit and real estate loans.

Table P.119-3. Other loans, share in closing balance 2015, assets S.2 liabilities other subsectors (%)

Transaction		AF.41C		AF.42D		
Description		Other short-term		Other long-term loans		
Liabilities		loans				
Subsect			Assets			
or	Description	S.2FI	S.2NFI	S.2FI	S.2NFI	
S.11	Non-financial institutions	62	38	71	29	
S.121	Central bank	100	0	100	0	
S.122	Banks	100	0	80	20	
S.123	Money market funds (MMF)	100	0	100	0	
S.124	Non-MMF investment funds	83	17	87	13	
S.125	Other financial institutions	99	1	91	9	
S.126	Financial auxiliaries	100	0	100	0	
S.127	Captive financial institutions and money					
	lenders	77	23	86	14	
S.128	Insurance corporations	100	0	100	0	
S.129	Pension funds	99	1	100	0	
S.13	Government	100	0	100	0	
S.1A	Households	100	0	100	0	

Source Table P.119-3: Dutch Central Bank

The balance sheet total for subsector S.127 (Captive financial institutions and money lenders) contains mainly Special Purpose Entities (SPEs) which have been added to the calculation of FISIM as from the benchmark revision of 2015. Initially it was assumed that loans to SPEs provided by foreign financial intermediaries consisted of particularly intra-concern loans; by convention, FISIM is not calculated on intra-concern loans. Analysis of source data by the Dutch Central Bank has shown that the greater part of these loans are not intra-concern loans.

Import of FISIM on loans is multiplied with the share of S.2 FI in other loans, since only S.2 FI can produce FISIM. FISIM import to subsectors S.122 and S.125 is set to zero, because interbank FISIM is excluded.

For determining the external reference rate, subsector S.2 must also be divided into S.2 FI and S.2 NFI. Regarding the average balance sheet totals of deposits, the assets of S.2 are multiplied with the balance sheet share of S.2 FI (table p119-1) to get interbank deposits. Likewise, the S.2 liabilities of the average balance sheet totals of loans are multiplied with the balance sheet share of S.2 FI (table p119-2) to get interbank loans. Finally, the S.2 assets of the average balances of loans are multiplied with the balance sheet share of S.2 (table p119-3) to get

interbank loans. The external reference rate is calculated on international interbank loans and deposits.

Division of S.14

Sector S.14 households is divided into consumers, house-owners and unincorporated enterprises. The division of sector S.14 into different subsectors is necessary, because of the distinction between final consumption (consumers) and intermediate consumption (house-owners and unincorporated enterprises). In the Sector Accounts balance sheets are only available for the aggregate S.14. The stocks of mortgages are totally attributed to house-owners. Deposits and other loans are attributed to consumers and unincorporated enterprises, using their share in interest received (respectively 95 and 5 percent) and interest paid (respectively 93 and 7 percent). Assets are divided using data on interest received, liabilities are divided using data on interest paid. The shares are estimated using statistics on labour income and entrepreneurial income and wealth.

Negative FISIM

After many discussions in Task Forces it has been agreed that negative FISIM is possible. The ECB (Colangelo 2012)¹ concludes that "the discussion should not aim at a methodology that excludes negative margins, but rather at a method which can explain negative margins. Such negatives may well reflect the economic reality. For instance, the fact that during the financial crisis (especially after the collapse of Lehman Brothers) many European banks were offering (and still do) deposit rates higher than money market rates to improve their liquidity positions is well known. In addition, this does not mean that banks would necessarily make losses on deposits as in many cases direct charges also apply on deposit accounts."

¹ Colangelo, Antonio (2012), Measuring fisim in the euro area under various choices of reference rate(s), European Central Bank

3. Output produced for own final use (P.12)

Description of compilation procedures

Resources

Sector S.1

Estimates for the total output used for own capital formation and own final consumption expenditure are available from the SUTs (**DS.9**), with the exception of the ESA example of agricultural products retained by farmers. The main data source applied in the SUT is the investment survey covering most industries with market producers. Data on market producers is also available through the SBS production survey. For other industries as well as some specific types of investments (for example R&D and software) various data sources are used and estimates need to be made. More detail is provided in the GNI Inventory 2015 [4]. Industries for which specific estimates are needed include those mainly related to S.12 and S.13.

With regard to output for own capital formation the estimates in the SUT are compiled with breakdowns by industry and the following output categories:

- dwellings;
- buildings other than dwellings;
- other structures;
- transport equipment;
- machinery and installations;
- cultivated biological resources;
- software;
- R&D;
- other.

For sector accounts purposes the total output for own capital formation is taken from the SUT and cross-classified by sectors. After deduction of the specific estimates for S.12, S.13 and S.15, the other sectors are calculated as a residual.

An estimate is available in the SUT for own final consumption expenditure (dwelling services as well as household services produced by employing paid staff) and is implemented without adjustment in the Sector Accounts.

Sector S.11

The total output used for own capital formation is taken from the SUT. After subtraction of the own account capital formation by S.12, S.13 and S.15, the remainder is subdivided over sectors S.11 and S.14 taking full use of the available classifications in the SUT. Total output (P.1) by sector for each industry is used as the distribution key.

Sector S.12

Output for own capital formation is estimated for software and for R&D. Currently no direct data sources are available for these estimates. During the last major revision a level estimate

was compiled using an ICT questionnaire as well as some additional assumptions. The level estimates are extrapolated using indicators.

Sector S.13

Output for own capital formation is estimated for structures, software and R&D. The available information is limited for structures as well as software. During the last major revision a level estimate has been established which has subsequently been extrapolated using indicators. For software this level estimate was based on data of somewhat similar commercial service industries. Slightly more information is available on R&D, mainly done by universities and research institutions, based on annual reports.

Sector S.14

The total output used for own capital formation is taken from the SUT (**DS.9**). After subtraction of the own capital formation by S.12, S.13 and S.15, the remainder is subdivided over Sectors S.11 and S.14 taking full use of the available classifications in the SUT. Total output (P.1) by sector for each industry is used as the distribution key.

For output used for final consumption expenditure initially the data on dwelling services as well as household services produced by employing paid staff is taken from the supply-and-use-table. More detail on sources and methods is provided in the GNI Inventory 2015 [4]. As these two elements can be regarded as a minimum a small mark-up is added to the data to cover these other phenomena such as agricultural products retained by farmers.

Sector S.15

P.12 is determined by assuming that it has a similar development over time as the non-market output (P.13) of S.15. The ratio's relative to non-market output were determined in benchmark year 2010.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Information on this Transaction is directly obtained from the SUTs and assigned to sectors without further balancing.

Additional details

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4. Non-market output (P.13)

Description of compilation procedures

Resources

Sector S.1

The totals for S.1 are the sum of S.13 and S.15 calculations.

Sectors S.11 and S.12

Not applicable.

Sector S.13

The value of P.13 is determined by taking the value of P.1 and subsequently subtracting the values for P.11 and P.12.

Sector S.14

Not applicable.

Sector S.15

The value for P.13 is equal to the consumption of NPISH as found in the supply-and-use-table plus payments for non-market output. Payments for non-market output are assumed to show the same development over time as the other non-market output. Information on how the consumption of NPISH is estimated can be found in the GNI Inventory 2015 [4].

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Data are directly obtained from the SUT without further balancing.

Additional details

5. Intermediate consumption (P.2)

Description of compilation procedures

Uses

Sector S.1

Intermediate consumption of FISIM is discussed in the Chapter on FISIM output (P.119). Reference to P.2 in this chapter means P.2 excluding intermediate consumption of FISIM.

The data sources and methods used to estimate P.2 are similar to P.1. Firstly, a detailed SUT (**DS.9**) is compiled based on 143 industries and 617 goods/services categories. Secondly, the total for P.2 for sector S.1 taken from the SUT is subdivided over the various sectors. In this procedure intermediate consumption of FISIM is kept separate from other intermediate consumption

Please refer to the GNI Inventory 2015 [4] for more details on the adjustments made to the various data sources and the estimates required for missing data items. For the purpose of this ASA inventory the result of the abovementioned first step (i.e. the availability of P.2 excluding FISIM for S.1 including industry detail as well as goods and services details through the SUT) is taken as a given.

Sector S.11

P.2 for S.11 is estimated as a residual from P.2 from the SUT and the P.2 as allocated to the other sectors.

Sector S.12

P.2 for S.12 is estimated as P.2 from the SUT for industries 64, 65 and 66 minus the P.2 attributable to S.13 and S.14 from these industries plus any output from other industries attributable to S.12, currently only head offices from industry 70 but in the past also certain lease-activities from industry 77 as explained in the section on P.11.

Sector S.13

P.2 for S.13 is estimated as P.2 from the SUT for industry 84 and public education from industry 85 plus units from various industries as described in the section on P.11.

Sector S.14

The general description of how the value added and output for S.14 are estimated is provided in the chapter for P.11. To summarize, for a sizable part of the sector, starting point is the income generated by households as well as the wages payable according to tax statements (**DS.15**) after taking into account the adjustment to casualty insurance premiums. The SZO includes a distribution to various industries. The production structure for those industries according to the SUT is used to estimate the rest of the production account for households by industry. The level of aggregation for industries in this calculation is higher than the available detail in the SUT. The data on households is grouped into 65 separate industries.

Intermediate consumption is calculated as a residual from the data on gross mixed income, wages and social contributions, estimated results for output, other taxes on production and other subsidies on production and a separate estimate on the intermediate consumption of FISIM.

In those cases adjustment to the tax data were needed, intermediate consumption was estimated as follows:

- Real estate income other than from owner occupied dwellings: the estimated ratio
 used to assign output to households was also used for the intermediate consumption
 taken from the SUT.
- b) Owner occupied dwellings: the estimated intermediate consumption of owner-occupiers is taken from the SUT (DS.9). Reference is made to a survey of the 'Vereniging Eigen Huis' (Association of Owner-Occupiers), titled 'Grof geld voor onderhoud en verbetering' published in 'Woonpeil', august 201120. This survey distinguishes between the costs of normal maintenance, major repairs and improvements. The latter two items belong to GFCF. The first item concerns expenses to be recorded as intermediate consumptions or as consumption of households. The distinction between these two types of expenses in conformity with the responsibilities of landlords and tenants described above is based on data from the 'Household budget survey' (DS.17) and a commodity flow type approach in the SUT. The estimates for HFCE are based on a mix of the commodity flow method and the 'Household budget survey' and typically include maintenance and repair of dwellings, painting of dwellings and material for the handyman like paint, construction materials. For a detailed description see par. 3.19 of the GNI Inventory 2015 [4].
- c) In the administrative data casualty insurance premiums are treated as costs in full whereas in the National Accounts only the service charge of the insurers should be seen as intermediate consumption. An adjustment to income was made to compensate for this. Some adjustment to compensate for cost fraud are made as well.

Sector S.15

To estimate intermediate consumption, intermediate consumption of FISIM, wages and salaries, social contributions, other taxes on production and other subsidies on production and consumption of fixed capital, which are estimated separately, are subtracted from P.1.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

The data is directly classified to sectors without balancing adjustments.

Additional details

The registration of non-deductible value added tax (VAT) has been changed in the benchmark revision of 2015. This has led to slightly lower amounts of VAT paid by the buyer of goods or services. For 2015, this amounts to 837 million euros. A more detailed description can be found in the GNI Inventory 2015 [4], par. 7.2.3.4.

In the benchmark revision of 2015 the costs of foreign investment funds have been added to the intermediate consumption of Dutch investors. These costs are also visible through an increase in the imports of services P.72 (see section 29).

6. Individual consumption expenditure (P.31)

Description of compilation procedures

Uses

Sector S.1

Data for sector S.1 are obtained as the sum of the S.14 and S.15 sector outcomes. Individual consumption expenditure of both sectors is determined within the SUT (**DS.9**).

Sectors S.11-S.12

Not applicable.

Sector S.13

The general government entities are by definition non-market producers. The recording of their output is first of all SUT based (**DS.9**). The total consumption (P.3) of the sector government is a result of their non-market output (P.132) and the expenditure on products supplied to households via market producers (social transfers in kind, D.632). The non-market production is measured as the sum of production costs: compensation of employees, intermediate consumption, consumption of fixed capital formation and other taxes paid minus other subsidies received. The split of the production costs between collective and individual consumption (D.631) of own output is based on the COFOG classification of the costs.

Sector S.14

Consumption of households (S.14) is directly obtained from the expenditure SUT (**DS.9**), with specific reference to imputed rents. Estimates are mostly based on the household budget survey and retail trade statistics. A detailed methodological description and an explanation of used sources are found in Chapter 5 of the GNI Inventory 2015 [4].

Sector S.15

Consumption of non-profit institutions serving households (S.15) is directly obtained from the SUT (**DS.9**), with specific reference to the non-market production activities in the areas of motion picture and music creation, social work, arts and entertainment, sports, recreational activities and the activities of membership organisations. Estimates are mostly based on extrapolations and models. Further details are found in Chapter 5 of the GNI Inventory 2015 [4].

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Balancing is carried out in the SUT framework leading to consistent GDP data from a production, income and expenditure perspective. No further adjustments are made in the context of adopting this information in the Annual Sector Accounts.

Additional details

The registration of non-deductible value added tax (VAT) has been changed in the benchmark revision of 2015. This has led to slightly lower amounts of VAT paid by the buyer of goods or services. For 2015, this amounts to 484 million euros for households consumption. A more detailed description can be found in the GNI Inventory 2015 [4], par. 7.2.3.4.

7. Collective consumption expenditure (P.32)

Description of compilation procedures

Uses

Sector S.1

This transaction only applies to the general government sector (S.13.

Sector S.13

The general government entities are by definition non-market producers. The recording of their output is first of all SUT based (**DS.9**). The total consumption (P.3) of the sector government is a result of their non-market output (P.132) and the expenditure on products supplied to households via market producers (social transfers in kind, D.632). The non-market production is measured as the sum of production costs: compensation of employees, intermediate consumption, consumption of fixed capital formation and other taxes paid minus other subsidies received. The split of the production costs between collective and individual consumption (D.631) of own output is based on the COFOG classification of the costs.

Balancing adjustments across all sectors

Balancing is carried out in the SUT framework leading to consistent GDP data from a production, income and expenditure perspective. No further adjustments are made in the context of adopting this information in the annual sector accounts.

Additional details

8. Gross fixed capital formation (P.51)

Description of compilation procedures

Uses

Sector S.1

Data for sector S.1 are obtained as sum of all relevant subsectors.

Total gross fixed capital formation in the Netherlands is determined within the SUT (**DS.9**). A detailed methodological description and used sources is found in Chapter 5 of the GNI Inventory 2015 [4]. In a subsequent step, the fixed capital formation 'column' in the use table is cross classified by investing industries, partly based on the investment survey (**DS.23**). This work is done as part of the Dutch system of non-financial balance sheets (**DS.24**). For sector accounts this table is cross-classified from industries to institutional sectors without further modifications. This reclassification is briefly described below.

Sector S.11, S.14

After total investment in fixed capital in the use table has been allocated to industries, data from S.12, S.13 and S.15 allocated to industries is subtracted. The remainder is allocated to S.11 and S.14 using P.1 by industry as determined earlier as a distribution key.

For some industries specific allocations are made. Investments in trains are fully allocated to non-financial corporations. For investment in new housing a specific estimate is made for investment done by non-financial corporations with the residual being allocated to households. An estimate is also compiled for net sales of existing real estate from non-financial corporations to households.

In 2015 a Dutch-domiciled unit of a large international company purchased €22 billion of intellectual property from outside the Netherlands. A more detailed investigation as part of the 2015 revision shows that this mainly comprised R&D purchases rather than purchases of non-produced assets (brand names) as had been determined on the basis of earlier information. In accordance with the applicable international guidelines this led to a sharp upward adjustment to investments and imports of services in 2015 after the revision. This transaction caused an incidental upward jolt to both figures in 2015.

Sector S.12

Estimates are based on Finrep and profit-and-loss accounts (**DS.6**), and SE-reports (**DS.7**), for MFI's and DRA, direct reporting (**DS.8**) for all other financial corporations.

Sector S.13

Estimates are based on Administration of the State (**DS.10**), Education survey (**DS.11**), IV3 (Information for third parties) (**DS.12**), NPIGG Accounts (**DS.13**) and SSF Accounts (**DS.14**). As from the benchmark revision of 2015, the costs of investments through public-private partnerships, such as highways and buildings, are entered from the inception of the project to the end of the construction phase. The previous practice was that the costs were only entered at the end of the construction phase.

Sector S.15

Estimates are based on the investment survey (DS.23)

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Balancing is carried out in the SUT framework leading to consistent GDP data from a production, income and expenditure perspective.

Additional details

As from the benchmark revision of 2015 decommissioning costs for drilling platforms and nuclear power plants are included in investments.

9. Changes in inventory (P.52)

Description of compilation procedures

Uses

Sector S.1

Changes in inventory are determined within the system of national non-financial balance sheets of the Netherlands (**DS.24**). Subsequently the flows are balanced in the SUT with the balanced totals inserted back in the non-financial balance sheets. A detailed methodological description and used sources is found in the discussion paper (2009) by Taminiau-van Veen et al. [12]

Three kinds of inventories are being distinguished:

- finished products and work in progress;
- basic and ancillary materials;
- goods for resale.

The non-financial balance sheets for these three categories of inventories provide information on opening and closing balance sheets and all changes in balance sheets including P.52. Information for the sector accounts is directly obtained from the non-financial balance sheets without further modification. Changes in inventories from the non-financial balance sheets in turn are derived from data form the SUT.

As from the benchmark revision 2015 changes in strategic (petroleum) reserves are included in the change in inventories.

See par. 2.2 Annex A GNI Quality Report 2018, version 1.2. Report on A-action points resulting from the GNI information visit to the Netherlands on 6-9 December 2016 [5] for the method used to exclude holding gains and losses from the changes in inventories.

Sector S.11, S,13, S.14

For S.13 (**DS.10-DS.14**) data sources are used to determine P.52. Changes in inventories are allocated between S.11 and S.14 using P.1 as a distribution key after subtraction of known changes in inventories of S.13.

Sector S.12, S.15

Changes in inventories are assumed to be negligible unless specific information is available.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

No balancing is needed.

Additional details

10. Acquisition less disposables of valuables (P.53)

Description of compilation procedures

Uses

Sector S.1, S.11-S.15 and S.2

Acquisition less disposables of valuables (P.53) is determined within the supply-use table framework (**DS.9**) and includes the following items: works of art (AN.132), jewelry (AN.133), coins (AN.131)), non-monetary gold (AN.131) and stamps, museum exhibits and securities (all three as antiques) (AN.132). Further details are found in the GNI Inventory 2015 [4].

For S.12 (**DS.6-DS.8**) and S.13 (**DS.10-DS.14**) data sources are used to determine P.53. The allocation to S.11, S.14 and S.15 is determined by way of fixed ratios based on expert guesses.

Balancing adjustments across all sectors

Balancing is carried out in the SUT framework leading to consistent GDP data from a production, income and expenditure perspective.

Additional details

11. Export of goods (P.61)

Description of compilation procedures

Sector S.1

Not applicable.

Sector S.2

The export of goods P.61 is determined within the supply-use table framework (**DS.9**). A detailed description of the export of goods is provided in the GNI Inventory 2015 [4], par. 5.14. Foreign trade statistics are the major source for data on imports and exports of goods in the national accounts. They are compiled by the department for Business Statistics.

The total estimate for export of goods, which is estimated in four categories 'exports of domestic production to the European Union', 'exports of domestic production products to third countries', '(re-)exports of imports to the European Union (re-exports)', '(re-)exports of imports to third countries (re-exports)' is subsequently balanced within the SUT where it is confronted with output statistics among others.

Balancing adjustments across all sectors

Exports of goods are integrated in the SUT. Data are without further adjustments incorporated in the sector accounts.

Additional detail

12. Export of services (P.62)

Description of compilation procedures

Sector S.1

Not applicable.

Sector S.2

The export of services P.62 is determined within the supply-use table framework (**DS.9**). Export of FISIM is discussed in the chapter on output of FISIM (P.119). This chapter discusses all P.62 with the exception of FISIM. A detailed description of the export of services is provided in the GNI Inventory 2015 [4], par. 5.15. The main source for the imports and exports of services in the SUT is the quarterly International Trade in Services statistic (ITS) compiled by Statistics Netherlands. For the compilation of this statistic several sources are used. The most important source is the ITS-survey conducted by Statistics Netherlands. Next to this survey, for a number of services not (completely) covered in the ITS-survey several sources are combined.

Balancing adjustments across all sectors

Exports of services are integrated in the SUT. Data are without further adjustments incorporated in the sector accounts.

Additional detail

The registration of non-deductible value added tax (VAT) has been changed in the benchmark revision of 2015. From then on the VAT is adjusted because tourists in the Netherlands from outside of the EU do not pay VAT or can get a VAT-refund on some of their purchases that they take home in their personal luggage. For 2015, this amounts to 52 million euros. A more detailed description can be found in the GNI Inventory 2015 [4], par. 7.2.3.4.

13. Imports of goods (P.71) and services (P.72)

Description of compilation procedures

Sector S.2

The import of goods P.71 and services P.72 is determined within the supply-use table framework (**DS.9**).

A detailed description of the import of goods is provided in the GNI Inventory 2015 [4], par. 5.14. Foreign trade statistics are the major source for data on imports and exports of goods in the national accounts. They are compiled by the department of Business Statistics at Statistics Netherlands.

A detailed description of the import of services is provided in the GNI Inventory 2015 [4], par. 5.15. The main source for the imports and exports of services in the SUT is the quarterly International Trade in Services statistic (ITS) compiled by Statistics Netherlands. For the compilation of this statistic several sources are used. The most important source is the ITS-survey conducted by Statistics Netherlands. Next to this survey, for a number of services not (completely) covered in the ITS-survey several sources are combined.

The total of import of goods, which is estimated in two categories 'imports from the EU', 'imports from non EU countries' is subsequently balanced within the SUT where it is confronted with output statistics among others.

Balancing adjustments across all sectors

Balancing occurs within the SUT and without further adjustments incorporated in the annual sector accounts.

Additional details

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14. Wages and salaries (D.11)

Description of compilation procedures

Uses

Sector S.1

In the Dutch system of national accounts the wages and salaries are compiled in close connection with the labour accounts and SUT. The SUT is used as the integrated framework leading to consistent income based GDP measures including wages and salaries. The primary source of D.11 for the sector accounts is the SUT (**DS.9**).

The prime data source for estimating paid wages by Dutch employers are the monthly data from the Employee Insurance Agency (**DS.30**). From 2006 onwards companies are legally obliged to report to the tax authorities on a monthly basis every individual payment to every employee. By combining this data to the business register a complete overview is available for all paid wages and salaries by industry. For statistical purposes the data requires a number of further enhancements. For example, in administrative records payments for sick leave are treated as wages whereas in National Accounts it is treated as a social contribution. Additional adjustments are needed for wages in kind and illegal activities. More detail is provided in the GNI Inventory 2015 [4]. For the purpose of this inventory the availability of paid wages subdivided over industries as available in the SUT is taken as a given.

Sector S.11

The wages payable are determined as the residual from the total paid wages in the Netherlands minus wages payable by all other domestic sectors.

Sector S.12

D.11 for S.12 is obtained from the SUT NACE-industries 64, 65 and 66 minus the D.11 attributable to S.13 and S.14 from these industries plus any paid wages from other industries attributable to S.12, currently only head offices from NACE-industry 70 but in the past also certain lease-activities from NACE-industry 77.

As explained in the section on P.11, the main adjustment here is the allocation of wages from the financial sector to the household sector in their role as producer of auxiliary financial services. The estimate for paid wages by households in the financial industry is based on the data of the income tax authorities as explained below in the description of S.14.

Sector S.13

D.11 for S.13 is estimated as D.11 from the supply-and-use-table for industry 84 and public education from industry 85 plus units from various industries as mentioned in the section on P.11.

Sector S.14

As part of the dataset on gross income generated by household producers based on income tax data (**DS.15**), data is also available on labour costs paid by household producers. By using the business register, the data is allocated to industries.

From the data no split is available between wages and salaries on the one hand and social contributions on the other. However, such a split by industry is available from the data of

Employee Insurance Agency as implemented in the SUT. Wages paid by households are separated from social contributions by using the available ratio by industry to the total of labour costs as paid by households by industry. The level of aggregation for industries in this calculation is higher than the available detail in SUT. The data on households is grouped into 65 separate industries.

As explained under the section P.11 some adjustments to the tax data on gross income are needed for reasons of exhaustiveness and National Accounts concepts, e.g. wages in kind. This is less relevant for paid wages as it mostly concerns activities that do not involve employees. Nevertheless, in some cases the use of salaried workers in unreported activities can be assumed. Some employees may also work for owners of real estate as domestic personnel. For these cases paid wages have been estimated and added to the data from the tax authorities.

Sector S.15

Wages and salaries by industry are determined by using the industry totals of wages and salaries as a ratio of production, and combine that ratio with the output determined by industry.

Sector S.2

As from the 2015 benchmark revisions, the source for resident employees working abroad is the Integral Income and Wealth statistic (IVWS, **DS.16**), based on the administrative integral dataset on income and wealth of the tax authorities.

Resources

Sector S.1

The labour register data as incorporated in the labour accounts and SUT provide full coverage of wages payable to resident and non-resident workers.

Sectors S.11-S.13

Not applicable.

Sector S.14

The wages and salaries receivable by households are the residual of all payable wages by Dutch and foreign employers after subtraction of paid wages to foreign based employees.

Sector S.15

Not applicable.

Sector S.2

The tax register of Dutch employees as maintained by the Employee Insurance Agency has information on the wages of non-resident employees which are employed by resident entities. Non-resident workers can be identified by matching all employees in the tax register with the Government Resident Administration. Those employees not found in the Resident Administration are considered as non-resident. Data on cross-border workers is not exchanged with neighboring countries. No adjustments are made for foreign employees working at Dutch embassies and military basis as the amounts are likely to be of minor significance.

Balancing adjustments across all sectors

The wages and salaries receivable by households are the residual of all payable wages by Dutch and foreign employers after subtraction of paid wages to foreign based employees.

Additional details

15. Employers' social contributions (D.12)

Description of compilation procedures

Uses

Sector S.1

Employers' social contributions consist of employers' contributions to pension schemes, contributions for social security like health and unemployment and imputed contributions. To compile total employers' social contributions for compilation purposes a split is made into:

D.1211 Employers' actual pension contributions

D.1212 Employers' actual non-pension contributions

D.1221 Employers' imputed pension contributions

D.1222 Employers' imputed non-pension contributions

To compile D.12 by sector a three step approach is used. Firstly estimates are compiled for these four transactions for the total of all employers. The second step is to compile total social contributions by industry. As a final step the estimates are converted into sectors.

D.1211 Employers' actual pension contributions

The estimates for employers' contributions to pension schemes are derived from source data collected by the Dutch Central Bank (**DS.8**, **DS.26**). The observed pension contributions to pension funds and collective life insurance is a fixed starting point. In the labour accounts an estimate is made for the employee's part of pension contributions using administrative data on wages (**DS.30**) in combination with some modelling. In general the labour accounts estimates for the employee's part are leading, so that the employers' part is the remaining part to match the total contributions from the Central Bank data. Small adjustments are made for contributions paid by nonresidents to resident pension funds and vice versa.

As a final step, an amount for pre-pension schemes is added which is estimated using annual reports of pre-pension funds. Within the framework of the labour accounts the employee's part is estimated based on administrative data. For pre-pension contributions it is assumed that cross border transactions do not exist.

D.1212 Employers' actual non-pension contributions

For social insurance contributions two data sources are available. On the one hand information from tax authorities on social contributions paid are available (**DS.16**). On the other hand data are available from the institutions actually executing the concerning acts (**DS.30**). The tax data are in principle leading but the two sources are checked for inconsistencies.

D.1221 Employers' imputed pension contributions

Supervisory data (**DS.26**) provide detailed information on pension contributions (actuarial needed premium, actual paid premiums etc.). For each corporate pension fund with a defined benefit plan under supervision, the surplus/shortage of the actual premiums minus the actuarial needed premiums is calculated. For a methodological description reference is made to transaction **D.6121**.

Data source (**DS.10**) provides figures on directly paid military pensions. These figures become increasingly insignificant, as newly hired military staff build up pension in the Government pension fund (ABP).

D.1222 Employers' imputed non-pension contributions

Imputed social contributions consist mainly of payments during sick leave, pregnancy and birth, based on labour accounts data from the employee insurance agency (**DS.30**). Military pensions and government pre-pension schemes latter from administrative data of the government (**DS.10-14**).

Calculations of employers' social contributions on the industry level are compiled by combining the monthly micro-datasets on jobs from the Employee Insurance Agency (**DS.30**) with data from the business register. These calculations are recorded and integrated in the SUT (**DS.9**). The data is subsequently aligned to the totals for all employers as described above.

The data are converted into sectors as follows.

Sector S.11

The paid employers' social contributions by non-financial corporations are estimated as the residual from the total paid employers' social contributions in the Netherlands and the paid employers' social contributions by all other domestic sectors.

Sector S.12

The paid employers' social contributions by financial corporations are estimated by SUT NACE-industries 64, 65 and 66, minus the D.12 attributable to S.13 and S.14 from these industries, plus any paid employers' social contributions from other industries attributable to S.12, currently only head offices from NACE-industry 70 but in the past also some lease-activities from NACE-industry 77.

As explained in the section on P.11 the main adjustment here is the allocation of employers' social contributions from the financial sector to the household sector in their role as producer of auxiliary financial services.

Sector S.13

Paid employers' social contributions by General government is estimated as D.12 from the SUT for industry 84 and public education from industry 85 plus units from various industries as mentioned in the section on P.11.

Sector S.14

As part of the dataset on gross income generated by household producers based on income tax data (**DS.15**), data is also available on labour costs paid by household producers. By using the business register the data can be allocated to industries.

From the data no separation can be made between wages and salaries on the one hand and social contributions on the other. However, such a split by industry is available from the data of Employee Insurance Agency (**DS.30**) as implemented in the SUT (**DS.9**). Wages paid by households are separated from social contributions by using the available ratio by industry to the total of labour costs as paid by households by industry. The level of aggregation for industries in this calculation is higher than the available detail in the SUT. The data on households is grouped into 65 separate industries.

As explained under the section P.11 a few adjustments to the tax data on gross income are needed for reasons of exhaustiveness and national accounts concepts. This is of limited relevance for paid employers' social contributions as it mostly concerns activities that do not involve employees. When employees are involved it is mainly of the unregistered kind for which no employers' social contributions will be paid. Small adjustments are made for employees working for owners of real estate and for employees working for households in their role as employers of domestic personnel.

Sector S.15

Employers' social contributions are determined by using the industry totals of employers' social contributions as a ratio of production, and combine that ratio with the output determined by industry.

Sector S.2

As from the 2015 benchmark revisions, the source for resident employees working abroad is the Integral Income and Wealth statistic (IVWS, **DS.16**), based on the administrative integral dataset on income and wealth of the tax authorities.

Resources

Sector S.1

D.12 resources only apply to S.14 households

Sector S.14

The employers' social contributions received by households are the residual of all paid employers' social contributions by Dutch and foreign employers after subtraction of paid employers' social contributions to foreign based employees. Information is extracted from the SUT (**DS.9**).

Sector S.2

The tax register of Dutch employees as maintained by the Employee Insurance Agency has information on the employers' social contributions of non-resident employees which are employed by resident entities. Non-resident workers can be identified by matching all employees in the tax register with the Government Resident Administration. Those employees registered as living outside the Netherlands or not found in the Resident Administration are considered as non-resident. With regard to pension contributions paid by non-resident employees data is used from Dutch insurers and pension funds.

Data on cross-border workers is not exchanged with neighboring countries. No adjustments are made for foreign employees working at Dutch embassies and military basis as the amounts are likely to be of minor significance.

Balancing adjustments across all sectors

The employers' social contributions received by households are the residual of all paid employers' social contributions by Dutch and foreign employers after subtraction of paid employers' social contributions to foreign based employees.

Additional details

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16. Value added type taxes, VAT (D.211)

Description of compilation procedures

Uses

Not applicable

Resources

Sector S.1

D.211 resources only applies to sector S.13 General government

Sector S.13

The data for the value added tax are obtained from the State's Tax Authority as part of **DS.10**, administration of the State, on a quarterly basis. The quarterly data contains a split of VAT-taxes relating to the current year and the year before. For the final estimate (T+2) all information is available to calculate accrual based VAT tax. For preliminary annual estimates (T+1), time adjustment is only made for the first quarter.

No further adjustments are made.

Balancing adjustments across all sectors

Two estimates are available for the VAT, the theoretical VAT that is estimated by applying the VAT-rates to all concerning transactions and the (accrual) VAT that is actually received by the government. In order to align the final VAT-estimates in the SUT tables (**DS.9**) with the government data (**DS.10**) a two-step approach applied. First, the theoretical VAT is estimated in the SUT. In the second step, adjustments are made to align this estimate with the government receipts. The time adjusted VAT data from the State's Tax Authority are incorporated in the sector accounts without further adjustments.

Additional details

As from the benchmark revision 2015 the difference in imputed and received VAT is resolved. Non-deductible Value Added Tax (VAT) is included as a separate 'product group' in the supply and use tables (SUT): this concerns non-deductible VAT on purchases by households, enterprises on fixed capital formation and intermediate consumption linked to VAT-exempted activities. The main examples are government, banking, insurance and health services. VAT paid on inputs for the production of exempted goods and services from VAT cannot be deducted.

If applicable the actual VAT rate is applied to each individual transaction for estimating VAT for households and industries. The calculation of VAT is carried out on the highest level of detail (products and industries) available in the SUT. For the calculation with industries, the share of exempted goods and services in total output is determined first. Assuming that for the tax-exempt output within an industry the same intermediate inputs are used as for the taxable output, VAT can be compiled by multiplying the intermediate consumption with the VAT rate and the exemption fraction for every separate product group. The sum over all product groups is the total non-deductible VAT for the concerning industry.

Example

Total output of industry X is 10,000. The output of this industry includes a number product groups which are exempted from VAT. Production of these services is worth 2 000, giving an exemption ratio of 2,000/10,000 = 0.2.

Total intermediate consumption of industry 8 000 of which 1 000 is subject to the reduced VAT-rate (6 per cent) and 4 000 to the standard VAT-rate (19 per cent). This gives VAT payments of 1,000 * 6% + 4,000 * 19% = 820.

820 * 0.2 (= exemption ratio) = 164 relates to the provision of VAT-exempted product groups.

Non-deductible VAT of this industry amounts 164.

In the Dutch supply and use tables, VAT is calculated on taxed transactions irrespective whether it concerns 'white' or hidden economy. Only sales of products that are in all circumstances illegal (for example sales of cannabis or cocaine, which is always illegal as opposed to for example prostitution) are not included, as the VAT rate for these products is zero. This implies that in this calculation of theoretical VAT, the VAT not being transferred to tax authorities is included. Therefore the actual VAT-receipts by the government are lower than the theoretical VAT. For the benchmark year 2015, this VAT gap amounts to 1618 million euros.

17. Import duties (D.2121)

Description of compilation procedures

Uses

Not applicable

Resources

Sector S.2

Sector S.2 is the only relevant sector for D.2121. Import duties are imposed by the European Union, and levied by the EU-member states on behalf of the EU. The total value of import duties collected by the Dutch government is derived from the tax authority (part of **DS.10** Administration of the State). To comply with the ESA accrual recording the one month time adjusted cash method is applied to the import duties cash receipts. The value contains the import duties paid for by residents and non-residents. To estimate the value paid for by residents, the import rates by type of commodity group and the value of import extra-EU excluding transit trade are used. To estimate the value of import duties paid for by non-residents, the import rates by type of commodity group and the value of transit trade extra-EU are used. The sum of the estimated value of import duties paid for by residents and non-resident are then calibrated to match the total value of import duties collected by the Dutch government.

Only the import duties paid by Dutch residents are part of the Dutch national accounts.

Balancing adjustments across all sectors

Data are obtained from the SUT (**DS.9**) and without further adjustments incorporated in the sector accounts.

Additional details

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18. Taxes on imports excluding VAT and duties (D.2122)

Description of compilation procedures

Uses

Not applicable

Resources

Sector S.1

D.2122 resources only apply to sector S.13 General government.

Sector S.13

The State's Tax Authority (part of **DS.10** Administration of the State) only provides the total of the taxes on imports, excluding VAT and import duties (D.2122) and the taxes on products, except VAT and import taxes (D.214). The sum of D.2122+D.214 is available for the different tax categories. The revenues of the Tax Authority are cash based. To comply with the ESA accrual recording the one month time adjusted cash method is applied to the cash receipts of the different taxes categories. For each separate tax the accrual total of D.2122+D.214 is provided to the SUT by the government accounts.

In SUT the split is made for every D.2122+D.214 tax category separately, based on information provided in the foreign trade statistics. For the use of every type of commodity, group information is available on the value of imported or domestic produced commodity.

To obtain the split in D.2122 (the taxes on imports, excluding VAT and import duties and D.214 (the taxes on products, except VAT and import taxes) the import/domestic ratio of the commodity value is applied to the D.2122+D.214 total of the relevant tax category.

For example the excise duties on gas are split in D.2122 (import) and D.214 (domestic production) according to the value of imported or domestic produced gas.

Sector S.2

The agricultural levies are imposed by the European Union and levied by the EU-member states on behalf of the EU. Information for the SUT about the Dutch payments of the agricultural levies is obtained by the Ministry of Economic Affairs, Agriculture and Innovation. Accrual adjustments are applied to these cash based data. As for the State's Tax Authority data, no split in D.2122 and D.214 is provided. The split in D.2122 and D.214 is made applying the same method as described for the sector S.13 data. In 2016 the super levies on raw milk are lifted as a consequence of the cancelled restrictions on milk production.

Balancing adjustments across all sectors

The D.2122/D.214 split in SUT must comply with the sector S.13 total of D.2122+D.214.

Additional details

19. Taxes on products, except VAT and import taxes (D.214)

Description of compilation procedures

Uses

Not applicable

Resources

Sector S.1

D.214 resources only applies to sector S.13 General government.

Sector S.13

The State's Tax Authority (part of **DS.10** Administration of the State) only provides the total of the taxes on imports, excluding VAT and import duties (D.2122) and the taxes on products, except VAT and import taxes (D.214). The sum of D.2122+D.214 is available for the different tax categories. The revenues as obtained from the Tax Authority are cash based. To comply with the ESA accrual recording the one month time adjusted cash method is applied to the cash receipts of the different taxes categories. For each separate tax the accrual total of D.2122+D.214 is provided to the SUT by the government accounts.

In the SUT the split is made for every D.2122+D.214 tax category separately, based on information provided in the foreign trade statistics. For the use of every type of commodity, group information is available on the value of imported or domestic produced commodity.

To obtain the split in D.2122 (the taxes on imports, excluding VAT and import duties and D.214 (the taxes on products, except VAT and import taxes) the import/domestic ratio of the commodity value is applied to the D.2122+D.214 total of the relevant tax category.

For example the excise duties on gas are split in D.2122 (import) and D.214 (domestic production) according to the value of imported or domestic produced gas.

Sector S.2

The agricultural levies are imposed by the European Union and levied by the EU-member states on behalf of the EU. Information for the SUT about the Dutch payments of the agricultural levies is obtained by the Ministry of Economic Affairs, Agriculture and Innovation. Accrual adjustments are applied to these cash based data. As for the State's Tax Authority data no split in D.2122 and D.214 is provided. The split in D.2122 and D.214 is made applying the same method as described for the sector S.13 data. In 2016 the super levies on raw milk are lifted as a consequence of the cancelled restrictions on milk production.

Balancing adjustments across all sectors

The D.2122/D.214 split in SUT must comply with the sector S.13 total of D.2122+D.214.

Additional details

20. Other taxes on production (D.29)

Description of compilation procedures

Uses

Sector S.1

This transaction is estimated within the SUT framework (**DS.9**) and without adjustments included in the sector accounts.

The data for other taxes on production is taken from the government records (**DS.10**) as described below under resources of the government sector. The Administration of the State is cash based, all other sector government administrations are accrual based. To comply with the ESA accrual recording the one month time adjusted cash method is applied to most other taxes on production cash receipts of the State. The data also include information of the receipts of other taxes on production received by the European Union related to the bank resolution fund.

In the SUT (**DS.9**) the available detail of other taxes on production is in line with the table as presented below for the resources of the government sector. The allocation to industries is based on the data sources available for these industries. However, the allocation may be augmented if the government revenue of a specific tax can be allocated to a specific range of enterprises or industries. What results is a complete set of other taxes on production allocated over the various industries.

Sector S.11

The other taxes on production payable are estimated as the residual from the total paid other taxes on production in the Netherlands and the other taxes on production by all other domestic sectors.

Sector S.12

D.29 for S.12 is estimated as D.29 from the SUT (**DS.9**) for NACE-industries 64, 65 and 66 minus the D.29 attributable to S.13 and S.14 from these industries plus any paid taxes from other industries attributable to S.12, currently only head offices from NACE-industry 70 but in the past also some lease-activities from NACE-industry 77.

As explained in the section on P.11 the main adjustment here is the allocation of other taxes on production from the financial sector to the household sector in their role as producer of auxiliary financial services. The estimate for paid other taxes on production by households in the financial industry is determined by applying the ratio of other taxes on production to output by industry to total output of households in the financial industry.

Sector S.13

D.29 for S.13 is estimated as D.29 from the SUT for industry 84 and public education from industry 85 plus units from various industries as mentioned in the section on P.11. Data for the various other industries is directly taken from data sources or in case of less well documented entities based on a model. Further information can be found in the EDP inventory [10].

Sector S.14

No direct data is available on the paid other taxes on production for households. For all industries the ratio of other taxes on production to output by industry from the SUT is applied

to the estimated total output by industry as described in section on P.11. The level of aggregation for industries in this calculation is higher than the available detail in the SUT. The data on households is grouped into 65 separate industries.

Sector S.15

Other taxes on production are determined by using the industry totals of other taxes on production as a ratio of production, and combine that ratio with the output determined by industry.

Sector S.2

Not applicable.

Resources

Sector S.1

D.29 resources only applies to sector S.13 general government

Sector S.13

Table D29-1 summarises the scope and composition of other taxes on production in the Netherlands as in 2015. It shows that property taxes constitute the main type of other taxes on production, representing 39 per cent of the total. Motor vehicle taxes and special levies on social housing corporations are other important taxes on production.

Other taxes on production are defined in accordance with ESA 2010 (see sections 4.22-4.24). The principal difference with regard to taxes on products is that the latter are levied on outputs (e.g. excise duties), whereas other taxes on production relate to inputs (e.g. taxes on the use of motor vehicles, dwellings or offices).

According to ESA 2010 property taxes, motor vehicle tax and certain environmental taxes, such as sewage charges are recorded as 'other taxes on production' or 'other current taxes on income, wealth, etc.' depending if they are paid by producers or consumers. When these taxes are paid by producers, they are classified as other taxes on production. When paid by consumers, they are registered as other current taxes. However, the information to make this split is not available in the source data. Hence, additional statistical sources are used. Concerning the motor vehicle tax and certain environmental levies, such as sewage charges, information from the most recent household budget surveys is used for the breakdown in other taxes on production and other taxes on income, wealth, etc.

Table D.29-1 Other taxes on production, 2015

	million euros	%
Taxes on land, buildings or other structures	5.868	61,5
Property tax	3.691	38,7
Polderboard levies	832	8,7
Special levies on social housing corporations	1.345	14,1
Taxes on motor vehicles	1.069	11,2
Motor vehicles tax (National)	767	8,0
Motor vehicles tax (Provincial)	302	3,2
Taxes on payroll and workforce	658	6,9
Environmental taxes	758	8,0
Sewage charges	245	2,6
Levies on water pollution	328	3,4
Emission permits	137	1,4
Other environmental taxes	48	0,5
Other	1.181	12,4
Tourist tax	206	2,2
Bank levies (National)	478	5,0
Bank levies (EU)	454	4,8
Other taxes on production n.e.c.	43	0,5
Total	9.534	100

Sector S.2

The data for other taxes on production is taken from the government records (**DS.10**). Other taxes on production received by the European Union relate to the bank resolution fund.

Balancing adjustments across all sectors

Other taxes on production are recorded in the SUT (**DS.9**) and included in the sector accounts without further modifications.

Additional details

21. Subsidies on products (D.31)

Description of compilation procedures

Uses

Not applicable

Resources

Sector S.1

D.31 resources only applies to sector S.13 General government.

Sector S.13

Data of subsidies on products granted by different government sectors are obtained from related government sub-sectors: **DS.10** Administration of the State and **DS.12** IV3 (information for third parties) for the municipalities, local intergovernmental organisations and provinces. As from the benchmark revision of 2015, subsidies for culture and subsidies for scientific research related to military defense are recorded as other subsidies on production (D.39), because they are based on their activities or purpose in general.

Sector S.2

Data on subsidies on products granted by the Institutions of the EU as recorded in the SUT (DS.9) are obtained from monthly reports supplied by the Ministry of Economic Affairs, Agriculture and Innovation and the Agricultural Equalisation Fund (LEF). Furthermore, data on subsidies granted by the Institutions of the EU is available from the EU Annual budget. Around 2005 a shift in EU subsidies on products to EU subsidies on production has started. Since 2013 no more EU subsidies on products are granted. Most EU subsidies are subsidies on production.

Balancing adjustments across all sectors

Subsidies on products are recorded in the SUT (**DS.9**) and included in the sector accounts without further modifications. The SUT subsidies on products granted by government sector must comply with the government sector data.

Additional details

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22. Other subsidies on production (D.39)

Description of compilation procedures

Uses

Sector S.1

The data for total other subsidies on production is taken from government records as described below under resources for the government as well as the rest-of-the-world.

In the SUT (DS.9) the other subsidies on production are subdivided in three categories:

- wage subsidies;
- other subsidies offered by the Dutch government;
- EU-subsidies.

The allocation to industries is based on the data sources available for the receiving industries. However, the allocation may be augmented if the receipt of a specific subsidy can be allocated to a specific range of enterprises or industries. What results is a complete set of other subsidies on production allocated over the various industries.

The SUT-based estimates for D.39 are without further adjustments assigned to institutional sectors and subsequently incorporated in the sector accounts.

Sector S.11

The received other subsidies on production are estimated as the residual from the total received other subsidies on production in the Netherlands and the other subsidies on production by all other domestic sectors.

Sector S.12

D.39 for S.12 is estimated as D.39 from the SUT for NACE-industries 64, 65 and 66 minus the D.39 attributable to S.13 and S.14 from these industries plus any received subsidies from other industries attributable to S.12, currently only head offices from NACE-industry 70 but in the past also certain lease-activities from NACE-industry 77.

As explained in the section on P.11 the main adjustment here is the allocation of other subsidies on production from the financial sector to the household sector in their role as producer of auxiliary financial services. The estimate for received other subsidies on production by households in the financial industry is determined by applying the ratio of wages subsidies to labour cost by industry to total labour costs of households in the financial industry. For non-wage other subsidies the ratio of those subsidies to output by industry from the supply-and-use-table is applied to the estimated total output of households by industry as described in section on P.11.

Sector S.13

D.39 for S.13 is estimated as D.39 from the SUT for industry 84 and public education from industry 85 plus units from various industries as mentioned in the section on P.11. Data for the various other industries is directly taken from data sources or in case of less well documented entities based on a model. Further information can be found in the EDP inventory [10]. As from the benchmark revision of 2015 subsidies for culture and subsidies for scientific research related to military defense are recorded as other subsidies on production (D.39) instead of subsidies on products (D.31), because they are based on their activities or purpose in general.

Sector S.14

No direct data is available on the received other subsidies on production for households. The estimate for received other subsidies on production by households is determined by applying the ratio of wages subsidies to labour cost by industry to total labour costs of households by industry as described in section on D.11. For non-wage other subsidies the ratio of those subsidies to output by industry from the SUT is applied to the estimated total output of households by industry as described in section on P.11. The level of aggregation for industries in this calculation is higher than the available detail in the SUT. The data on households is grouped into 65 separate industries.

Sector S.15

Not applicable.

Sector S.2

Not applicable.

Resources

Sector S.1

D.39 resources only applies to sector S.13 General government.

Sector S.13

Table D39-1 summarises the scale and composition of other subsidies on Dutch production in 2015, which represented 1.1 per cent of GDP at market prices.

Table D39-1
Other subsidies on production (D.39), 2015

	million euros	%
Subsidies granted by the general government	6.319	79,8
Wage subsidies	1.412	17,8
R&D subsidies	1.475	18,6
Public transport subsidies	1.070	13,5
Subsidies related to culture, sport and recreation	353	4,5
Education fund medical specialists	1.016	12,8
Other subsidies to health care providers	329	4,2
Subsidies related to apprenticeships	189	2,4
Agricultural subsidies	5	0,1
Other subsidies on production n.e.c.	470	5,9
Subsidies granted by the institutions of the EU	1.598	20,2
Agricultural subsidies	924	11,7
R&D subsidies	437	5,5
Structural funds subsidies	111	1,4
Other subsidies on production n.e.c.	126	1,6
Total	7.917	100

Other subsidies on production are defined in accordance with ESA 2010 (see sections 4.36-4.40). The major difference compared with subsidies on products is that the latter are granted on the basis of confirmed outputs (for example public transport), whereas other subsidies on production are based on inputs/costs incurred. More than 50 per cent of the total of other subsidies on production are provided by the Dutch central government and around 23 per cent by Dutch municipalities.

Sector S.2

Subsidies granted by the Institutions of the EU relate to other subsidies on food production received by Dutch units from the EU. Also subsidies granted by supranational government bodies are recorded in the integrated SUT (DS.9). This is done based on data on other subsidies on food obtained from monthly reports supplied by the Ministry of Agriculture and the Agricultural Equalisation Fund (LEF). Each year CBS receives an overview of the outstanding amounts on the extra-budgetary account of the government, which the government maintains for this purpose as cashier of EU subsidies. Time of recording in the data sources of subsidies is on an accrual basis so no adjustments are needed. EU grants for operation aid of agriculture are registered on transaction basis in the period the aid is needed. Furthermore, data on subsidies granted by the Institutions of the EU is supplemented with the EU Annual budget.

Balancing adjustments across all sectors

The SUT based estimates of other subsidies on production (D.39) are included in the Sector accounts without making adjustments.

Additional details

23. Interest (D.41)

Description of compilation procedures

Uses

Sector S.1

Interest payable (D.41) at the level of the total domestic economy (S.1) is determined as the sum of uses as estimated at the individual sector level.

Sector S.11

Interest payable is directly obtained from data source **DS.1**, **DS.2** and **DS.5** without further adjustments. For head offices, interest payable is computed from information from annual corporate accounts (**DS.4**). Balance sheet positions from data source **DS.28** are used to calculate interest payable of health care institutions. Balance sheet information together with market (bond) interest rates are used as crosscheck. Even so, counterpart information (**DS.8**) largely determines the final outcome.

Sector S.12

Information on interest payable of the central bank (S.121) is obtained from the annual corporate statement of the Dutch Central Bank (DNB). Information of banks (S.122) is directly obtained from data source **DS. 7**. Information on financial intermediaries (S.125) and auxiliaries (S.126) is obtained from annual business reports (**DS.4**). Information on the captive financial institutions (S.127) is obtained from data source **DS.8** and annual business accounts (**DS.4**). Information of the Non-MMF investment funds (S.124), insurance corporations (S.128) and pension funds (S.129) is directly obtained from data source **DS.8**.

Sector S.13

Interest payable is directly obtained from data sources **DS.10-DS.14** without further adjustments. No exhaustiveness adjustments are needed.

Sector S.14

A calculation of interest payable is made based on information from data source **DS.16** and Euribor interest rate developments as there is no direct data source available. Exhaustiveness adjustments are made based on counterpart information from data source **DS.8** and **DS.10**-**DS.14** and balance sheet information together with market (bond) interest rates.

Sector S.15

A calculation of interest payable is made based on information from data source **DS.16** and Euribor interest rate developments as there is no direct data source available. Exhaustiveness adjustments are made based on counterpart information from data source **DS.8** and **DS.10**-**DS.14** and balance sheet information together with market (bond) interest rates.

Sector S.2

Interest payments are directly obtained from data source **DS.8** for counterpart units in S.127, S.128, and S.129. Data sources **DS.10-DS.14** are used for counterpart units in S.13. Estimates based on market interest rates and balance sheet positions are made for counterpart units in S.14 and S.15.

Resources

Sector S.1

Interest receivable at the level of S.1 is determined as the sum of resources as estimated at the individual sector level.

Sector S.11

Interest receivable is directly obtained from data source **DS.1**, **DS.2** and **DS.5** without further adjustments. For head offices, interest receivable is computed from information from annual corporate accounts (**DS.4**). Balance sheet positions from data source **DS.28** are used to calculate interest receivable of health care institutions. Balance sheet information and information on market (bond) interest rates are used as crosscheck. Even so, counterpart information (**DS.8**) largely determines the final outcome.

Sector S.12

Interest receivable by the central bank is obtained from the annual corporate statement of DNB. Information of the other banks (S.122) is directly obtained from data source **DS. 7**. For money-market funds (S.123), interest receivable is calculated based on financial balance sheets positions. Most information on financial intermediaries (S.125) and auxiliaries (S.126) is obtained from annual business reports (**DS.4**). However, interest receivable from SPV's is estimated based on market interest rates and balance sheet positions. Information on the captive financial institutions (S.127) is obtained from data source **DS.8** and annual business accounts (**DS.4**). Information of the Non-MMF investment funds (S.124), insurance corporations (S.128) and pension funds (S.129) is directly obtained from **DS.8**.

Sector S.13

Interest receivable is directly obtained from data sources **DS.10-DS.14** without further adjustments. No exhaustiveness adjustments are needed.

Sector S.14

A calculation of interest receivable is made based on information from data source **DS.16** and Euribor interest rate developments as there is no direct data source available. Exhaustiveness adjustments are made based on counterpart information from data source **DS.8** and **DS.10-DS.14** and balance sheet information together with market (bond) interest rates.

Sector S.15

A calculation of interest receivable is made based on information from data source **DS.16** and Euribor interest rate developments as there is no direct data source available. Exhaustiveness adjustments are made based on counterpart information from data source **DS.8** and **DS.10-DS.14** and balance sheet information together with market (bond) interest rates.

Sector S.2

Interest payments are directly obtained from data source **DS.8** for counterpart units in S.127, S.128, and S.129. Data sources **DS.10-DS.14** are used for counterpart units in S.13. Estimates based on market interest rates and balance sheet positions are made for counterpart units in S.14 and S.15.

Balancing adjustments across all sectors

In the balancing process, only interest payable and receivable by S.11, S.14 and S.15 will be adjusted. Data sources addressing total uses and resources of S.12, S.13 and are considered of

high quality and are only adjusted when explicit errors are found. The direction of adjustments, uses versus resources etc., is directly related to crosschecks made, based on balance sheet positions (F.2-F.4), market interest rates published by DNB and nominal interest rates for bonds. This crosscheck is done for each (sub)sector, validating and if required adjusting S.12 and S.13 whom-to-whom data, but only adjusting total uses and resources of S.11, S.14 and S.15 and S.2

For some sectors, whom-to-whom information is not available. These cells are filled based on a calculation of balance sheet positions (F.2-F.4) and market interest rates and nominal interest rates for bonds. Remaining differences between totals and sum of counterparts sectors are distributed proportionally to counterpart sectors.

Additional details

24. Dividends (D.421)

Description of compilation procedures

Uses

Sector S.1

Dividends (D.421) payable at the level of the total domestic economy (S.1) is determined as the sum of uses as estimated at sector level. As a general rule, information on dividends paid by listed companies is available from the ISIN database (**DS.22**). This information is used and fully balanced in a whom-to-whom matrix, and is available as an aid during the balancing procedure of D.421 dividends.

Sector S.11

The most important data source for D.421 is **DS.1**. Corrections are made for super-dividends and impairments. This source is supplemented by the corporate tax register data (**DS.2**) for coverage of the smaller enterprises and the survey of the housing corporations **DS.5**. As **DS.1** refers to consolidated figures, annual corporate reports **DS.4** are used to deconsolidate head offices of non-financial corporations in order to be ESA2010 compliant.

Sector S.12

Dividends from the Central Bank (S.121) to the state are obtained from counterpart information (**DS.10**). Information of the other banks (S.122) is directly obtained from data source (**DS.7**). Information on financial intermediaries (S.125) and auxiliaries (S.126) is obtained from annual business reports (**DS.4**). Information on the captive financial institutions (S.127) is obtained from three data sources: **DS.8** DRA (direct reporting), **DS.4** annual corporate accounts, and stock market data (**DS.29**). Results are compared and a judgment is made about the best reliable source. Information of the insurance corporations (S.128) is directly obtained from **DS.8**.

Sectors S.13-S.15

Not applicable

Sector S.2

Information for S.2 is directly obtained from the balance of payments source statistics (DS.8).

Resources

Sector S.1

Dividends receivable (D.421) at the level of the total domestic economy (S.1) is determined as the sum of resources as estimated at the sector level.

Sector S.11

Information is directly obtained from data sources DS.1. DS.2, DS.4, DS.5. (see uses).

Sector S.12

Information is directly obtained from data sources DS.4, DS.8, DS.10 and DS.29 (see uses).

Sectors S.13

For all relevant subsectors information is directly obtained from administrative data (DS.10).

Sectors S.14--S.15

Dividend received by S.14 households is available from the Integral Income and Wealth statistics (IIWS, **DS.16**). Sector S.15 is not covered by direct sources for D.421, but is estimated in order to gain a plausible return on investments.

Sector S.2

Information is directly obtained from DS.8.

Balancing adjustments across all sectors

The total uses of S.11 are the sum of four components.

- The final annual estimate of S.11-S.11 dividends is based on annual reports (DS.4).
 Quarterly estimates are the sum of information from the ISIN database (DS.22) and the increase/decrease of dividends received by S.11 from S.2.
- Dividends paid by S.11 according to counterpart sources for S.124, S.127 S.128 and S.129 (DS.8), S.125 and S.126 (DS.4), and S.13 (DS.10)
- It is assumed, households are the main recipient of dividend paid by small non-financial corporations (DS.2).
- For the relation between non-financial corporations and the rest of the world, data sources DS.1 and DS.8 partly overlap. In the course of the balancing procedure, a data comparison at enterprise level is carried in a joint effort from CBS and DNB. For the largest data source discrepancies additional analysis is done, for example through annual reports or by contacting corporation representatives. For those companies reporting substantively diverging results, a common decision was taken about their recording in the Balance of Payments and in the National Accounts.

The total of dividends received by S.11 is the sum of three components:

- The annual estimate of S.11-S.11 dividends based on annual reports (**DS.4**).
- Counterpart information from S.125, S.127 (DS.8) on dividends paid to S.11
- The outcome of the data comparison of data sources DS.1 and DS.8, on the relation of non-financial corporations and rest of the world.

S.121 only receives dividends from S.2. This is directly taken from the source data (**DS.6**) from DNB. S.121 only pays dividends to S.13 (the state). This flow directly obtained from (**DS.10**).

For the compilation of the sector S.122 the total uses and resources are directly taken from the source data. During the balancing no adjustments are made on the total uses and resources of S.122. The source of S.122 does not have data for the relations with counterpart sectors. For the dividends paid by S.122 to other sectors, including the rest of the word, counterpart information is used. For the dividends paid by S.122 to S.122, S.125, S.126, S.14 and S.15 estimations are used based on the total balance sheet value of AF.5.

For the dividends receivable by S.122, counterpart information from S.2 and estimations from S.11, S.122, S.125 are used based on the total balance sheet value of AF.5.

For S.124, no adjustments are made during balancing.

Data on sector S.125 are of low quality. During the balancing procedure the total uses and resources are adjusted to fit counterpart information of S.124, S.128, S.129 and S.13. The counterpart sectors S.11, S.122, S.125 and S.126 are estimated based on the annual reports of financial intermediaries.

For S.126, the total uses and resources are directly taken from the source data and no adjustments are made. Most of the time only the total dividends received and paid are available, therefore for counterpart detail information from S.2 is used. An estimation is made for the relations with other counterpart sectors based on annual reports.

The sectors S.127 and S.13 are directly taken from the source data. During the balancing no adjustments are made on the source data.

Sectors S.128 and S.129 are also taken directly from the source data.

Total dividend received by households is the sum of three elements:

- The main assumption is that dividend paid by small non-financial corporations (DS.2) is received by households.
- counterpart sources are used for the relations with S.127 and S.2 (DS.8).
- For the counterpart sectors A S.122, S.125, and S.126 estimations are used based on the total balance of AF.5 and residual calculation.

The total dividends receivable by S.15 is the sum of counterpart information and estimations.

The sector S.2 is directly taken from the source data (**DS.8**). For the relation between non-financial corporations and the rest of the world, data sources **DS.1** and **DS.8** partly overlap. In the course of the balancing procedure, a data comparison at enterprise level is carried in a joint effort from CBS and DNB. For the largest data source discrepancies additional analysis is done, for example through annual reports or by contacting corporation representatives. For those companies reporting substantively diverging results, a common decision was taken about their recording in the Balance of Payments and in the National Accounts.

Additional details

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25. Withdrawals from the income of quasicorporations (D.422)

Description of compilation procedures

Uses

Sector S.1

D.422 uses only applies to sector S.11 Non-financial corporations

Sector S.11

Results are obtained from counterpart information from the sector S.2, based on data source **DS.8**.

Sector S.2

Results are directly obtained from **DS.8** and without modifications included in the rest of the world account.

Resources

Sector S.1

Results for S.1 correspond to the sum of sector calculations.

Sector S.11, s13, s15

Not applicable.

Sector S.12

The subsectors S.124 and S.127 is covered by DS.

Sector S.14

For the household sector an estimation method is used based on DS.27.

Sector S.2

This sector is covered by DS.8 (no data modifications required) and DS.27 (idem).

Balancing adjustments across all sectors

In the Dutch national accounts the income of quasi-corporations (D.422) includes cross-border flows of rents related to cross-border real estate holdings. Information on this income flow is obtained from the balance of payments (DS.8) and in addition household tax records (DS.27).

The balancing of the sectors S.124 and S.127 is straightforward. The resources of these sectors are taken directly from **DS.8** and **DS.12** without further adjustments.

The sector S.14 has source data for the relation with S.2 (DS.27).

The resources of S.2 are directly taken from DS.8 and DS.27.

Additional details

Better sources regarding holiday homes in the Netherlands owned by non-residents and of holiday homes abroad owned by residents have led to substantial higher uses and resources of sector S.2. See the GNI Inventory 2015 [4], par. 8.5.2.2 for a detailed description.

26. Reinvested earnings on direct foreign investments (D.43)

Description of compilation procedures

The reinvested earnings of foreign owned Dutch corporations, and assigned to the foreign owners, is defined in par. 4.64 of the ESA 2010:

Reinvested earnings on foreign direct investment (D.43) are equal to the operating surplus of the foreign direct investment enterprise plus any property incomes or current transfers receivable, minus any property incomes or current transfers payable, including actual remittances to foreign direct investors and any current taxes payable on the income, wealth, etc., of the foreign direct investment enterprise.

All available sources (**DS.1**, **DS.8**, **DS.10**) follow the Current Operating Performance Concept (COPC) concept. Therefore, for ESA2010 purposes, additional corrections are required. Corrections are made for impairments and super dividends, for those companies under ownership of a domestic SPE but with an ultimate foreign parent. In such cases the reinvested earnings for all domestic entities in the ownership chain are recorded at the level of the domestic SPE (classified under S.127). This recording convention was recommended by a majority of representatives in the Eurostat national accounts working group meeting of May 2016. Also, additional corrections should be made for the capitalization of R&D, software, mineral exploitation and originals. Research on this topic is expected to be implemented during the next benchmark revision.

Uses

Sector S.1

Reinvested earnings (D.43) payable at the level of the total economy (S.1) is determined as the sum of uses as estimated at the sector level. The two most significant (sub)sectors for D.43 from the uses side are the Non-financial corporations (S.11) and the Captive financial institutions (S.127).

Sector S.11

For this sector the outward flow of D.43 is being observed via **DS.1**. This survey covers the profit and loss statements and balance sheets of the largest 2500 corporations (balance total $> \le 40$ million euros) and has information on foreign ownership.

Sector S.12

Information for sector S.12, mainly S.127, is obtained as counterpart data from the balance of payments statistics **DS.8** (cf. S.2).

Sector S.13-S.15

Not applicable.

Sector S.2

The Dutch Central Bank runs a quarterly balance of payments survey (**DS.8**) with a sample of 2000 reporting entities including non-financial corporations and financial institutions. Survey questions are grossed up and based on ESA2010/BPM6 concepts.

Resources

Sector S.1

The inward flow of D.43 at the level of the total economy (S.1) is determined as the sum of uses as estimated at the sector level. The two most significant receiving (sub)sectors for D.43 are the Non-financial corporations (S.11) and the Captive financial institutions (S.127).

Sector S.11

For this sector the inward flow of D.43 is being observed via DS.1 (see details above).

Sector S.12

Information for sector S.12, mainly S.127, is obtained as counterpart data from the balance of payments statistics **DS.8** (cf. S.2).

Sector S.13

Information for sector S.13, is obtained from DS.10.

Sector S.14-S.15

Not applicable.

Sector S.2

The quarterly Dutch Central Bank survey (**DS.8**) has a sample of 2000 reporting entities including non-financial corporations and financial institutions. Survey questions are grossed up and based on ESA2010/BPM6 concepts.

Balancing adjustments across all sectors

The data sources **DS.1** and **DS.8** partly overlap. In the course of the balancing procedure, a data comparison at enterprise level is carried out as a joint effort by CBS and DNB. For the largest data source discrepancies additional analysis is done, for example through annual reports or by contacting corporation representatives. For those companies reporting substantively diverging results, a common decision is taken about their recording in the Balance of Payments and in the National Accounts.

Furthermore, if reinvested earning are large and negative, an additional check is conducted for super dividends.

Additional details

27. Investment income attributable to insurance policy holders (D.441)

Description of compilation procedures

Uses

Sector S.1

D.441 uses only applies to sector S.128 insurance companies.

Sector S.12

In DRA (**DS.8**), D.441 is not explicitly reported. For each kind of insurance, except for the individual life insurance, D.441 is computed as the sum of net direct investment income on financial assets or land or buildings (which generate net operating surpluses). This direct investment income consists of all D.4 resources, which are:

- Interest (D.41);
- Dividend (D.421);
- Withdrawals from the income of quasi-corporations (D.422);
- Reinvested earnings on foreign direct investments (D.43);
- Dividends attributable to collective investment fund shareholders (D.4431);
- Retained earnings attributable to collective investment fund shareholders (D.4432)
- Rent on land or subsoil assets (D.45).
- plus net operating surplus on renting buildings minus paid interest (D.41 uses).

For life insurance the main data source (**DS.8**) does not contain the split in individual and collective life insurance data. Furthermore, no split is available for received interest, dividend, etc. for the policy holder and received income on the non-technical account of the insurer. To solve this, as a first step, the total direct investment income (D.44) for all of the life insurers is split into funds of the insurers and income attributed those attributable to policyholders, using a ratio of the total investment income on the technical insurance account versus the non-technical account of the life insurers in the supervisory data of the Dutch central bank (**DS.26**). As a second step, the income attributed to policyholders is split into attributable to individual life insurance policyholders (D.441) and attributable to collective life insurance premiums versus collective life insurance premiums in the supervisory data of the Dutch central bank (**DS.26**).

Sector 2

Data are based on counterpart information.

Resources

Sector S.1

The inward flow of D.441 resources to the total economy (s.1) is determined by the sum of used available from insurance companies.

Sector S.11

Data with respect to counterpart sector S.11 are based on information from insurance companies.

Sector S.12

Data with respect to counterpart sector S.122, S.127, S.128 and S.129 are based on information from insurance companies.

Sector S.13 and S.15

Not applicable.

Sector S.14

Data with respect to counterpart sector S.14 are based on information from insurance companies.

Sector S.2

For counterpart sector S.2 it is assumed that a fixed percentage of the non-life insurance and reinsurance (for S.128) policies is contracted via insurance corporations abroad (see below).

Balancing adjustments across all sectors

D.441 consists of income generated by four types of insurance companies:

- Individual life insurance: Policy holders are households, both domestic and abroad.
 Households abroad is computed using a ratio derived from supervisory data (DS.26) for cross border life insurance premiums. The remaining part is attributed to the sector S.14.
- 2. Reinsurance: both income on life and non-life. Policy holders are insurance companies (domestic and abroad) and pension funds. Reinsurance is supplied by professional reinsurance companies, but also by life insurance and non-life insurance companies, all with different kinds of cross border ratios. First for each of these suppliers this ratio is derived from our main data source (DS.8), and then the remaining (domestic) value is attributed to counterpart sectors S.128 and S.129 using a ratio derived from the domestic reinsurance premiums paid by S.128 and S.129.
- 3. Health insurance: Policy holders are domestic households.
- 4. Other non-life insurance: all sectors can be policy holders here, both domestic and abroad. Other non-life insurance is used by (almost) all kinds of sectors. To attribute the investment income D.441 to counterpart sectors, as a first step the cross border part is computed, using a ratio derived from the supervisory data (**DS.26**) on non-life insurance premiums. For the domestic part ratios are based on the intermediate use and consumption values on insurance premiums in the SUT. Based on the 2015 benchmark revision, households are attributed 60% of the income. The remainder is mainly attributed to S.11 (92.8%) and for a smaller part S.12 (S.122: 2.9%; S.124: 0.1%; S.125: 0.3%; S.126: 0.7%; S.127: 1.0%; S.128: 1.8%; S.129: 0.4%).

Additionally, domestic sectors receive income D.441 from (re)insurers abroad. The estimates in case of other non-life insurance are made by taking a percentage of intermediate use and consumptions of non-life insurance. Financial and non-financial companies use 5% non-life insurance services from insurers abroad. Also for reinsurance, an assumption is made, for insurers to receive about 50% of the domestic income from (re)insurers abroad.

Additional details

28. Investment income payable on pension entitlements (D.442)

Description of compilation procedures

D.442 uses, for S.128 insurance companies and S.129 pension funds equals D.6141 Households' pension contribution supplements, resources for S.128 insurance companies and S.129 pension funds.

Uses

Sector S.1

D.442 uses only applies to sectors S.128 and S.129.

Sector S.12

In data sources for S.128 and S.129 (**DS.8**), D.442 is not explicitly reported. D.442 includes both pension entitlements of pension funds and entitlements from collective life insurance schemes.

For life insurance the main data source (**DS.8**) does not contain the split in individual and collective life insurance data. Furthermore, no split is available for received interest, dividend, etc. for policy holders and received income on the non-technical account of the insurer. To solve this, as a first step, the total direct investment income (D.44) for all of the life insurers is split into funds of the insurers and income attributed to policyholders, using a ratio of the total investment income on the technical insurance account versus the non-technical account of the life insurers in the supervisory data of the Dutch central bank (**DS.26**). As a second step, the income attributed to policyholders is split into attributable to individual life insurance policyholders (D.441) and attributable to collective life insurance policyholders (registered as D.442), using a ratio between individual life insurance premiums versus collective life insurance premiums in the supervisory data of the Dutch central bank (**DS.26**).

For collective life insurance policies and pension funds, a split into defined contribution (DC) and defined benefit (DB) schemes is required. According to ESA2010, D.442 for DB- schemes equals the increase of the present value of the pension entitlements from the start of the year to the end of the year, as the due date of the entitlements is one year nearer. As data sources do contain information for this estimate, BC schemes of both collective life insurance and pension funds are derived in a similar process to DC- schemes.

Resources

Sector S.1

D.442 resources only applies to S.14 households.

Sector S.14

No additional data sources are available for households.

Sector S.2

No additional data sources are available for S.2.

Balancing adjustments across all sectors

During the balancing procedure, for life insurance policies a split is made into households domestic and abroad, based on a ratio derived from supervisory data (**DS.26**) for cross border life insurance premiums. For pension funds **S.129** a similar method applies, using supervisory data for pension funds (**DS.26**).

Additional details

29. Investment income attributable to collective investment fund shareholders (D.443)

Description of compilation procedures

This transaction consists of the following two components (ESA 2010, par. 4.70):

- Dividends attributable to collective investment fund shareholders (D.4431);
- Retained earnings attributable to collective investment fund shareholders (D.4432).

This chapter covers both types of transactions.

Uses

Sector S.1

D.433 uses applies to MMF S.123 and non-MMF investments funds S.124.

Sector S.11

Not applicable.

Sector S.12

Data on D.4431 are obtained from **DS.6** for S.123 MMF and **DS.8** with regard to the non-MMF investment funds (S.124). D.4432 is calculated based on **DS.8** with regard to the non-MMF investment funds (S.124) as net operating surplus on domestic renting of buildings and land + resources D.4 – uses D.4 (excluding D.4432).

Sector S.13-S.15

Not applicable.

Sector S.2

The BoP data source (**DS.8**) provides data on how much dividend (D.4431) is received from MMF and investment funds abroad. This source is used without further modifications. With regard to D.4432, about 35% of total investment in foreign investment funds is reported with ISIN-codes (**DS.22**). This ISIN-code contains additional information about the category of the investment (money market, bond, equity, real estate, hedge, mixed, other). Per investment category the yield is estimated. The weighted average yield is calculated per sector. Total yields minus dividends (D.4431) payable results in the retained earnings per sector (D.4432).

Resources

Sector S.1

Data for sector S.1 are obtained as sum of all relevant subsectors.

Sector S.11

Counterpart information on D.4431 is directly obtained from **DS.8** (non-MMF investment funds) and used without further adjustments.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Sector S.12

Data on D.4431 are obtained from **DS.8** with regard to the non-MMF investment funds (S.124). Counterpart information (resources) of S.128 Insurance companies and S.129 Pension funds (**DS.8**) is used to split S.128+S.129 aggregates.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Sector S.13

Counterpart information on D.4431 is directly obtained from **DS.8** (non-MMF investment funds) and used without further adjustments.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Sector S.14

Counterpart information on D.4431 is directly obtained from **DS.8** (non-MMF investment funds) and used without further adjustments.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Sector S.15

Counterpart information on D.4431 is directly obtained from **DS.8** (non-MMF investment funds) and used without further adjustments.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Sector S.2

Information on D.4431 is directly obtained from **DS.8** (non-MMF investment funds) and used without further adjustments.

Distribution of D.4432 across counterparts is based on F.522 closing balance sheets per subsector (**DS.8**).

Balancing adjustments across all sectors

No balancing adjustments for D.4431 or D.4432 are needed.

Additional details

In the benchmark revision of 2015 the costs of foreign investment funds have been passed on to the ultimate Dutch investors. This has led to an increase in the imports of services P.72, an increase in intermediate consumption of Dutch investors, as well as resources D.4432 of domestic sectors. Higher property income received from the investment funds is subsequently attributed to all investors.

30. Rent on land and subsoil assets (D.45)

Description of compilation procedures

Uses

Sector S.1

D.45 uses applies to sector S.11, S.13 and S.14.

Sector S.11

Estimations are based on **DS.1** and checked with, and often overruled by counterpart information (see below).

Sector S.13

Sector S.1313 Local government is covered by **DS.12** without modifications.

Sector S.14

Sector S.14 is covered by **DS.16**, however usually replaced by counterpart information during the balancing procedure.

Sector S.2

Not applicable

Resources

Sector S.1

D.45 resources only applies to sector S.11, S.13 and S.14.

Sector S.11

Estimations are based on **DS.1** and checked with counterpart information (see below).

Sector S.13

Subsectors S.1311 and S.1313 are covered by **DS.10** and **DS.12** respectively without modifications.

Sector S.14

Sector S.14 is covered by **DS.16** however usually replaced by counterpart information.

Sector S.2

Not applicable

Balancing adjustments across all sectors

For sector S.11 the total uses and resources are estimated based on **DS.1**. The sources of S.1311 and S.1313 provide more reliable counterpart information from direct sources which, in case of discrepancies, will overrule the S.11 sources. The S.13 subsectors are seen as sectors with reliable data for balancing the D.45 and as a general rule, no adjustments are made during balancing.

The information on S.1313 is directly obtained from municipalities (**DS.12**) which is generally the leading data source for this subsector. This source provides information on the total uses of S.1313 and counterpart information for S.11 and S.14. In case of discrepancies on the uses or resources side S.14 data will be overruled by S.1313 counterpart information.

The changes made during balancing to S.11 and S.14 are usually quite small (less than 500 million euros). Larges discrepancies will be examined more closely.

Additional details

Rent from land and subsoil assets of the State mainly consists of proceeds from concessions regarding the extraction of natural resources, mostly natural gas. These proceeds have been decreasing sharply in recent years due to the decision to restrict the amount of natural gas extracted from the Groningen gas reserves. The amounts also include proceeds from the sale of telephone and internet frequencies (3G, 4G, etc.), these amounts are spread across several years to conform to the accrual compilation method.

Rent from land and subsoil assets of the municipalities concerns several items, most prominent of which are the proceeds from the 'precario' rights. These include rights for the use of public spaces for restaurants and advertisement, but are mainly comprised of rights for underground cables and pipelines. The amounts also include payments by public transport entities (local and national) to municipalities for the maintenance of public transport infrastructure and buildings.

31. Taxes on income (D.51)

Description of compilation procedures

Uses

Sector S.1

D.51 uses applies to all domestic sectors, except for S.15.

Sector S.11

Direct source information (DS.1, DS.2) are available.

Sector S.12

Subsectors are covered as follows S.122: **DS.6**, S.124: **DS.8**, S.125: **DS.4**, S.126: **DS.4**, S.127: **DS.8** and S.128: **DS.8**.

Sector S.14

Direct source information is available from DS.16

Sector S.2

Direct source information is available from DS.8.

Resources

Sector S.1

D.51 resources only applies to S.13 general government.

Sector S.13

Data from **DS.10** are leading and directly included without further modification.

Sector S.2

Data from DS.8 are leading and directly included without further modification.

Balancing adjustments across all sectors

Total resources from S.13 (DS.10) and S.2 (DS.8) are included without further modification.

Total uses from direct sources on domestic sectors is included without further modification. If negative tax on income is reported, corrections are made based on the assumption the report is based on the cash instead of a transaction based time of recording. This split into payments to domestic or foreign government is made by **DS.8** which includes information on the distribution to domestic sectors.

As a final step, the difference between D.51 received by Dutch government and the sum of all payers is allocated to S.11 non-financial corporations.

Additional details

32. Other current taxes (D.59)

Description of compilation procedures

Uses

Sector S.1

D.59 uses only applies to S.14 households.

Sector S.14

Data is available from DS.16.

Sector S.2

Data is available from information (DS.8).

Resources

Sector S.1

For D.59 resources, only relevant domestic sector is S.13 general governments.

Sector S.13

Data is available from source data, S.1311: DS.10 and S.1313: DS.12.

Balancing adjustments across all sectors

In the balancing of D.59, total resources of S.13 taken from **DS.10** and **DS.12** included without further modification..

The **DS.8** provides information on the total uses of S.2. It is assumed the full amount is payable to S.1311.

As a final step in the balancing, total payable by S.14 is derived as the residual from total resources S.13 minus total paid by S.2

The changes made during the balancing procedure to S.14 and S.2 are expected to be small.

Additional details

33. Employers' actual pension contributions (D.6111)

Description of compilation procedures

Uses

Sector S.1

For D.6111 uses, only applies to sector S.14

Sector S.14

No direct sources are available

Sector S.2

No direct sources are available

Resources

Sector S.1

D.6111 resources only applies to sector S.128 (Insurance companies) and S.129 (Pension funds)

Sector S.12

Sources: Data reported by units in sector S.128 and S.129 include total pension contributions only (i.e. both employees' and households' pension contributions, transactions D.6111 and D.6131) (**DS.8**). For life insurers only collective life insurance premiums are to be registered as pension premiums.

Methods:

For pension funds, **DS.8** reports total value of pension contributions received. The split into employers and employees' pension contributions is obtained using an employer/employee ratio from contribution data in the annual supervisory data (**DS.26**).

For life insurance companies, **DS.8** reports total premium income. The split into collective and individual life insurance is made by using a ratio derived from the supervisory data (**DS.26**). As a second step, a split into employers' and households' contribution is made.

Conceptually, employers' actual pension contributions D.6111 are part of total employers' social contributions for their employees (D.12): the employers pay a contribution to their employees in D.12 and then the employees (households) pay these contributions to the pension funds and life insurance companies. The rerouting of pension contributions for National accounts purposes is different from the actual cash flows: employers directly pay both employers and employees' premiums to pension funds.

Pension contributions by Dutch households from foreign employers are expected to be solely paid to Dutch pension funds (and life insurance companies).

Balancing adjustments across all sectors

During the balancing process, estimates for S.128 and S.129 are compared with income tax related data (**DS.30**) available at the Labour Accounts. For D.6111, labour accounts data is included without further adjustment. Differences are allocated to D.6131, employers pension contributions, thereby respecting the total pension contributions from **DS.8**.

For collective life insurance companies a split into domestic and foreign pension premiums is made using a ratio derived from supervisory data (**DS.26**) for cross border life insurance premiums.

For pension funds S.129 a similar method applies, using supervisory data for pension funds (DS.26).

The values of D.6111 for S.14 and S.2 (uses) in each period by convention correspond with the values of D.1211 for S.14 and S.2 (resources).

Additional details

34. Employers' actual non-pension contributions (D.6112)

Description of compilation procedures

Uses

Sector S.1

D.6112 uses only applies to S.14 households.

Sector S.14

No direct source is available.

Sector S.2

No direct source is available.

Resources

Sector S.1

D.6112 resources applies to S.129 pension funds and S.1314 Social security funds.

Sector S.12

For pension funds information on employers' actual non-pension contributions is available from **DS.8**. Since 2015 this concerns transitional premiums paid for former early retirement and lifecourse schemes by employers (D.6112) and employees (in D.6132). These premiums are explicitly not registered as pension premiums.

The split into employers' and employees' contributions is made based on a comparison with income tax related data (**DS.30**) available at the Labour Accounts. Households' contribution based on **DS.30** are included without further adjustment. Differences are allocated to D.6132, employers non-pension premiums, thereby respecting the total non-pension premiums from **DS.8**.

Sector S.13

For social security funds, information on employers' actual non-pension contributions is available from **DS.14**, and is included without any further adjustments.

Sector S.2

The figure for the contributions received by the rest of the world (S.2) from counterpart sector of households (S.14) is imputed in accordance with the figures reported within the transaction of employers' actual non-pension contributions (D.1212).

Balancing adjustments across all sectors

During the balancing process, resources of the social security funds (S.1314) from the households (S.14) is derived as a residual for total resources of sector S.1314 minus rest of the world (S.2).

The total uses of sector S.14 correspond by convention with the values reported within transaction D.1212 for the total resources of sector S.14.

Additional details

35. Employers' imputed pension contributions (D.6121)

Description of compilation procedures

Uses

Sector S.1

D.6121 uses, only applies to sector S.14 Households.

Sector S.14

No direct sources are available.

Resources

Sector S.1

D.6121 resources, only apply to pension funds (S.129) and the Central government (S.1311).

Sector S.12

For pension funds, supervisory data **DS.26** contains information on Employers' imputed pension contributions.

However, applying ESA2010 guidance on the recording of D.6121 Employers' imputed pension contributions, for instance in the numerical example in ESA 2010 Table 17.4, is not easy for the Dutch pension and (collective) life insurance system, especially for corporate pension funds with DB pension schemes. The guidance suggests, transaction D.6121 must reflect the claim of pension funds on the pension managers (the employers), or reversely the claim of pension managers on pension funds (in case the employers' premiums are higher than actuarially necessary). The latter would imply that pension managers are the actual owners of the pensions' buffers.

In the Netherlands, in the case of corporate pension funds with a DB scheme, the employer has his 'own' pension fund and the relation between the pension fund and the employer is different. Up to a few years ago most of the employers with corporate pension plans were more or less obliged to pay extra contributions in case of shortages². Also, in case of surpluses, employers could 'skim' some of the buffers in case these would become quite large.

In the Dutch national accounts, D.6121 is recorded with respect to contribution surpluses/shortages of corporate pension funds with DB pension schemes that have a financial responsibility in case of shortages. These are computed as the difference between the actual contributions (see D.6111 and D.6131) from **DS.8** and the actuarial premiums from the supervisory (**DS.26**).

For other kinds of pension funds (with DB schemes) it is assumed that all surpluses/shortages flow into the buffers, which are considered the equity capital of the pension fund.

The surplus/shortage of the contributions directly affects transaction D.8 'adjustment on pension entitlements'.

² In the last few years, this changed quite dramatically. Employers were to lesser extent responsible for possible shortages. Therefore, both D.6121 and AF.64 decreased considerably.

Sector S.13

For D.6121, **DS.10** provides the information on directly paid military pensions. D.6121 for military pensions are the 'counterpart' to social benefits (pension) directly paid by employers to their (former) employees, as registered in transactions D.6221 and D.1221. In National Accounts, an imputed contribution balances the accounts, thereby having no impact on the 'adjustment on pension entitlements' transaction D.8.

Balancing adjustments across all sectors

Information from **DS.10** for S.1311 and **DS.26** for S.129 is included without further adjustments. Both relate to S.14 households.

Additional details

The value of D.6121 for S.129 resources, corresponds with the assets -/- liabilities of S.129 in F.64.

The value of D.6121 for S.14 uses, corresponds with the value of D.1221 for S.14 resources.

36. Employers' imputed non-pension contributions (D.6122)

Description of compilation procedures

Uses

Sector S.1

D.6122 uses only applies to sector S.14 households.

Sector S.14

No data source available.

Sector S.2

Not applicable.

Resources

Sector S.1

D.6122 resources applies to all sectors

Sector S.11, S.12, S.14 and S.15

As explained in the section on D.12, the employers' social contributions (D.12) are calculated by combining the monthly micro-datasets on jobs from the National tax office (**DS.30**) with data from the business register. These figures are then allocated to the individual industries in the SUTs and aligned with the totals for all employers.

The transaction D.12 is then subsequently broken down into transactions D.1211, D.1212 and D.1221 and allocated to the various sectors, using D.1222, which equals D.6122 and D.6132, as a residual.

Sector S.13

The figures for the general government sector (S.13) are not estimated using the same top-down approach as the other sectors, but are compiled on the basis of **DS.10** to **DS.14**.

Balancing adjustments across all sectors

This transaction is the transposed matrix of the employers' imputed non-pension contributions (D.1222).

Additional details

37. Households' actual social contributions (D.613)

Description of compilation procedures

Uses

Sector S.1

D.613 uses only applies to S.14 households.

Sector S.14

No data source available

Sector S.2

D.613 uses by the rest of the world (S.2) is based on data from DS.8.

Resources

Sector S.1

D.613 resources applies to S.129 pension funds and S.1314 Social security funds.

Sector S.12

For pension funds (S.129), the total of households' actual social contributions is the sum of D.6131 as derived in the process of the estimate of D.6111; employers actual pension contributions and D.6132 (as derived in the process of the estimate of D.6122; employers' imputed non-pension contributions).

Sector S.13

For social security funds (S.1314), information is available using SSF accounts (**DS.14**) without further modifications.

Sector S.2

Resources, rest of the world (S.2) are based on data from DS.8.

Balancing adjustments across all sectors

The contributions paid by households (S.14) to pension funds (S.129), social security funds (S.1314) and the rest of the world (S.2) is set equal to the counterpart information of these sectors.

Additional details

38. Households' contribution supplements (D.614)

Description of compilation procedures

Households' non-pension contribution supplements (D.6142) is not applicable to the case of the Netherlands. This chapter only addresses households' pension contribution supplements (D.6141).

For insurance companies S.128 and pension funds S.129, D.6141 resources, equals D.442; Investment income payable on pension entitlements, uses.

Uses

Sector S.1

D.6141 uses applies only to Sector S.14 Households.

Sectors S.14

No data source available.

Sector S.2

No data source available.

Resources

Sector S.1

D.6141 resources applies only to S.128 insurance companies and S.129 pension funds.

Sector S.12

D.6141 equals D.442; Investment income payable on pension entitlements. Please refer to section 28 for details on the estimate.

Balancing adjustments across all sectors

The uses for sectors S.14 Households and S.2 Rest of the world are entirely based on counterpart information from S.128 insurance companies and S.129 pension funds. The split between domestic and foreign households is based on ratios on contributions paid by domestic households and households abroad in the supervisory data of the Dutch central bank (DNB) (DS.26).

Additional details

39. Social insurance scheme service charges (D.61SC)

Description of compilation procedures

This transaction is part of P.1; output. However, the output is rerouted through D.61SC.

Uses

Sector S.1

D.61SC uses applies only to S.14 households.

Sector S.14

No data source is available.

Sector S.2

No data source is available.

Resources

Sector S.1

D.61SC resources applies only to S.128 Insurance companies and S.129 Pension funds.

Sector S.12

D.61SC represents the service charges for operating the pension and (collective) life insurance schemes by the pension funds and life insurance corporations. ESA2010 guidelines recommend using:

Output = premiums earned + premium supplements – benefits due – increases in life insurance (and pension) technical reserves

Unfortunately, no data sources is available for *Increase in life insurance (and pension) technical reserves*. As an alternative, ESA 2010 proposes:

Output = production costs + an allowance for 'normal profit'.

Cost items are obtained from **DS.8** and labour cost components are checked with Labour accounts. *A normal profit rate* for life insurance companies is estimated by using the average yield on perpetual bonds (both corporate and government bonds, where available) in each period multiplied with the equity of the life insurers (**DS.8**).

For pension funds, a 'normal profit' is estimated as zero, as pension funds are non-profit organisations.

Balancing adjustments across all sectors

The uses for sectors S.14 Households and S.2 Rest of the world are entirely based on counterpart information from S.128 insurance companies and S.129 pension funds. The split between domestic and foreign households is based on ratios on premiums paid by domestic households and households abroad in the supervisory data of the Dutch central bank (DNB) (DS.26).

Additional details

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40. Social security benefits in cash (D.621)

Description of compilation procedures

Please note, social security *pension* benefits in cash (D.6211) is currently not used in the national accounts of the Netherlands. This section therefore only concerns the social security *non-pension* benefits in cash (D.6212).

Uses

Sector S.1

D.621 uses only applies to S.1314 Social security funds, both domestic and foreign. *Sector S.13* Social security non pension benefits received by social security funds (S.1314) are compiled using **DS.15**. Two institutions are relevant: 'Uitvoeringsinstituut Werknemersverzekeringen' (UWV) and 'Sociale VerzekeringsBank' (SVB). The source includes information on the benefits received by both resident (S.14) and non-resident households (S.2).

Sector S.2

No direct source available.

Resources

Sector S.1

Social security non-pension benefits in cash are only received households (S.14).

Sector S.14

For benefits paid by foreign social security funds (S.2) to resident households (S.14), information is available in **DS.16**; IIWS.

Sector S.2

No data source available.

Balancing adjustments across all sectors

Benefits received by sector S.14 from sector S.1314 is available from **DS.15**. Total benefits by sector S.14 is the sum of S.1314 (**DS.15**) and S.2 (**DS.16**).

Benefits received by sector S.2 from sector S.1314 is available from DS.15.

Additional details

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41. Other social insurance pension benefits (D.6221)

Description of compilation procedures

Other social insurance pension benefits (D.6221) is the transposed matrix of employers' imputed non-pension contributions (D.1221) and (D.6121).

Uses

Sector S.1

D.6221 uses, applies to S.128 insurance companies, S.129 Pension funds and S.1311 Central government.

Sector S.12

Data for S.128 and S.129 on other social insurance pension benefits to (former) employees are reported in the macroeconomic statistics data from the Dutch central bank (**DS.8**). The benefits payable by pension funds are directly available from our main data source. However, for life insurance companies the total of life insurance benefits (both individual and collective life insurances) is split using a ratio available in the central bank's supervisory data (**DS.26**). This source also contains the contribution-ratio of resident/non-resident households, which is used for the split of other social insurance pension benefits.

Sector S.13

Data for sector S.13 on other social insurance pension benefits are reported in **DS.10.** It concerns directly paid military pensions. The actual payment of these benefits is registered in transactions D.6221 and D.1221. In National Accounts, the imputed premium contribution is registered in D.6121 to balance the accounts. In National Accounts, an imputed contribution balances the accounts, thereby having no impact on the 'adjustment on pension entitlements' transaction D.8.

Resources

Sector S.1

D.6221 resources, only applies to S.14 households.

Sector S.14

No data source is available.

Sector S.2

No data source is available.

Balancing adjustments across all sectors

Total other social insurance pension benefits received by households (S.14) is the sum of counterpart information from S.128, S.129 and S.1311.

Total other social insurance pension benefits received by non-resident households (S.2) is the sum of counterpart information from S.128, and S.129.

Additional details

42. Other social insurance non-pension benefits in cash (D.6222)

Description of compilation procedures

The data on other social insurance non-pension benefits in cash (D.6222) is the transposed matrix of the employers' imputed non-pension contributions (D.1222) and (D.6122).

Uses

Sector S.1

D.6122 resources applies to all sectors

Sector S.11, S.12, S.14 and S.15

As explained in the section on D.12, the employers' social contributions (D.12) are calculated by combining the monthly micro-datasets on jobs from the National tax office (**DS.30**) with data from the business register. These figures are then allocated to the individual industries in the SUTs and aligned with the totals for all employers.

The transaction D.12 is then subsequently broken down into transactions D.1211, D.1212 and D.1221 and allocated to the various sectors, using D.1222, which equals D.6122, as a residual.

Sector S.13

The figures for the general government sector (S.13) are not estimated using the same top-down approach as the other sectors, but are compiled on the basis of **DS.10** to **DS.14**.

Resources

Sector S.1

D.6122 uses only applies to sector S.14 households.

Sector S.14

No data source available.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

This transaction is the transposed matrix of the employers' imputed non-pension contributions (D.1222).

Additional details

43. Social assistance benefits in cash (D.623)

Description of compilation procedures

Uses

Sector S.1

D.623 uses apply to S.1311 central government and S.1313 local government.

Sector S.13

Social assistance benefits in cash are paid by the central government (S.1311, **DS.10**) and the local government (S.1313 **DS.12** and **DS.14**). Sources allow for a split in resident and non-resident households. For central government, benefits are mainly related to the Child Benefit (Kindgebonden budget), Disability Assistance Act for Handicapped Young Persons (Wajong), General Family Allowance Act (AKW), healthcare allowance (Zorgtoeslag), Supplemental Income for the Elderly Act (AIO) and Supplementary Benefits Act (Toeslagenwet). Benefits paid by local government are predominantly associated with the Participation Act (Participatiewet) and assistance to older and partially disabled unemployed (IOAW/IOAZ).

Resources

Sectors S.1

D.623 recourses only apply to S.14 households.

Sector S.14

No data source available.

Sector S.2

No data source available.

Balancing adjustments across all sectors

The benefits received by households (S.14) and the rest of the world (S.2) are set equal to the counterpart information of central and local government (S.1311 and S.1313). No further balancing adjustments are made.

Additional details

44. Social transfers in kind – general government and NPISHs non-market production (D.631)

Description of compilation procedures

Uses

Sector S.1

Social transfers in kind payable are connected to part of the output of general government (S.13) and non-profit institutions serving households (NPISHs, S.15). For other sectors, this transaction is not relevant.

Sector S.13

Concerning the general government a major part of the transfers in kind produced by government relate to education (**DS.11**). As subsidized educational institutions are mainly financed by the State, they are treated as non-market producers. Since they are classified under non-market producers, their output is measured as the total sum of production costs (see also the part on collective consumption expenditures P.32): compensation of employees, intermediate consumption, consumption of fixed capital formation and other taxes paid minus other subsidies received. D.631 is then calculated as the output minus the market output of these institutions.

Besides education services D.631 also includes other transfers as differentiated according to the COFOG classification of government expenditure. These include for example transfers to museums, libraries, the vaccine programme, asylum seekers and sheltered workshops. The SUTs (DS.9) are used as a source, in combination with DS.10, DS.12, DS.14 and DS.15.

Sector S.15

For the non-market output of NPISHs SUT output estimates are followed without any modifications made (**DS.9**). Examples of NPISH providing such services are museums, theatres, sporting clubs and other associations.

Resources

Sector S.1

The social transfers in kind are receivable by households (S.14) only. Other sectors are irrelevant with respect to this transaction.

Sectors S.14

No data source is available.

Balancing adjustments across all sectors

Data sources are implemented without adjustments. The total social transfers receivable by households are set equal to transfers payable.

Additional details

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45. Social transfers in kind – market production purchased by general government and NPISHs (D.632)

Description of compilation procedures

Uses

Sector S.1

D.632 uses in the Netherlands only applies to general government (S.13). Other sectors, including S.15, are not applicable.

Sector S.13

Social transfers in kind are payable by central government (S.1311, DS.10 and DS.11), local governments (S.1313 DS.11 and DS.12), and social security funds (S.1314, DS.15). For central government the main part of the transfers concern house rent support ('huurtoeslag') and children day care facility support ('wet kinderopyang'). For local government the main part of the transfers concerns financial support of people with a disability ('Wet Maatschappelijke Ondersteuning', WMO). For social security funds, the main part of D.632 represents purchases of the social security institution 'Zorginstituut Nederland' (ZiN, DS.15) with the purpose of carrying out the 'wet langdurige zorg' (WLZ) and the 'zorgverzekeringswet' (ZVW). The WLZ covers the cost of long and intense diseases (such as Alzheimer) that are not covered by the basic health insurance ZVW. Payments from private health insurance companies to care providers concerning basic health care are recorded as government expenditure in the form of social transfers in kind related to the ZVW. The ZiN has the task of redistributing the incomerelated premiums to the private health insurance companies. It must do so in such a way that justice is done to the different types of clients of each insurance company. Hence, a private health insurance company with relatively old people as clients will receive a larger part of the premiums. Nominal premiums collected and paid social benefits by private health insurance companies are considered as government income and expenditure, even though the ZiN does not collect the nominal premiums and does not pay the social benefits (rerouting is applied).

Resources

Sector S.1

D.632 resources only apply to S.14 households . Other sectors are not applicable.

Sectors S.14

No data source available

Balancing adjustments across all sectors

The data sources are implemented without adjustments. The total transfers in kind receivable by households (S.14) are set equal to transfers payable by general government (S.13).

Additional details

46. Net non-life direct insurance premiums (D.711)

Description of compilation procedures

Uses

Sector S.1

D.711 uses applies to all sectors.

Sector S.11, S.12 and S.14

No data source available.

Sector S.13

For this transaction state government (**DS.10**), educational organisations (**DS.11**), municipalities, local intergovernmental organisations, provinces and water boards (**DS.12**), and non-profit institutions (**DS.13**) are relevant. For some subsectors the non-life insurance premiums paid are derived from intermediate consumption figures of the sector.

Sector S.15

For sector S.15, an extrapolation is used.

Sector S.2

No data source available.

Resources

Sector S.1

D.711 resources only applies to S.128 insurance companies.

Sector S.12

The net non-life direct insurance premiums of S.128 consist out of three elements

premiums earned

- + investment income attributed to policy holders (D.441)
- -/- the value of the insurance services (part of P.11)

Net non-life insurance premiums occur among health care insurance companies³, guarantee funds and other non-life insurance companies. For health care insurance, premiums earned for additional health care insurance are used (**DS.8**). Premiums for 'core' health care are part of D.632 so only additional health care is recorded. For guarantee funds the premiums received according to their annual reports (**DS.4**) are used. For other non-life insurance premiums earned are reported in **DS.8**.

For each category of insurers the direct income attributable to policyholders is computed as described in D.441.

The value of the insurance services for the non-life insurance are part of the output of non-life insurance companies. For each category the service charge is calculated as the difference

³ Only additional health care insurance are registered in the insurance companies sector, since the Dutch basic health care insurance is mandatory and therefore must be registered under the sector government.

between premiums earned plus direct income attributable to policy holders minus the adjusted claims (payable)⁴.

Sector S.2

No data source available.

Balancing adjustments across all sectors

For the additional health care insurance, it is assumed all premiums are paid by sector S.14 Households.

For guarantee funds and other non-life insurance, the same distribution to sectors is applied. The split in resident and non-resident premiums is made based on **DS.8**. Information from the Dutch Association of Insurers (Verbond van Verzekeraars) (**DS.25**) and DNB (**DS.26**) indicates a ratio of 60/40 ratio for domestic households and companies. For the division between the non-financial corporations (S.11), banks (S.122), investment funds (S.124), other financial institutions (S.125), financial auxiliaries (S.126), captive institutions and money lenders (S.127), insurance companies (S.128) and pension funds (S.129) the output value of several industries from the SUTs (**DS.9**) is used.

Estimates for S.13 and S.15 uses are included without further adjustment.

For premiums paid to insurance companies abroad, data on international trade of services are used. About 5 % of premiums by companies is paid to foreign insurance companies. For households about 0.1 % of premiums is paid to foreign insurance companies.

Additional details

As from the benchmark revision of 2015 non-standard guarantees paid to central government (**DS.10**) are no longer included in D.711 but in in D.75.

⁴ Adjusted claims are calculated as an for inflation corrected moving average of the claims in the last 5 years.

47. Non-life reinsurance premiums (D.712)

Description of compilation procedures

Uses

Sector S.1

D.712 uses applies to S.128 insurance companies and S.129 pension funds.

Sector S.12

DS.8 includes information on non-life reinsurance premiums, paid. In the Netherlands reinsurances occurs among insurance companies, both domestic and abroad, and between pension funds and insurance companies. Reinsurance services are not only supplied by reinsurance companies, but also by life insurance companies and non-life insurance companies.

Non-life reinsurance premiums are estimated by three elements:

premiums earned

- + income attributed to policy holders (D.441)
- -/- the value of the insurance services (part of P.11).

For reinsurance companies the premiums earned are determined by premiums received minus the paid reinsurance provision.

For non-life insurance companies the reported indirect premiums earned are used.

For life insurance companies the reported indirect premiums earned are also used, but the reported reinsurance premiums paid by pension funds to the (life) insurance company is added to this value. This is because the life insurance companies do not report these premiums as part of the indirect premiums earned. The assumption is that all reinsurance premiums paid by Dutch pension funds are paid to Dutch life insurance companies.

Insurance companies do not only receive reinsurance premiums, they also insure part of their risks themselves, like pension funds do. This even occurs among reinsurance companies and is called retrocession. As a result, insurance companies also pay reinsurance premiums. The reinsurance provision, the profit sharing and the value of the reinsurance services are subtracted from the reported premiums.

Sector S.2

For all reinsurers cross border transactions are calculated by using a ratio directly determined by **DS.8**.

Resources

Sector S.1

D.712 resources only applies to S.128 insurance companies.

Sector S.12

DS.8 includes information on non-life reinsurance premiums, received. The estimates of received premiums follows the same 3 elements (premiums + D.441 -/- service charge) as described for premiums paid.

Sector S.2

For all the kinds of reinsurers the cross border transactions is calculated by using a ratio directly determined from our main source from the Dutch central bank (**DS.8**).

Balancing adjustments across all sectors

As a result of the retrocession, reinsurance premiums payable are more reliable than the premiums receivable. For balancing purposes, premiums paid by S.128 and S.129 are included without further adjustment, as is the premiums paid by the Rest of the World. Also, premiums received by the rest of the world are not adjusted. The total amount of received premiums by S.128 is the residual.

Additional details

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

Description of compilation procedures

D.721 Non-life insurance claims is the transposed matrix of D.711, net non-life direct insurance premiums, see section 46.

D.722 Non-life reinsurance claims is the transposed matrix of D.712, Non-life reinsurance premiums, see section 47.

Balancing adjustments across all sectors

Additional details

49. Current transfers within general government (D.73)

Description of compilation procedures

Uses

Sector S.1

D.73 uses only applies to S.13 general government.

Sector S.13

Sector S.1311 is covered by data source **DS.10**. Sub-sector S.1313 is covered by data source **DS.12**. S.1314 is covered by data source **DS.14**. Data are directly obtained from sources without further modification.

Sector S.2

Not applicable.

Resources

Sector S.1

D. 73 resources only applies to S.13 general government.

Sector S.13

Depending on the sector data sources **DS.10** to **DS.14** are used. Data is obtained from these sources without further modification.

Sector S.2

Not applicable.

Balancing adjustments across all sectors

Government sectors exchange information in order to align reported amounts. In case of differences, the amounts reported by other government sectors take precedence over the amounts reported by the State. Amounts reported by other sectors are assumed to be accrual in nature, whereas amounts reported in **DS.10** are cash based. Counter entries for such differences are made in other accounts payable/receivable (AF.89).

Additional details

50. Current international cooperation (D.74)

Description of compilation procedures

Uses

Sector S.1

D.74 uses only applies to S.1311 Central government and S.1313 Local government.

Sector S.13

Sector S.1311 is covered by data source **DS.10**. Sector S.1313 is covered by data source **DS.12**. Data are directly obtained from sources without further modification.

Sector S.2

Data source DS.8 is used.

Resources

Sector S.1

This transaction only applies to S.13 General government.

Sector S.13

Depending on the subsector data sources **DS.10** to **DS.14** are used. Data is obtained from these sources without further modification.

Sector S.2

Data sources **DS.8** and **DS.13** are used without further modifications.

Balancing adjustments across all sectors

The source of S.1311 provides total uses, which overrules counterpart data provided by S.2, resources.

In case of discrepancies, S.13 resources overrule S.2 uses.

Additional details

51. Miscellaneous current transfers (D.75)

Description of compilation procedures

Uses

Sector S.1

D.75 uses applies to all domestic sectors.

Sector S.11

The main part of the current transfer from S.11 to S.2 represents free sample shipments. This information is obtained from the international trade in goods statistics, part of International trade in goods statistics, one of the sources for the SUT (**DS.9**). In addition, corporations provide funds to NPISH, the total value of which is estimated from NPISH data (**DS.18**). Total uses also include fines paid to the Tax authority and the Netherlands Authority for Consumers and Markets (**DS.10**). As from the benchmark revision of 2015 non-standard guarantees and insurance premiums paid to central government (**DS.10**) are included in D.75 instead of D.711 respectively D.99.

Sector S.12

Sector S.121 is covered by **DS.6**. According to ESA paragraph 14.16, part of the output of the central bank which is not sold has to be, by convention, allocated to the intermediate consumption of other financial institutions (in the Netherlands S.122). To balance the accounts, the same amount is counterbalanced by a current transfer classified under D.75 received from the central bank

From 2008 to 2014 financial institutions paid premiums for special loan guarantees to S.13. These special loan guarantees were provided at the end of 2008 to relief the liquidity problems of the financial institutions caused by the financial turmoil. The last special loan guarantees expired in 2014. Fines are also included in the uses. Mainly government data is used for the recording of these transactions (**DS.10**).

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12**, **DS.13** and **DS.14** are used. Data are included without further adjustments. The largest part relates to current transfers to S.15 NPISH, such as contributions to public and regional broadcasters and development aid (OXFAM Novib, Cordaid Netherlands and Plan Netherlands).

Sector S.14

Current transfers include fines paid to S.1311 central government, for which information is available from **DS.10**. Although **DS.16** provides some information on contributions to NPIGG, government sources (**D.13**) are leading. In addition, households provide funds to NPISH such as charities, trade unions, religious organisations and sport clubs. Estimates are largely based on data sources from NPISH (**DS.18**). Remittances to S.2 are estimates based on data from Money Transfer Operators (**DS.20**). Transfers between households are based on **DS.19**.

Sector S.15

Data source **DS.18** is used.

Sector S.2

The largest flow represents the free sample shipments provided by S.11 based on the information from international trade in goods statistics, an input for SUT (**DS.9**). Data on remittances from expats to their families in the Netherlands are estimates based on data from Money Transfer Operators (**DS.20**).

Resources

Sector S.1

The S.1 total is the sum of outcomes of all domestic sectors.

Sector S.11

Current transfers received from S.2 include mainly free sample shipments. This information is obtained from the international trade in goods statistics, part of International trade in goods statistics, one of the sources for the SUT (**DS.9**). Other current transfers received are based on counterpart information.

Sector S.12

According to ESA paragraph 14.16 the part of the output of the central bank which is not sold has to be, by convention, allocated to the intermediate consumption of other financial institutions (in the Netherlands S.122). To equilibrate the accounts of the other financial institutions, the amount of their respective intermediate consumption of the service provided by the central bank is to be counterbalanced by a current transfer (classified under D.75) received from the central bank, for the same amount.

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12**, **DS.13** and **DS.14** are used. Data are included without further adjustment. Resources of S.13 are dominated by fines paid by households (S.14) and non-financial corporations (S.11). Educational institutions receive parental contributions, for which data source **DS.11** is available.

Sector S.14

Counterpart information is used in combination with **DS.16**. The resources mainly originate from S.14 and S.15 which encompass (from S.14) gifts, study allowances and alimonies which are estimated with the help of **DS.17**. Flows from S.15 are mainly support to households (**DS.18**). The flows from S.2 are remittances from families abroad obtained from the balance of payments (**DS.8**).

Sector S.15

The main source of income are contributions to charities, trade unions, religious organisations and sport clubs from households, corporations and the government (**DS.18**).

Sector S.2

This concerns mainly free sample shipments based on the information from international trade in goods statistics, an input for the SUT (**DS.9**). In 2013 a fine for fraud was recorded between S.12 and S.2. Data on remittances to S.2 are estimates based on data from Money Transfer Operators (**DS.20**). Transfers between households are based on **DS.19**. To estimate the transfers from NPISH to S.2 data source **DS.18** is used.

Balancing adjustments across all sectors

The S.13 related data sources are assessed as being of highest quality which implies these sources will overrule the counterpart sector data in case of discrepancies. Similarly, the estimates on the uses and resources of S.2 are generally not adjusted during further balancing. To a lesser extent this also applies to S.15. Some sectors, notably S.11 and S.14 do not have sufficient sources in their own right for D.75 and are therefore estimated (at least partly) based on counterpart sector information.

Additional details

52. VAT and GNI based EU own resources (D.76)

Description of compilation procedures

Uses

Sector S.1

D.76 uses applies to S.1311 Central government.

Sector S.13

Data on VAT-based (D.761) and GNI-based (D.762) own resources are directly obtained from **DS.10**. The same holds for miscellaneous non-tax contributions of the government to the institutions of the EU (D.763).

Sector S.2

Not applicable

Resources

Sector S.1

Not applicable.

Sector S.2

Data is obtained from DS.6.

Balancing adjustments across all sectors

The data source for government (uses) is leading in case of discrepancies.

Additional details

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53. Adjustment for the change in pension entitlements (D.8)

Description of compilation procedures

D.8 Adjustment for the change in pension entitlements is calculated as the pension part of D.61 net social contributions, minus the pension part of D.62 Social benefits other than social transfers in kind. For more information see sections 33-43.

Balancing adjustments across all sectors

Uses

Sector S.1

D.8 uses applies to S.128 insurance companies and S.129 pension funds.

Sector S.12

Data for S.128 and S.129 uses are calculated as D.61 net social contributions, minus D.62 Social benefits other than social transfers in kind.

Sector S.2

Not applicable.

Resources

Sector S.1

D.8 resources only applies to S.14 Households.

Sector S.14

Data for S.14 resources is calculated as D.61 net social contributions, minus D.62 Social benefits other than social transfers in kind.

Sector S.2

Data for S.2 resources is calculated as D.61 net social contributions, minus D.62 Social benefits other than social transfers in kind.

Additional details

54. Capital transfers (D.91)

Description of compilation procedures

Uses

Sector S.1

D.91 uses only applies to S.14 Households.

Sector S.14

Data are obtained from **DS.16** and used in combination with counterpart information.

Sector S.2

Estimations used are based on modelling (DS.8).

Resources

Sector S.1

D.91 resources only applies to S.13.

Sector S.13

S.1311 Central government is covered by **DS.10** while for S.1313 Local government data are obtained from **DS.12**. Data are used without further modification.

Sector S.2

Estimations are used based on modelling (DS.8).

Balancing adjustments across all sectors

The **DS.10** and **DS.12** data for S.1313 and S.1311 will overrule the information provided for S.14. For the balancing of the sectors, the difference between the total resources provided by the sources of S.1311 and the estimation from the source of S.2 are assigned to S.14 uses. The estimation made by S.2 generally remains unchanged.

Additional details

55. Investment grants (D.92)

Description of compilation procedures

Uses

Sector S.1

D.92 uses only applies to S.13 General government.

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12** and **DS.14** are used without further modification.

Sector S.2

No data available.

Resources

Sector S.1

D.92 resources applies to S.11 Non financial corporations and S.13 General government.

Sector S.11

Data are obtained from DS.1.

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12** and **DS.14** are used without further modification.

Sector S.14

Data are obtained from **DS.16**.

Sector S.15

Data are obtained from DS.18.

Sector S.2

No data available.

Balancing adjustments across all sectors

The source data of S.13 is included without further adjustment. During the balancing process, all other sectors are adjusted.

Additional details

56. Other capital transfers (D.99)

Description of compilation procedures

Uses

Sector S.1

D.99 uses applies to all domestic sectors.

Sector S.11

Estimations are based on counterpart information. The data are based on information from various parts of S.13 (**DS.10-DS.15**). As from the benchmark revision of 2015 insurance premiums paid to central government (**DS.10**) are included in D.75.

Sector S.12

With respect to S.12, only capital transfers received by S.129 pension funds are recorded. Information is taken from annual corporate accounts (**DS.4**) of pension funds under supervision of the Central Bank.

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12** and **DS.14** are used without further modification. The payment to S.14 is mainly the debt relief of the performance-related student loans, taken from the source **DS.11**. The flows to S.2 are mainly payments to funds like the European Development Funds and the Stability Funds and contributions to the International Development Organisation.

Sector S.14

The flow paid by S.14 to other sectors represents mainly inheritances. The amount of inheritance is estimated based on the inheritance tax receipts data (**DS.10**).

Sector S.15

Currently no capital transfers payable are recorded for S.15.

Sector S.2

Estimates are model based. The main flow relates to inheritances to S.14. The estimate is extrapolated from an observation in 2003 from the Central Bank on cross border inheritances. The trend on deaths in the Netherlands is used for the number of deaths and thus inheritances received from outside the Netherlands.

Resources

Sector S.1

D.99 resources applies to all domestic sectors.

Sector S.11

Estimations are based on counterpart information. S.11 receives capital transfers from S.13 e.g. claims related to export credit insurances.

Sector S.12

Estimations are based on counterpart information, primarily S.13. The main capital transfers in recent years relate to government take-overs of troubled financial institutions

Sector S.13

Depending on the S.13 sector data sources **DS.10**, **DS.12** and **DS.14** are used without further modification.

Sector S.14

One large flow is the debt relief of the performance-related student loans paid by S.13. Another large flow is the estimate for inheritances between households. The amount of inheritances is estimated based on the inheritance tax that is received by S.13 (both **DS.10**).

Sector S.15

DS.18 is used for the coverage of flows to S.15 which are mainly inheritances from households that go to charity. Information from **DS.18** on legacies are used for the estimation.

Sector S.2

Estimates are partly based on **DS.8** as well as model based. The main flow to S.2 represents inheritances received from S.14. Just like the incoming inheritances, this is based on a 2003 observation from the Dutch Central Bank on cross border inheritances. The change in the number of deaths in the Netherlands is used for the trend in the years after. S.2 also receives capital transfers from S.13. These are mainly payments to European funds.

Balancing adjustments across all sectors

The S.13 related data sources are assessed as being of highest quality, which implies these sources will overrule the counterpart sector data in case of discrepancies. Similarly, the estimates on the uses and resources of S.2 are generally not adjusted further during balancing. To a lesser extent this also applies to S.15. Some sectors, notably S.11 and S.14 do not have sufficient sources in their own right for D.99 and are therefore estimated (at least partly) based on counterpart sector information.

Additional details

57. Acquisitions less disposals of non-produced assets (NP)

Description of compilation procedures

Uses

Sector S.1

NP applies to all domestic sectors.

Sector S.11- S.2

The acquisition and disposals of royalties and license originals like brand names and franchise concepts is available from the International trade on services statistic, a source for the SUT (**DS.9**). Soccer transfers are accounted for in NP, based on free newsgathering.

Sector S.127-S.2

DRA (**DS.8**) provide information on acquisition and disposals of royalties and license originals like brand names and franchise concepts.

Sector S.13

The administration of the State (**DS.10**), Education survey (**DS.11**), NPIGG Accounts (**DS.14**) and IV3 (**DS.12**) are data sources for transactions between government entities and between S.13 and S.11. These transactions mainly concern land, and incidentally, the issuing of permits to extract natural resources or use mobile phone frequencies.

Sector S.12

DRA (**DS.8**) contains data on transactions in real estate of financial corporations. 20% of transactions in dwellings and 10% of transactions in other buildings are considered "land", and booked as transactions in NP accordingly.

Sectors S.11, S.14 & S.15

There are no direct sources for S.11 and S.14 and S.15. These sectors are estimated as counterparties of S.12, S.13 and S.2.

Sector S.2

Outcomes are based on DS.8.

Balancing adjustments across all sectors

Balancing is only needed for transactions in land between S.11 and S.14 and S.15. A share of 72 per cent of the total is attributed to S.11 while 28 per cent is attributed to S.14 and S.15.

Additional details

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58. Consumption of fixed capital (P.51C)

Description of compilation procedures

The estimation of consumption of fixed capital is based on the perpetual inventory method (PIM). The data framework underlying the PIM is data source **DS.23**. The PIM system provides, in a consistent way, statistics on consumption of fixed capital, net capital stocks, productive capital stocks and capital services (for productivity statistics). The PIM provides outcomes on consumption of fixed capital at industry and institutional sector level.

A detailed description of the Dutch PIM is available in the GNI inventory [5]

Balancing adjustments across all sectors

Results from the PIM are included in sector account without further adjustments or balancing.

Additional details

59. Employment

Description of compilation procedures

Sector s.1

The number of employed persons is derived from two sources. The Employees' Register of the Employee Insurance Agency [DS.30] and the Labour Source Survey (LFS, [DS.32]) are used to determine the quarterly figures. The quarterly estimate of the number employees is based the jobs/employed person ratio of the same quarter in the previous year [DS.30]. The number of self-employed persons are determined from the LFS in which the main jobs that are classified as a self-employed job are selected. This result in the numbers of persons employed.

Hours worked are the hours paid less hours paid without work, e.g. in case of sickness, pregnancy and maternity and so on. Hours worked include unpaid overtime. In order to estimate the unpaid overtime LFS **DS.32** is used.

For the self-employed the hours worked are determined on the basis of the average LFS working time per industry x gender. The LFS survey specifically asks for the actual hours worked in the previous week.

For the annual estimates the Employees' Register of the Employee Insurance Agency (DS.30) and the Statistic's of unincorporated enterprises (DS.15) are used.

For the breakdown of the employment in branches of industry and institutional sectors(S.13), the administrative data are linked to the units in the statistical business register (SBR).

Balancing adjustments across all sectors

For employment, no further balancing is performed on the breakdown into institutional sectors.

Additional details

60. Overview of source data coverage

This final chapter of Section D provides an overview of data coverage of the Dutch Annual Sector accounts. An overview is provided in table 5 in which the evaluation of the shares of the estimated value in the total (estimated + observed) amount is recorded. By 'observed amount', the value calculated through the use of direct sources is meant, including through directly observed counterpart data. By 'estimated amount', the value calculated by using statistical or modelling techniques is meant.

Table 5 is filled in by using the following codes:

- E80 estimates dominate in the final value by more than 80%;
- E50 estimates dominate in the final value between 50-80%;
- OE observed values dominate final value, though estimates were used;
- OV only observed values.

Table 5
Evaluation of the shares of the estimated value in the total (estimated + observed) amount recorded

Transaction/ sectors		S.11	S.12	S.13	S.14	S.15	S.2
P.11 including P.119		OE	OE	OE	OE	OE	-
P.12		E80	OE	ov	OE	ov	-
Р	.13	-	-	ov	-	OV	-
ı	2.2	OE	OE	OE	OE	OE	-
Р	.31	-	-	-	OE	-	-
Р	.32	-	-	OE	-	-	-
Р	.51	OE	OE	ov	OE	OE	-
P.52		OE	-	OV	E50	-	-
P.53		E50	-	OV	E50	OE	-
Р	P.61		-	-	-	-	OE
Р	P.62		-	-	-	-	OE
P.62B		-	-	-	-	-	E80
P.71		-	-	-	-	-	OE
P.72		-	-	-	-	-	OE
P.72B		-	-	-	-	-	E80
D.11	uses	OE	OE	OE	OE	OE	OE
D.11	resources	-	-	-	OV	-	OE
D 12	uses	E80	OE	OE	OE	OE	OE
D.12	resources	-	-	-	OV	-	OE
D.211	uses	-	-	-	-	-	-
	resources	-	-	OV	-	-	-
D.212	uses	-	-	-	-	-	-
	resources	-	-	E80	-	-	OE
D.214	uses	-	-	-	-	-	-
	resources	-	-	OE	-	-	OV
D.29	uses	OE	OE	OE	OE	OV	-

	resources	_	-	OE	-	_	E80
D.31	uses	-	-	-	-	-	-
	resources	-	-	OV	-	-	-
	uses	OE	OE	ov	OE	-	-
D.39	resources	-	-	OV	-	-	OV
5.44	uses	OE	OE	ov	OE	E50	OE
D.41	resources	OE	OE	ov	OE	E80	OV
D 424	uses	OE	OE	-	-	-	OV
D.421	resources	OE	ov	OE	OE	OV	OE
D 422	uses	E80	-	-	-		OV
D.422	resources	OE	OE	-	E80	-	OV
D 43	uses	OE	OE	-	-	-	E80
D.43	resources	E80	OE	ov	-	-	OE
D 44	uses	-	OE	-	-	-	OE
D.44	resources	E50	OE	E50	OE	-	E80
D 45	uses	E50	-	OV	E50	-	-
D.45	resources	OE	-	OE	E80	1	-
D E1	uses	OE	OE	OV	OE		OE
D.51	resources	-	-	OV	-		OE
D F0	uses	-	-	-	OE		OV
D.59	resources	-	-	OV	-	1	-
D.611	uses	-	-	-	OE	-	E80
	resources	-	OE	OV	-	1	E80
D.612	uses	-	-	-	OV	-	-
	resources	OE	OE	ov	E80	OE	-
D.613	uses	-	-	-	ov	-	OE
	resources	-	OE	ov	-	-	OV
D.614	uses	-	-	-	ov	-	E80
	resources	-	OE	ov	-	-	-
D.61SC	uses	-	-	-	OE	-	OE
	resources	-	ov	-	-	-	-
D.621	uses			ov	-		OV
D.021	resources			-	OE		OV
D.622	uses	OE	ov	ov	E80	OE	-
D.022	resources	-	-	-	OE	-	OE
D.623	uses	-	-	ov	-	-	-
5.023	resources	-	-	-	OE	-	OV
D.63	uses	-	-	OE	-	OV	-
	resources	-	-	-	-	-	-
D.71	uses	OE	OE	ov	OE	OV	OE
	resources	-	ov	E80	-	-	OE
D.72	uses	-	OV	E80	-	-	OE
	resources	OE	OE	OV	OE	OV	OE

I	uses	l <u>.</u>	_	OE .	l <u>.</u>	l <u>.</u>	_
D.73							
	resources	-	-	OE	-	-	-
D.74	uses	-	-	OV	-	-	OE
	resources	-	-	OE	-	-	OV
D.75	uses	OE	ov	OV	OE	OV	OV
	resources	OE	ov	OE	OE	OE	OE
D.76	uses		_	OV			-
	resources			-			OV
D.8	uses		OE		-		-
	resources		-		OE		E80
D.91	uses	-	-	-	ov	-	OV
	resources	-	-	OV	-	-	OV
D.92	uses	-	-	OE	-	-	OE
	resources	OE	-	OE	OV	OE	OV
D.99	uses	E80	E50	OE	ov	-	OE
	resources	OE	E80	OV	OE	OV	E80
NP		E80	OV	OV	E80	E80	V
P.51C		OE80	E80	OV	E80	E80	-
EMP		-	-	OV	-	-	-

Annex 1 – List of abbreviations

SUT Supply and Use Table

ASA	Annual Sector Accounts
ВоР	Balance of Payments
BPM	Balance of payments Manual
CBF	Centraal Bureau Fondsenwerving (Central Bureau of Fund Raising)
CBS	Centraal Bureau voor de Statistiek (CBS)
DB	Defined Benefit
DC	Defined Contribution
DNB	De Nederlandsche Bank (Dutch Central Bank)
DRA	Directe Rapportage (Balance of Payments Survey)
ESA2010	European System of Accounts 2010
EDP	Excessive Deficit Procedure
EU	European Union
FI	Financial Intermediaries
FISIM	Financial Intermediation Services Indirectly Measured
GDP	Gross Domestic Product
GNI	Gross National Income
GVA	Gross Value Added
IIP	International Investment Position
IIWS	Integral Income and Wealth statistics
ISIN	International Securities Identification Number
iSR	Integration System Sector Accounts
IV3	Information for third parties
LEF	Agricultural Legalization Fund
kFSO	Statistics of finances of non-financial corporations on quarterly basis
MER	Monthly Securities Survey
MMF	Money Market Fund
NACE	Nomenclature statistique des activités économiques dans la Communauté
	européenne
NFI	Non-financial Intermediaries
NPIGG	Non-Profit Institutions serving General Government
NPISH	Non-Profit Institutions Serving Households
OFI	Other Financial Institutions
PBO	Public Corporate Organisations
PIM	Perpetual Inventory Method
QSA	Quarterly Sector Accounts
SA	Sector Accounts
SIM	Standard Inpassing Machine (Standard Adjustment Machine)
SFGO	Statistics of finances of large non-financial corporations
SFKO	Statistics of finances of small non-financial corporations
SFO	Statistiek Financiën Ondernemingen (Statistics Finances of Enterprises)
SC	Service Charge
SPE	Special Purpose Entity
SSF	Social Security Funds

- *SZO* Statistiek Zelfstandige Ondernemingen (statistics of unincorporated enterprises)
- TP Transmission Program
- *VAT* Value Added Tax

Annex 2 – Reference list

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