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Non-financial transactions - annual data (nasa_10_nf_tr)

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Eurostat metadata

Reference metadata

National metadata

National reference metadata

National metadata produced by countries and released by Eurostat

Slovenia

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1. Contact

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2. Metadata update

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2.1. Metadata last certified	12/12/2023
2.2. Metadata last posted	20/01/2021
2.3. Metadata last update	31/05/2024

3. Statistical presentation

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3.1. Data description

The non-financial Annual Sector Accounts (ASA) are compiled in accordance with the European System of Accounts (ESA 2010) and are transmitted by the EU Member States, EFTA Members (except Liechtenstein) following ESA2010 transmission programme (Table 8) established by the Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union, annexes A and B respectively).

The ASA encompass non-financial accounts that provide a description of the different stages of the economic process: production, generation of income, distribution of income, redistribution of income, use of income and non-financial accumulation. The ASA record the economic flows of institutional sectors in order to illustrate their economic behaviour and interactions between them. They also provide a list of balancing items that have high analytical value in their own right: value added, operating surplus and mixed income, balance of primary incomes, disposable income, saving, net lending / net borrowing. All of them but net lending / net borrowing, can be expressed in gross or net terms, i.e. with and without consumption of fixed capital that accounts for the use and obsolescence of fixed assets.

In terms of institutional sectors, a broad distinction is made between the domestic economy (ESA 2010 classification code S.1) and the rest of the world (S.2). Within S.1 and S.2, in turn, more detailed subsectors are distinguished as explained in more detail in section "3.2 Classification system".

Data are presented in the table "Non-financial transactions" (nasa_10_nf_tr).

The table contains data, as far as they are available, expressed in national currency and millions of euro in current prices.

In line with ESA2010 Transmission programme requirements data series start from 1995 (unless subject to voluntary transmission option and/or country specific derogations). Countries may transmit longer series on voluntary basis.

Available level of detail by sectors and transactions may also vary by country due to voluntary transmission of some items (as defined in ESA2010 transmission programme) and country specific derogations.

ASA collected according ESA2010 Transmission programme include selected data on employment (in persons and hours worked) by institutional sectors. However, as transmission of these variables is voluntary (except for the sector of General government), data availability may vary significantly across countries.

A set of key indicators, deemed meaningful for economic analysis, is available in the table "Key indicators" (nasa_10_ki) for most of the members of the European Economic Area (EEA), of the Euro area and EU.

Key ratios are derived from non-financial transactions as follows:

- Gross household saving rate (S.14_S.15): B8G/(B6G+D8rec-D8pay)*100
- Gross investment rate of households (S.14_S.15): P51G/(B6G+D8rec-D8pay)*100
- Gross investment rate of non-financial corporations (S.11): P51G/B1G*100

- Gross profit share of non-financial corporations (S.11): B2G_B3G/B1G*100
- Total investment to GDP ratio (S.1): P51G/B1GQ*100
- Business investment to GDP ratio: (S.11_P51G+S.12_P51G)/B1GQ*100
- Government investment to GDP ratio: S.13_P51G/B1GQ*100
- Households investment to GDP ratio: (S.14_S.15_P51G)/B1GQ*100

With the following transaction codes:

- B8G - Gross saving
- B6G - Gross disposable income
- D8rec / D8pay - the adjustment for the change in pension entitlements (receivable / payable)
- P51G - Gross fixed capital formation
- B1G - Gross value added
- B1GQ – Gross domestic product
- B2G_B3G - Gross operating surplus/ mixed income.

In the above, all ratios are expressed in *gross terms*, i.e. before deduction of consumption of fixed capital.
The following key indicators are calculated in real or nominal terms:

- Real growth of household adjusted disposable income per capita (percentage change on previous period, S.14_S.15): B7G/(POP_NC*Price Deflator)
- Nominal growth of household adjusted disposable income per capita (percentage change on previous period, S.14_S.15): B7G/(POP_NC)
- Real growth of household actual consumption per capita (percentage change on previous period, S.14_S.15): P4/(POP_NC*Price Deflator)

With the following codes (the codes already described above have not been listed):

- B7G - Gross adjusted gross disposable income (adjusted for social transfers in kind)
- P4 - Actual final consumption (adjusted for social transfers in kind)
- POP_NC - Total population national concept (source:Quarterly national accounts, Eurobase domain namq_10_pe)
- Price deflator - Price index/implicit deflator calculated as CP_MEUR/CLV10_MEUR – both indicators refer to households and NPISH final consumption expenditure (P31_S14_S15) (source: Quarterly national accounts, Eurobase domain namq_10_gdp)

The following key indicators combine non-financial with financial accounts:

- Gross return on capital employed, before taxes, of non-financial corporations (S.11): [B2G_B3G/(AF2+AF3+AF4+AF5, liab)]*100
- Net debt-to-income ratio, after taxes, of non-financial corporations (S.11): ([(AF2+AF3+AF4, liab)/(B4N-D5pay)]*100)
- Net return on equity, after taxes, of non-financial corporations (S.11): [(B4N-D5pay)/(AF5, liab)]*100
- Gross debt-to-income ratio of households (S.14_15): [(AF4, liab)/(B6G+D8net)]*100
- Household net financial assets ratio (BF90/(B6G+D8net))

With the following codes (the codes already described above have not been listed):

- B4N - Net entrepreneurial income
- D5pay - Current taxes on income and wealth
- AF2 - Currency and deposits
- AF3 - Debt securities (excluding financial derivatives)

- AF4 - Loans
- AF5 - Equity and investment fund shares
- BF90 – Financial net worth

"rec" means resources, that is transactions that add to the economic value of a given sector.
"pay" means "uses", that is transactions that reduce the economic value of a given sector.
"liab" refers to the stock of liabilities incurred by a given sector and recorded in the financial balance sheets.
See also the sector accounts dedicated website for more information.

3.2. Classification system

The standard followed is the European System of Accounts 2010 and ESA 2010 data transmission programme. The main categories are the **institutional sectors** and the **transactions** recorded between the sectors. The transactions are grouped into a **sequence of accounts**, namely: the production, generation, distribution and redistribution of income, use of income and capital accounts.
The **institutional sectors** combine institutional units with broadly similar characteristics and behaviour: households and non-profit institutions serving households (NPISHs), non-financial corporations, financial corporations, and the government. Transactions with non-residents and the financial claims of residents on non-residents, or vice versa, are recorded in the "rest of the world" account.
ESA 2010 Classification of sectors:

- Total economy (S.1)
- Non-financial corporations (S.11)
  - Public non-financial corporations (S.11001)
- Financial corporations (S.12)
  - Public non-financial corporations (S.12001)
- General government (S.13)
- Households and non-profit institutions serving households (NPISH) (S.14_15)
- Households (S.14)
- Non-profit institutions serving households (S.15)
- Rest of the World (S.2)

An additional Not sectorised category (S.1N) is introduced for sector accounts data transmission/ presentation purposes.
The **Not sectorised** category describes transactions that conceptually cannot be allocated to domestic institutional sectors. This is the case only for transactions in taxes and subsidies in products (D.21-D.31) as elements of GDP by production approach.
The **households sector** comprises all households including unincorporated household enterprises. These cover most sole proprietorships and most partnerships that do not have a legal status independent from their owners. Therefore the household sector also generates output and entrepreneurial income. In the European accounts, non-profit institutions serving households (NPISHs), such as charities and trade unions, are grouped with households. Their economic weight is relatively limited.
The **non-financial corporations sector** comprises all private and public corporate enterprises that produce goods or provide non-financial services to the market. Accordingly, the government sector excludes such public enterprises (except corporations having mainly non-market output and being controlled by government unit) and comprises central, state (regional) and local government and social security funds.
The **financial corporations sector** comprises all private and public entities engaged in financial intermediation such as monetary financial institutions (Central bank and

other banks, money market funds), investment funds, insurance corporations and pension funds.

Rest of the world sector consists of non-resident units insofar as they are engaged in transactions with resident institutional sectors.

The **transactions** between institutional sectors are grouped into various categories that have a distinct economic meaning. For more details on **transactions and sequence of accounts** please see section 3.4. Statistical concepts and definitions.

Classification of transactions:

- Transactions in goods and services include the letter "P", e.g. *P.1 Output*, *P.2 Intermediate consumption*, *P.51 Gross fixed capital formation* etc.
- Distributive transactions have the letter "D", e.g. *D.1 Compensation of employees*, *D.2 Taxes on production and imports*, *D.41 Interest* etc.
- Letter "B" is used for the balancing items of the non-financial accounts, e.g. *B.1GQ Gross domestic product at market prices*, *B.6G Gross disposable income*, *B.9 Net lending (+) / net borrowing (-)* etc. They are calculated as resources minus uses.

Coding of the flow dimension: in the non-financial accounts, resources are coded as "received" and uses as "paid".

For a complete review of the classifications used, please refer to:

- ESA 2010 Chapter 23 'Classifications'

- The European System of Accounts 2010 Transmission Programme

3.3. Coverage - sector

Annual sector accounts cover all (institutional) sectors of the economy. For details, please refer to section 3.2 Classification system.

Transmission of annual data on sub-sectors of public non-financial and financial corporations is voluntary according to ESA 2010 transmission programme. Thus these data may not be available for all countries and periods.

3.4. Statistical concepts and definitions

The concepts, definitions and classifications are based on the European System of Accounts (ESA 2010). The non-financial sector accounts provide, by institutional sector, a systematic description of the different stages of the economic process: production, generation of income, distribution of income, redistribution of income, use of income and financial and non-financial accumulation. Transactions with non-residents are recorded in the "rest of the world" account. The sector accounts thus show the interactions among the different sectors of the resident economy and between the resident economy and the rest of the world.

For the euro area and the EU consolidated **rest of the world accounts** are produced. This means that cross-border transactions among euro area/EU Member States have been removed from the rest-of-the-world accounts and that, in particular, the asymmetries in the bilateral trade statistics have been eliminated. Consequently, imports and exports are much smaller than they would have been if a simple aggregation of the national data had been used; about half of the external trade of the individual Member States is within the euro area/EU.

The **transactions** are grouped into various categories that have a distinct economic meaning, such as 'compensation of employees' (comprising wages and salaries, before taxes and social contributions are deducted, and social contributions paid by the employers). In turn, these categories of transactions are shown in a **sequence of accounts**, each of which covers a specific economic process. This ranges from production, income generation and income (re)distribution, through the use of income, for consumption and saving, and the investment, as shown in the capital account, to transactions such as borrowing and lending. Each non-financial transaction is recorded as an increase in the "resources" of a certain sector and an increase in the "uses" of another sector. For instance, the resources side of the "dividends" transaction category records the amounts of dividends receivable by the different sectors of the economy, whereas the uses side shows dividends payable. For each type of transaction, total resources of all sectors and the rest of the world equal total uses. Each account leads to a meaningful balancing item, the value of which equals total resources minus total uses. Typically, such balancing items, such as GDP or saving, are important economic indicators. They are carried over to the next account.

The production account records the output of goods and services as its main resource, to which taxes less subsidies on products are added to obtain total resources of an economy at market prices. The main use in the production account is "intermediate consumption" - such as the consumption of fuel within a production process. The difference between resources and uses is the balancing item "gross value added" for individual domestic sectors and gross domestic product (GDP) for total economy . This gross value added is then carried over as a resource to the subsequent set of accounts, the **generation and distribution of income accounts**, which eventually yield "disposable income" as a balancing item. This conceptual and numerical inter-linkage of the accounts ensures the consistent derivation of key economic indicators. "Net lending/net borrowing" is derived from the **capital account** by comparing "gross capital formation" (mainly investment in capital goods and software) plus the net acquisition of "non-produced, non-financial assets" (such as land or licences) with "gross saving" plus net "capital transfers" (such as an investment grants). If saving plus net capital transfers received exceeds non-financial investment, a sector has a surplus of funds and becomes a net lender to other domestic sectors and/or the rest of the world.

The transactions are recorded on an accrual basis (i.e. not on a cash basis), that is, when economic value is created, transformed or extinguished.

3.5. Statistical unit

The elementary building block of ESA2010 statistics is the institutional unit (see ESA2010, 2.12.), "an elementary economic decision-making centre characterised by uniformity of behaviour and decision-making autonomy in the exercise of its principal function". This can be, amongst others, a household, a corporation or a government agency.

3.6. Statistical population

National accounts combine data from many source statistics. The concept of statistical population is not applicable in a national accounts context.

3.7. Reference area

Eurostat collects and disseminates in its database data for European Union, Euro Area, EU Member States, EFTA Member States (except Liechtenstein) and enlargement countries whenever available (currently Serbia and Turkey) based on ESA 2010.

Eurostat receives from OECD in the framework of data sharing agreement and disseminates data for the following OECD countries based on the SNA2008: Russia, South Africa, Canada, United States, Costa Rica, Mexico, Brazil, Chile, Colombia, Peru, China including Hong Kong (SNA93), Japan (SNA 93), South Korea, Israel, Australia, New Zealand. The applied key statistical concepts can be consulted under https://stats.oecd.org/

3.8. Coverage - Time

The ESA 2010 regulation requires submitting the data back to 1995. Given the existence of derogations regarding the transmission programme and voluntary series, the length of the series available varies from one country to the other.

The Euro Area and the European Union Annual Sector Accounts are available as from 1999.

3.9. Base period

Not applicable.

4. Unit of measure

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Data are presented in millions of national currency, Euro/ECU (for non-financial transactions) and as percentage ratios (for key indicators).

5. Reference Period

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The reference period is the calendar year.

6. Institutional Mandate

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6.1. Institutional Mandate - legal acts and other agreements

The non-financial Annual Sector Accounts (ASA) are compiled in accordance with the European System of Accounts (ESA 2010) and are transmitted by the EU Member States, EEA Members (Norway, Iceland) and Switzerland following ESA2010 transmission programme (Table 8) both established by the Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union, annexes A and B respectively).

6.2. Institutional Mandate - data sharing

Data received via the ESA2010 transmission programme are shared with other international institutions in accordance with specific agreements, notably with the ECB and the OECD.
Data sharing with ECB is governed by service level agreement signed between Eurostat and ECB in February 2008.

A Protocol for co-operation between Eurostat and the OECD in the area of National Accounts signed in June 2013 specifies agreed data exchange and data validation arrangements.

7. Confidentiality

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7.1. Confidentiality - policy

Regulation (EC) No 223/2009 on European statistics (recital 24 and Article 20(4)) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

7.2. Confidentiality - data treatment

If Member States transmit data with a confidentiality flag or an embargo date, these data are not disseminated until the confidentiality flag is lifted in a subsequent data transmission or the embargo expired.

8. Release policy

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8.1. Release calendar

Complete sequence of annual accounts for the European Union and Euro Area by institutional sectors are released and revised four times per year (120 days after the reference quarter) as they are calculated as the sum of quarterly EA/EU accounts.

For the Euro Area only, selected transactions and key indicators for the corporations and households (incl. NPISH) sectors are first published around 94 days after the reference quarter (preliminary data release). To avoid inconsistencies in Euro Area accounts due to data revisions, data for total economy, general government and RoW sectors are not available in database between 94 and 120 days after the reference quarter. Complete dataset for Euro area as released for previous quarter can be downloaded here in .tsv format.

According to the legal data transmission deadline as defined in ESA2010 transmission programme the countries should submit annual sector accounts data by 30th of September each year (see also part "14.1 Timeliness"). Once received, data are subject to validation procedures and are normally released within one month. However, the publication may be delayed if Eurostat has detected data quality issues (e.g. imbalances, implausible data).

In general, annual sector accounts by country are updated before the end of November for data up to the previous year including later data submissions.

Annual sector accounts data by countries validated by Eurostat before the release of validated government finance statistics (GFS) data are published excluding S.13 (general government) sector. Following the release of GFS in the 3rd week of October, sector accounts data are published including S.13 data.

Significant inconsistencies between sector accounts data and related national accounts datasets (main GDP aggregates, GFS) may result in countries' data not being disseminated until the quality issues are resolved (see section 19. Comment for more details by country).

8.2. Release calendar access

For European sector accounts please refer to release calendars section on Eurostat website and sector accounts dedicated webpages.

8.3. Release policy - user access

In line with the Community legal framework and the European Statistics Code of Practice Eurostat disseminates European statistics on Eurostat's website (see item 10 - 'Accessibility and clarity') respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The detailed arrangements are governed by the Eurostat protocol on impartial access to Eurostat data for users.

9. Frequency of dissemination

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National data are disseminated once a year. In case of data updates, these are released shortly after data transmission by a country.

European sector accounts (Euro Area and European Union) are released quarterly. Please see section 8.1 for more details.

10. Accessibility and clarity

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10.1. Dissemination format - News release

Not available for annual data.

10.2. Dissemination format - Publications

Sector accounts dedicated website provides data, information on methodology and analysis. On this website, the ASA data are also presented in the standard ESA2010 sequence of accounts format (Excel files).

10.3. Dissemination format - online database

Please consult free data in Eurostat database.

10.4. Dissemination format - microdata access

Not applicable.

10.5. Dissemination format - other

The dedicated website offers analytical review of the published data.

10.6. Documentation on methodology

The general methodological framework is defined in the European System of Accounts (ESA 2010).

For a methodological overview of European sector accounts please refer to chapter 19 of ESA 2010 and to the sector accounts dedicated website.

10.7. Quality management - documentation

Not available.

11. Quality management

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11.1. Quality assurance

Quality is assured by strict application of ESA2010 concepts and by thorough validation of the data delivered by countries.

11.2. Quality management - assessment

ESA 2010 data transmissions are subject to regular quality assessment reviews. Article 4 of Regulation (EU) No 549/2013 (ESA 2010 Regulation) specifies that the data covered by that Regulation is subject to the quality criteria, namely relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence, as set out in Article 12(1) of Regulation (EC) No 223/2009 of the European Parliament and of the Council. Member States are to provide the Commission with a report on the quality of the transmitted data on national and regional accounts. The modalities, structure, periodicity and assessment indicators of the quality reports on data transmitted have been specified in a Commission Implementing Regulation 2016/2304 of 19 December 2016. The implementation of the quality reporting and assessment exercise started in 2017 and is carried out annually. As part of the annual exercise, Eurostat assesses the results, prepares and publishes an overall assessment based on the national quality reports and other available information. The Commission also, on a 5 year basis, reports to the European Parliament and the Council on the application of the ESA 2010 Regulation, including the quality of data on national and regional accounts. The first of such reports was published in 2018: REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the application of Regulation (EU) No 549/2013.

12. Relevance

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12.1. Relevance - User Needs

Annual sector accounts offer complete and consistent description of the economic cycle from production to the accumulation of non-financial assets for the whole economy and institutional sectors.

Sector accounts allow for an analyses of the interactions among institutional sectors as well as between them and the rest of the world, and the derivation of key macroeconomic indicators.

12.2. Relevance - User Satisfaction

Not available.

12.3. Completeness

Annual sector accounts offer complete and consistent description of the economic cycle from production to the accumulation of non-financial assets for the whole economy and institutional sectors, including rest of the world.

13. Accuracy
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13.1. Accuracy - overall

The overall accuracy is supported by ensuring that total uses and total resources are balanced at the level of individual transaction categories giving a coherent set of data for the total national economy and transactions with the rest of the world.

13.2. Sampling error

Not applicable.

13.3. Non-sampling error

Not applicable.

14. Timeliness and punctuality
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14.1. Timeliness

According to the ESA 2010 Transmission Programme (see also section 8.1), Member States have to transmit annual data to Eurostat within 9 months after the end of the reference year. Eurostat normally publishes the data shortly after delivery by the countries (sometimes, validation process may lead to some delay). For some countries data may be available earlier, following their national release calendars. In all cases, data should be transmitted to Eurostat no later than the day they are published by the national authority.

Annual European Union and Euro Area aggregates (calculated by summing up four quarters of Quarterly Sector Accounts*)* are first available 4 months after the end of the reference year.

14.2. Punctuality

Eurostat monitors closely punctuality of data delivery by the countries. Except in the case of special derogations, limited in time, countries generally meet the data transmission deadline (9 months after the end of the reference year).

15. Coherence and comparability
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15.1. Comparability - geographical

The comparability is ensured by the application of common definitions and methodological framework established by European System of Accounts, ESA 2010, which is based on internationally agreed System of National Accounts, SNA 2008.

15.2. Comparability - over time

Application a common framework (European System of Accounts 2010) ensures data comparability over time.

Wherever series are not comparable, data breaks are appropriately flagged in the Eurostat database.

15.3. Coherence - cross domain

European aggregates

The annual series of the euro area and EU aggregates are fully consistent with the quarterly accounts published in the table "Non-financial transactions" (nasq_10_nf_tr) of the domain "Quarterly Sector Accounts" (nasq).

The rest of the world accounts, as compiled by Member States, record transactions between the national economy and all non-resident units, including those in other EU Member States. To measure the external transactions of the euro area / EU, cross-border flows within the area concerned are consolidated. With this procedure, inconsistencies in country data, such as the so-called "asymmetries" are eliminated. Furthermore, European institutions transactions are included. Therefore, European sector accounts are internally consistent but have differences with Euro area/ EU aggregates released by other national accounts domains.

It should be stressed that European sector accounts are not a simple sum of national sector accounts and cannot be used to derive not available national series as a residual.

National data

For national data, there may be discrepancies between annual and quarterly sector accounts as well as with the data released by other national accounts domains due to different revision/release calendars as well as different data sources/methods across data sets. More specifically:

Differences between main aggregates *(nama)* **and non-financial sector accounts** *(nasa)*: Annual data are transmitted simultaneously at t+9 months and are generally expected to be consistent (except for preliminary estimates of latest year based on sum of quarterly data).

Differences between general government statistics *(gov)* **and non-financial sector accounts** *(nasa/nasq)*: General government statistics is used as input to sector accounts for the institutional sector of general government. If general government statistics is revised during Eurostat validation process after data transmission (in particular, in April and October within EDP procedure), it may result in differences with sector accounts in these periods. Bigger discrepancies at annual level are possible in April, when annual data are transmitted for general government statistics but not necessarily for sector accounts (in line with ESA2010 Transmission programme).

Differences in back series *(any tables)*: may occur if data revisions are not fully co-ordinated at national level: major revisions are implemented in one data set, but not yet in other related data sets.

Other differences *(any tables)*: may occur in case of insufficient methodological co-ordination at national level when different sources/methods are used without due justification to compile identical/related variables in different tables.

Such discrepancies across national accounts domains are expected to be temporary and should reconciled at the first available opportunity (at the next data transmission or at least once a year if earlier revisions are not feasible). Discrepancies in back series are normally reconciled during benchmark revisions.

Cross-domain discrepancies are regularly monitored by Eurostat and constant efforts are made to minimise them. Recommendations for harmonised European revision policy for national accounts and balance of payments are being developed under the umbrella of Committee on Monetary, Financial and Balance of Payments Statistics (CMFB).

Methodologically acceptable statistical discrepancies

Selected transactions may be different due to accepted differences in treatment of statistical discrepancy between GDP values calculated by different approaches. Such discrepancy is explicitly disclosed in main aggregates, but not in sector accounts that are expected to be balanced. Countries may choose to allocate statistical discrepancy in sector accounts to changes in inventories (expenditure side, done by AT, IE,), value added (output side, done by IE), operating surplus (income side,) in order to balance the accounts.

Possible statistical discrepancy for net lending/net borrowing between non-financial and financial accounts is recognised by ESA 2010 due to different statistical data used (in particular for sectors of Non-financial corporations and Households). Countries should nonetheless aim to reduce the discrepancies through improvements in sources and methods.

Information on cross-domain consistency by country can be consulted in section 19. Comment.

15.4. Coherence - internal

European sector accounts are internally consistent. This is supported by the fact that the total uses and total resources are balanced at the level of individual transaction categories giving a coherent set of data for the total national economy and transactions with the rest of the world.

However, it should be stressed that European sector accounts are not a simple sum of national sector accounts and cannot be used to derive not available national series as a residual. Differences between European (EU/ EA accounts) and sum of the countries' data can be explained by the following:

- To measure the external transactions of the euro area / EU, cross-border flows within the area concerned are consolidated. With this procedure, inconsistencies in country data, such as the so-called "asymmetries" are eliminated;
- European institutions transactions are included.

16. Cost and Burden

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Not available.

17. Data revision

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17.1. Data revision - policy

Annual sector accounts are produced from a large variety of data sources with varying degrees of timeliness, taking up to three years or more in the case of structural sources. As users need national and international data as fast as possible, particularly on certain key aggregates, data are produced using the sources and related indicators that are more readily available. As more complete source data are obtained, the statistics are updated to incorporate the new information.

Such revisions of macroeconomic statistics are necessary to improve data quality. To minimise the inconvenience for data users, the European Statistical System (ESS) and the European System of Central Banks (ESCB) try to strike the right balance between incorporating the necessary statistical revisions and maintaining an acceptable degree of consistency across domains and countries. To this end, the two systems have worked together to draw up a Harmonised European Revision Policy (HERP) for Macroeconomic Statistics issued by the CMFB in October 2017. HERP is aligned with the general Eurostat revision policy.

According to HERP, a distinction should be made between 'routine' revisions and 'major' or 'benchmark' revisions.

Routine Revisions

Routine revisions refer to the changes made to the economic data published initially and to its subsequent releases for a particular reference year. According to the guidelines laid down in HERP, annual estimates are usually revised retrospectively for up to four years to incorporate annual data sources as well as changes following Excessive Deficit Procedure and Own Resources notifications, although the policy allows unlimited revisions for transmissions at t+9 months. HERP requires that national revision practices are aligned across statistical domains. This implies that annual routine revisions are carried out with identical timing and depth of revision across all statistical domains, to eliminate vintage differences as a source of inconsistencies. This part of the policy is also important in the context of ensuring consistency between national accounts and BOP/IIP. HERP requires at least one point in time where cross-domain consistency must be achieved; namely, in the 3rd quarter when annual revisions are also carried out. In addition, HERP covers domains with annual and quarterly data reporting frequencies and requires alignment between quarterly and annual tables. HERP requires that all countries align their quarterly and annual frequencies across all domains, at least, in the third quarter.

Benchmark revisions

Benchmark revision is carried out at much longer time intervals. Its purpose is to incorporate the main new data sources and major changes in international statistical methodology (such as ESA 2010 or BPM6). In benchmark revision, many years are open for revision in order to create the longest possible consistent time series. Disseminating the results of a benchmark revision always involves revising all, or at least a large part of the time series. HERP requires that benchmark revisions result in break-free series at least for the timespan required on a mandatory basis by the ESA 2010 Transmission Programme. Breaks in the series should be temporary and appropriately flagged with the 'B' flag. The coordination and communication of benchmark revisions are prepared well in advance. Benchmark revisions are publicly announced in advance of the release date, at least a quarter in advance for annual and quarterly statistics. The actual release of the results of a benchmark revision are accompanied by sufficient documentation that allows users to appropriately assess the new presentation of the macroeconomic and/or social situation.

Eurostat plays a central role in the communication of European harmonised benchmark revisions. The impact of benchmark revisions is analysed in statistical publications and presented to various technical fora ,including key users and policy makers.

Non-scheduled revisions

Non-scheduled revisions take place on an ad-hoc basis, outside the European harmonised approach. While there is no comprehensive set of recommendations agreed at EU level for when non-scheduled revisions should take place, good practices regarding metadata and communication on non-scheduled revisions are discussed in the "Practical guidelines for revising ESA 2010 data". Since non-scheduled revisions could confuse users and thus damage user confidence in official statistics, they should always be an exception and should be avoided where possible. If the benefits of carrying out a non-scheduled revision are assessed as clearly outweighing the disadvantages of waiting to integrate the results into a forthcoming benchmark revision, there should be a clear communication strategy. Non-scheduled revisions may be often related to errors. Reported errors are assessed for seriousness to determine whether they should trigger a correction of already disseminated data. Reported errors in national data that are deemed to be significant are corrected in the disseminated data as soon as the correct data have been validated. Corrections for other errors in national data are most often carried out in connection with the regular scheduled data dissemination/in connection with next scheduled regular revision. The EU aggregates are revised according to the pre-announced release calendar. There is rarely the case that errors in national data have a substantial impact on aggregates. National Statistical Offices and National Central Banks agreed to gradually implement a common harmonised European revision policy for national accounts and balance of payments statistics. The level of adherence to the guidelines of Member States' revision policies will be monitored regularly.

Information on adherence to HERP and the national revision policies is available at: https://ec.europa.eu/eurostat/web/esa-2010/data-revision

17.2. Data revision - practice

European Union and Euro Area annual aggregates are revised four times per year as they are calculated by summing up the respective quarterly data. Revisions of national input data are respectively reflected in Euro area and EU sector accounts aggregates. National revision practices of sector accounts data should follow the harmonised revision policy for the national accounts and balance of payments statistics.

The revision practice effectively corresponds to the revision practice of the domain listed under sub-concept 17.1 (data revision – policy).

Routine revisions for annual data

National accounts data at country level are subject to continuous routine revisions as new input data becomes available. Countries' data are revised according to country schedules, and revisions become visible in Eurostat's online database as soon as new data is transmitted to and validated by Eurostat. The dates are pre-announced in the release calendar on Eurostat's web-site. Annual estimates of non-financial sector accounts data are usually revised retrospectively for up to four years to incorporate annual data sources as well as changes following Excessive Deficit Procedure and Own Resources notifications, although the policy allows unlimited revisions for transmissions at t+9 months. In practice, the majority of countries revise their annual data once per year in September. However, some countries may revise their annual data twice per year also in March, together with publication of fourth quarter of the year, or even in every quarterly round with the release of quarterly figures. According to the principles of HERP, the maximum depth of revisions in each quarter is 4 years, as the majority of NSIs work on a cycle of 3-4 years after which the data can be considered final. However, all years may be open to revisions during the third quarter of the year and during benchmark revisions. Data may be published even if they are missing for certain variables and/or countries or flagged as provisional or of low reliability. They are replaced with final data once transmitted and validated. European aggregates are updated according to the pre-announced release calendar. The vast majority of NSIs have aligned their national release dates with the calendar of Eurostat so that European aggregates are consistent with revised country data. Routine revisions are communicated through metadata files and dedicated statistical analyses. A thorough analysis based on pre-selected revision indicators is also included in the annual national quality report.

Major or benchmark revisions

In 2014, all Member States disseminated revised data according to ESA 2010. The agreed guidelines specify that Member States should disseminate the results of the next benchmark revisions in 2019 and 2024 respectively. The majority of EU countries were able to meet the 2019 target and all EU countries are expected to carry out the subsequent benchmark revision in 2024.

More information on the ongoing benchmark revisions is available on this page:

https://ec.europa.eu/eurostat/web/esa-2010/data-revision

https://ec.europa.eu/eurostat/web/esa-2010/implementation-data-quality

More information on the ongoing benchmark revisions is available on this page:

https://ec.europa.eu/eurostat/web/esa-2010/data-revision

18. Statistical processing

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18.1. Source data

Figures are collected and transmitted to Eurostat by the National Statistical Institutes of the EU Member States following ESA2010 transmission programme (Table 8) introduced by the Regulation (EU) No 549/2013 of the European Parliament and of the Council of 21 May 2013 on the European system of national and regional accounts in the European Union (annex B).

National sector accounts compilation relies on a variety of data sources, including administrative data (registers, accounting statements, tax data, budgetary reports etc), censuses, and statistical surveys of businesses and households. No single type of source data can be pointed out. Sources vary from country to country and may cover a large set of economic, social and financial items, which may not be strictly related to National Accounts. For further information about sources and collection methods, please refer to National Statistical Institutes. Annual sector accounts inventories may be compiled by countries on voluntary basis and those available can be consulted in dedicated webpage of Eurostat website.

For the aggregation purposes (the euro area and EU aggregates), missing data concerning specific countries, transactions and sectors may be estimated by Eurostat, but such estimates are not published separately.

Accounts of the EU Institutions are compiled by Eurostat on the basis of respective balance of payments (BoP) data and the profit and losses accounts of the European Investment Bank. The accounts of the European Central Bank (ECB), the European

Stability Mechanism (ESM) and the European Financial Stability Facility (EFSF) are compiled by the ECB.

18.2. Frequency of data collection

Member States transmit sector accounts data to Eurostat upon national publication and/or in line with the deadlines specified in the European System of Accounts (ESA 2010) transmission programme (please see section 14 for details).

Underlying data are collected from national sources. As data sources vary, so does the frequency of collection, from monthly to annually, and in the case of population censuses they are mostly collected every decade.

18.3. Data collection

ESA 2010 data in are transmitted to Eurostat based on SDMX which introduced standardised codes.

National Accounts combine data from many source statistics. Techniques of data collection vary widely, depending on the compilation approach, the source statistics available, the particular account in the system of accounts, the timeliness of data release and other factors.

18.4. Data validation

Data input by National Statistical Institutes is regularly checked by Eurostat for accuracy (accounting consistency, time-consistency between quarterly and annual accounts, consistency over time), completeness (coverage of reference periods and variables) and coherence with related national accounts data sets (GDP main aggregates, Government finance statistics). Cross domain checks against financial accounts are performed on an ad-hoc basis. Any lack of quality in this respect is regularly followed up with national authorities.

The same checks are applied to data for the European aggregates.

The checks are classified under four levels and can be summarised as follows:

- Level 1: within file checks
  - Completeness
  - Monitoring of STATUS and CONFIDENTIALITY flags
  - Zero & negative values
  - Accounting consistency checks (respect of accounting identities based on ESA 2010 in the dataset)
- Level 2: intra-domain, intra-source checks
  - Revisions vs previous version of the same reference year
  - Revisions vs latest vintage
- Level 3: intra-domain, inter-source checks
  - Quarterly vs Annual
- Level 4: cross-domain consistency (inter-domain, intra-institution checks)
  - Main aggregates (T1A)
  - Government finance statistics (T2)

18.5. Data compilation

Eurostat compiles aggregate estimates for the euro area and the EU. The annual current price data for the euro area and the EU are derived using Member States' data as input, usually by adding up the aggregates for all Member States after expressing them in a common currency (euros), followed by adding data of EU institutions and consolidating cross-border flows. More details on European sector accounts compilation can be consulted in dedicated webpage.

Where single Member States' figures are not available, Eurostat may use unpublished estimates to impute country data and hence calculate the European aggregates.

Data in national currency are converted to euro using the annual average of the current market exchange rates. Figures expressed in Purchasing Power Standards are derived from figures expressed in national currency by using Purchasing Power Parities (PPP) as conversion factors.

For further information about national data sources and collection methods, please refer to National Statistical Institutes. Annual sector accounts inventories may be compiled by countries on voluntary basis and those available can be consulted in dedicated webpage of Eurostat website.

18.6. Adjustment

Member States' accounts may show statistical discrepancies (explicit or implicit) between GDP and the sum of components. In order to compile coherent and balanced set of sector accounts, some variables may be used to adjust for any possible lack of additivity between the total and the sum of its components, i.e. these variables are effectively used as balancing items.

For the expenditure approach of GDP, the balancing variable is most often changes in inventories (P.52).

For the income approach of GDP the balancing variables are gross operating surplus and mixed income (B.2g + B.3g).

For the output approach of GDP, the balancing variable is value added (B1G).

Some NSIs may also choose not to balance the statistical discrepancy. Statistical discrepancies are not explicitly recorded in sector accounts tables, In such cases these are manifested as discrepancies between the respective totals and sum of the components, as well as between total economy and sum of domestic sectors.

For the purpose of calculation of European aggregates, Eurostat corrects country data for such lack of additivity in order to produce coherent and balanced European sector accounts.

19. Comment

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More details on sector accounts consistency with related data sets and other relevant issues by country are available here.

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