

eurostat National statistical business register -

Greece

National Reference Metadata in Euro SDMX Metadata Structure (ESMS) Compiling agency: Hellenic Statistical Authority (ELSTAT)

Eurostat metadata

Reference metadata

1. Contact
2. Metadata update
3. Statistical presentation
4. Unit of measure
5. Reference Period
6. Institutional Mandate
7. Confidentiality
8. Release policy
9. Frequency of dissemination
10. Accessibility and clarity
11. Quality management
12. Relevance
<u>13. Accuracy</u>
14. Timeliness and punctuality
15. Coherence and comparability
16. Cost and Burden
17. Data revision
18. Statistical processing
<u>19. Comment</u>
Related Metadata
<u>Annexes</u> (including footnotes)

For any question on data and metadata, please contact: Eurostat user support

1. Contact		<u>Top</u>
1.1. Contact organisation	Hellenic Statistical Authority (ELSTAT)	
1.2. Contact organisation unit	Business Statistics Division, Registers and Big Enterprises Secton	
1.5. Contact mail address	Pireos 46 & Eponiton st. GR 185 10 Pireas	

2. Metadata update	<u>Top</u>
2.1. Metadata last certified	31/05/2023
2.2. Metadata last posted	31/05/2023
2.3. Metadata last update	31/05/2023

3. Statistical presentation

3.1. Data description

The statistical business registers (SBR) are basic infrastructure for the collection and compilation of data for European business statistics. The SBR are used as the main source of information for statistical analysis of the business population and its demography, for the definition of the survey population and for establishing the link to administrative data sources.

<u>Top</u>

European statistical business registers should become an authoritative sources for deriving harmonised frame populations for the production of European business statistics. SBR contribute to the achievement of consistent and comparable business statistics by creating and using coordinated populations of statistical units The national statistical business registers include information on the active population of:

• all enterprises carrying out economic activities contributing to the gross domestic product (GDP) and their local units;

- the legal units of which those enterprises consist;
- the kind of activity unit for those enterprises which due to their size have a significant influence and
- whose kind-of-activity units (KAUs) have a significant influence on the aggregated (national) data;
- enterprise groups to which those enterprises belong.

Households shall not fall within the scope of the European framework for statistical business registers insofar as the goods and services they produce are destined to their own consumption, or involve letting out of own property. Local units of foreign enterprises not constituting separate legal entities (branches), and classified as quasi-corporations in accordance with Regulation (EU) No 549/2013, shall be deemed to be enterprises for the purposes of the national statistical business registers and the EuroGroups Register.

Enterprise groups shall be identified through the links of control between their legal units in accordance with Regulation (EU) No 549/2013.

The main variables recorded in the statistical business registers are the following:

- Identification variables: identification number, name, address;
- Demographic events: date of commencement/cessation of the unit;
- Economic variables/stratification parameters: economic activity (NACE), employment, turnover, legal form, legal activity status;

• Information on control and ownership of units: parent/subsidiary legal unit, minority shareholder information, country of global decision centre.

3.2. Classification system

Classification systems and code lists used in the national statistical business register are as follows:

- Statistical classification of economic activities in the European Community (NACE Rev. 2)
- European System of Accounts (ESA 2010)
- Nomenclature of territorial units for statistics (NUTS)
- National classification of administrative territories (Geographical code), which is available under the
- following link: https://www.statistics.gr/en/statistics/-/publication/SKA01/-
- National classification of economic administration

3.3. Coverage - sector

The coverage of the national statistical business registers is defined in the <u>Regulation (EU) 2019/2152</u> on European business statistics.

The national statistical business registers comprise all enterprises resident in the national territory that are carrying out activities contributing to GDP.

Households do not fall within the scope of the European framework for statistical business registers insofar as the goods and services they produce are destined to their own consumption, or involve letting out of own property.

The SBR frame covers all units which, wholly or partially, exercise an economic activity and economically inactive legal units, which are part of an enterprise in combination with economically active legal units. For the purposes of the European framework for statistical business registers, the following economic activities are considered:

- any activity comprising the offer of goods and services on a given market;
- non-market services contributing to the GDP;
- direct and indirect holdings of active legal units.

Holding assets and/or liabilities are also considered an economic activity.

The national statistical business register covers the following sections:

• A - S of the Statistical Classification of NACE Rev. 2

The national statistical business register does not cover the following sections:

- T: Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use and U of the Statistical Classification of NACE Rev. 2
- U: Activities of extra-territorial organisations and bodies

3.4. Statistical concepts and definitions

The main statistical concepts and definitions used for the statistical business registers are as follows: Annual copy of statistical business register

The annual copy of the statistical business register reflects the state of the register at the end of the year including all units active within the reference year. NSIs have to make a copy annually and keep that copy for at least 30 years for the purpose of analysis.

Active unit

A statistical unit is considered to have been active during the reference period, if in said period it either realized positive net turnover or produced outputs or had employees or performed investments.

A legal unit can be legally or administratively active without any economic activity, when the inactive legal unit is part of an enterprise in combination with economically active legal units. Holding assets and/or liabilities shall also be regarded as an economic activity.

Number of active enterprises

The number of active enterprises is the number of all statistical units which at any time during the reference period were 'enterprises', as defined in Council Regulation (EEC) No 696/93, and also active during the same reference period. A statistical unit is considered to have been active during the reference period, if in said period it either realized positive net turnover or produced outputs or had employees or performed investments.

Number of employees

The number of employees represents the average number of persons who were, at some time during the reference period, employees of the statistical unit.

Number of employees and self-employed persons

The number of employees and self-employed persons is the sum of the Number of employees and Number of selfemployed persons. The number of self-employed persons is the average number of persons who were at some time during the reference period the sole owners or joint owners of the statistical unit in which they work. Family workers and outworkers whose income is a function of the value of the outputs of the statistical unit are also included.

Number of local units

A count of the number of local units as defined in Regulation (EEC) No 696/93 registered to the population concerned in the business register corrected for errors, in particular frame errors. Local units must be included even if they have no paid employees. This statistic should include all units active during at least a part of the reference period.

Net turnover

For all activities except for NACE 64, 65 and some activities of NACE 66 net turnover consists of all income arising during the reference period in the course of ordinary activities of the statistical unit, and is presented net of all price reductions, discounts and rebates granted by it.

Income is defined as increases in economic benefits during the reference period in the form of inflows or enhancements of assets or decreases of liabilities that result in increases in equity, other than those relating to contributions from equity participants.

The inflows referred to are arising from contracts with customers and are realized through the satisfaction by the statistical unit of performance obligations as foreseen in said contracts. Usually, a performance obligation is represented by the sale (transfer) of goods or the rendering of services, however, the gross inflows can also contain revenues obtained as a yield on the use by others of the statistical unit's assets.

Excluded from net turnover are:

— all taxes, duties or levies linked directly to revenue;

— any amounts collected on behalf of any principal, if the statistical unit is acting as an agent in its relationship with said principal;

— all income not arising in the course of ordinary activities of the statistical unit. Usually, these types of income are classified as 'Other (operating) income', 'Financial income', 'Extra-ordinary income' or under a similar heading, depending on the respective set of generally accepted accounting standards used to prepare the financial statements.

Infra-annual statistics may not be able to take into account aspects such as annual price reductions, subsidies, rebates and discounts.

For the activities of NACE K6411, K6419 and K649 net turnover is defined as the value of output minus subsidies or government grants.

For the activities of NACE K642 and K643 net turnover can be approximated by the total operating costs, if net turnover is not available in the financial statements.

For the activities of NACE K6511, K6512 and K652 net turnover is defined as Gross premiums earned.

For the activities of NACE K653 the net turnover is defined as total pension contributions

For activities of NACE K66 for which net turnover is not available in the financial statements, net turnover is defined as the value of output minus subsidies or government grants. For activities of NACE K66 for which net turnover is available in the financial statements, the standard definition of net turnover applies.

Principal activity

The principal (or main) activity is the activity that contributes most to the total value added of a unit under consideration. Ideally, the principal activity of the unit should be determined with reference to the value added to the goods and services produced, by applying the top-down method. The top-down method follows a hierarchical principle: the classification of the unit at the lowest level of the classification must be consistent with the classification of the unit at higher levels. The principal activity so identified does not necessarily account for 50 % or more of the unit's total value added.

In the European Union the classification of principal activity is determined by reference to NACE Rev. 2, first at the highest level of classification and then at more detailed levels (top-down method).

Secondary activity

A secondary activity is each separate activity that produces products eventually for third parties and that is not the principal activity. The outputs of secondary activities are secondary products.

More information on statistical concepts and definitions relevant to the statistical business registers could be found in the <u>EBS methodological manual for Statistical Business Registers (2021 edition)</u>.

3.5. Statistical unit

The statistical units maintained in the national statistical business register are defined in accordance with <u>Regulation (EEC) No 696/93</u> on the statistical units for the observation and analysis of the production system in the Community, as follows:

• Enterprise - the enterprise is the smallest combination of legal units that is an organizational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources. An enterprise carries out one or more activities at one or more locations. An enterprise may be a sole legal unit.

• Enterprise group - an enterprise group is an association of enterprises bound together by legal and/or financial links. A group of enterprises can have more than one decision-making centre, especially for policy on production, sales and profits. It may centralize certain aspects of financial management and taxation. It constitutes an economic entity, which is empowered to make choices, particularly concerning the units, which it comprises.

• **Kind of activity unit (KAU)** - the kind of activity unit groups all the parts of an enterprise contributing to the performance of an activity at class level (four digits) of NACE and corresponds to one or more operational subdivisions of the enterprise. The enterprise's information system must be capable of indicating or calculating for each KAU at least the value of production, intermediate consumption, manpower costs, the operating surplus and employment and gross fixed capital formation.

• Local unit - the local unit is an enterprise or part thereof (e. g. a workshop, factory, warehouse, office, mine or depot) situated in a geographically identified place. At or from this place economic activity is carried out for which - save for certain exceptions - one or more persons work (even if only part-time) for one and the same enterprise.

The methods used to implement the statistical units in the statistical business register are as follows:

• Enterprise: The compilation of the statistical unit "enterprise" is based on the profiling process. More specifically, light manual profiling, including desk and automated profiling for medium sized and simpler enterprise groups and "enterprises" is applied. The desk profiling was implemented approximately in 150 enterprise groups, while automated profiling in 180 enterprise groups. On the basis of the profiling results, the internal flows survey is conducted, through which all necessary information for the consolidation of the basic non-additive variables at the level of statistical unit enterprise is acquired. The consolidated data are used in the framework both of the Statistical Business Register and Structural Business Statistics.

• **Enterprise group**: The structure of the enterprise groups is updated on the basis of information received by a commercial provider, from the Foreign Direct Investment survey, the process of national and European profiling, which involves the study of disseminated financial statements, and the input from the internal flows survey.

Local Unit: Information on Local Units is available from administrative registers of enterprises.

• **Kind of Activity Unit (KAU).** The compilation of the Kind of Activity Unit is made in accordance with the operational rules described in the European Business Statistics methodological manual for statistical business registers. The data used for delineating the KAU were drawn from the following sources:

- 1. Short term statistics
- 2. PRODCOM survey
- 3. Structural Business Statistics Survey and
- 4. Tax declaration for income from business activities

3.6. Statistical population

The national statistical business registers shall be the authoritative source for deriving high quality and harmonised statistical business register populations for the production of European statistics in accordance with Article 8 to the EBS Regulation 2019/2152.

The national statistical business register comprises the following units:

- Legal Unit
- Local Unit
- Kind of Activity Unit (KAU)
- Enterprise
- All-resident enterprise group
- Multinational enterprise groups
- Institutional Units

3.7. Reference area

The reference area for national statistical business register is the territory of the country. Concerning enterprise groups any country outside the national territory may be relevant.

The National classification of administrative territories are: National territory-Region-Regional unit-Municipality-Municipal unit.

3.8. Coverage - Time

The national statistical business register was established in 2000.

The statistical units are implemented and maintained in the national statistical business register as follows:

- Enterprise group implemented and maintained since 2018.
- Enterprise implemented and maintained since 2018.
- Local unit implemented and maintained since 2000.
- Kind of activity unit implemented for the first time for the reference year 2021, in accordance with Regulation (EU) 2019/2152 of the European Parliament and of the Council.

3.9. Base period

Not applicable.

4. Unit of measure

The economic variables on employment are recorded in absolute figures. The net turnover is recorded in 1.000 of Euro.

5. Reference Period

The reference period for the annual copy of the national statistical business register is a calendar year. An annual copy that reflects the state of the national statistical business register at the end of the year is taken and kept for at least 30 years for the purpose of analysis.

The latest available copy of the national statistical business register consists of the final annual master frame for 2021 reference year.

In this annual copy, the economic variables (number of employees, turnover and economic activity) refer to the 2021 reference year(s).

6. Institutional Mandate

6.1. Institutional Mandate - legal acts and other agreements

Legal acts and other agreements - EU level

• <u>Regulation (EU) 2019/2152</u> of the European Parliament and of the Council of 27 November 2019 on European business statistics;

• <u>Commission Implementing Regulation (EU) 2020/1197</u> of 30 July 2020 laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 of the European Parliament and of the Council on European business statistics.

Legal acts and other agreements - national level

• Legal framework concerning the organization and operation of ELSTAT (<u>https://www.statistics.gr/en/legal-framework</u>)

6.2. Institutional Mandate - data sharing

The <u>EBS Regulation (EU) 2019/2152</u> lays down provisions on the exchange of and access to confidential data for the purpose of the European framework for statistical business registers.

The <u>Commission implementing regulation (EU) 2020/1197</u> lays down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152, including technical specifications for the exchange of confidential data for the purposes of the European framework for statistical business registers.

At national level, the following agreements or procedures for data sharing and data exchange between national authorities have been established:

• Memorandum of Understanding with the Independent Authority for Public Revenue and the Single Social Security Entity (EFKA), former IKA.

7. Confidentiality

7.1. Confidentiality - policy

<u>Regulation (EC) No 223/2009</u> (recital 24 and Article 20(4)) of 11 March 2009 (OJ L 87, p. 164) on European statistics 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.

The issues concerning the observance of statistical confidentiality by the Hellenic Statistical Authority (ELSTAT) are arranged by articles 7, 8 and 9 of the Law 3832/2010 as in force, by Articles 8, 10 and 11(2) of the Regulation on Statistical Obligations of the agencies of the Hellenic Statistical System and by Articles 10 and 15 of the Regulation on the Operation and Administration of ELSTAT (<u>http://www.statistics.gr/en/statistical-confidentiality</u>) The Statistical Confidentiality Policy of ELSTAT includes the rules and principles implemented by ELSTAT for the observance of statistical confidentiality

Top

<u>Top</u>

(http://www.statistics.gr/documents/20181/1609796/ELSTAT_Statistical_Confidentiality_Policy_EN.pdf/c79e5ac8-469c-433d-b4e6-8433319b21d2)

The confidential data transmitted to ELSTAT by the agencies of the Hellenic Statistical System (ELSS) are used exclusively for statistical purposes. Right to access these data has exclusively the staff of ELSTAT employed for that purpose and designated by act of the President of ELSTAT. The receipt, storage and processing of data by ELSTAT is carried out by implementing strict security and personal data protection rules, in accordance with ELSTAT's Circular on the Information Systems Security Policy and Digital Data Protection.

7.2. Confidentiality - data treatment

According to policy rules (see section 7.1).

8. Release policy

8.1. Release calendar

The preliminary frames of the national statistical business register are released according to the statistical user needs, as follows:

• T+ 24 months to STS domain, taking into account the requirement for the base year revision.

Top

- T+ 16 months to SBS domain;
- T+ 16 months to FATS;
- T+ 16 months to ITGS;
- T+ 36 months to CIS (Community Innovation Survey);
- T+ 36 months to ICT survey;
- T+36 months to R&D;
- T+ 16 months to (PRODCOM).

The final frame of the national statistical business register is released in T+ 18 months.

8.2. Release calendar access

Not applicable.

8.3. Release policy - user access

The statistical users get access to the SBR frames or receive required data in the following way:

1. Aggregated data from the Statistical Business Register are available in ELSTAT's website (<u>www.statistics.gr</u>), under section "Industry, Trade, Services, Transport", subsection "Statistical Business Register (link:<u>https://www.statistics.gr/en/statistics/-/publication/SBR01/-</u>)

2. Upon user's request, which can be submitted through a special web form in the following link: <u>https://www.statistics.gr/en/statistical-data-request</u>

The data from the Statistical Business Register are disseminated in accordance with ELSTAT's Dissemination Policy, which is available at the following link:

http://www.statistics.gr/documents/20181/1609796/Dissemination_Policy_of_ELSTAT_en.pdf/8c399d64-9611-4d55-b514-56ea51ac1ecf

ELSTAT protects and does not disseminate the data it has obtained, or it has access to, which enable the direct or indirect identification of the statistical units by the disclosure of individual information directly received for statistical purposes or indirectly supplied from administrative or other sources. ELSTAT takes all appropriate preventive measures so as to render impossible the identification of individual statistical units by technical or other means which might reasonably be used by a third party. Statistical data that could potentially enable the identification of the statistical unit are disseminated by ELSTAT if and only if:

• these data have been treated, as specifically set out in the Regulation on the Statistical Obligations of the ELSS agencies, in such a way that their dissemination does not prejudice the statistical confidentiality

• the statistical unit has given its consent, without any reservations, for the disclosure of data.

ELSTAT may grant researchers conducting statistical analyses for scientific purposes access to data that enable the indirect identification of the statistical units concerned. The access is granted provided the following conditions are satisfied:

• an appropriate request together with a detailed research proposal in conformity with current scientific standards have been submitted;

• the research proposal indicates in sufficient detail the legitimate purpose of the research, the set of data to be accessed, the methods of analyzing them, the persons who will have access to the data and the time needed for the research;

• a contract specifying the conditions for access, the obligations of the researchers, the measures for respecting the confidentiality of statistical data and the sanctions in case of breach of these obligations has been signed by the individual researcher, by his / her institution, or by the organization commissioning the research, as the case may be, and by ELSTAT.

Top

Top

Information on the access to confidential data for scientific purposes is available at the following link: <u>http://www.statistics.gr/en/scientific_provision_data</u>.

9. Frequency of dissemination

Preliminary SBR frames are not disseminated.

The final frame for a reference year T is available on annual basis in T+18 months. The annual copy is kept for 30 years for the purpose of analysis.

10. Accessibility and clarity

10.1. Dissemination format - News release

ELSTAT informs users on the dissemination of the tables containing data from the Statistical Business Register, with a relevant announcement on its website (<u>www.statistics.gr</u>).

10.2. Dissemination format - Publications

The Tables of the Statistical Business Register are available at the following link: <u>http://www.statistics.gr/en/statistics/-/publication/SBR01/-</u>

10.3. Dissemination format - online database

There is no online database.

10.4. Dissemination format - microdata access

The NSI exchange microdata with the Commission (Eurostat) for the purposes of the European framework for statistical business registers.

The data and metadata are exchanged in electronic form and transmitted using the ESS data and metadata standards as specified by the Commission (Eurostat).

The SBR microdata are provided to the authorized statistical users, via secured environment.

Anonymised micro-data are provided to researchers according to the procedure for dissemination of confidential data for scientific purposes. Analytical information are presented under point 8.3.

10.5. Dissemination format - other

The aggregated data on national statistical business register are provided annually to Eurostat in electronic form and transmitted via EDAMIS.

Tailor-made data sets are available upon users' request which can be submitted through a special web form in the following link: <u>https://www.statistics.gr/en/statistical-data-request</u>

National statistical business register is the main source for the Business demography statistics that provide information for active enterprises in the business economy, the births, deaths and survival rates of enterprises, as well as information on related employment data.

10.6. Documentation on methodology

<u>European business statistics methodological manual for statistical business registers – edition 2021</u> outlines the methodology to be used for the national statistical institutes.

10.7. Quality management - documentation

ESS Data Quality Programme for statistical business registers is available on CIRCABC.

A quality report is sent to Eurostat on an annual basis when the compilation of the Statistical Business Register is completed.

11. Quality management

11.1. Quality assurance

The methodology followed is in line with the relevant decisions taken in the meetings of the Business Registers Working Group (BRWG), as well as with the recommendations of the Task Forces set up by Eurostat for the examination of particular topics concerning the statistical business registers.

Quality controls are carried out at all stages of the compilation of the SBR. The data used are mainly derived from administrative sources and as a result audits include, in principle, completeness checks and identification of incorrect data transmitted from administrative sources. Then logical checks for data consistency over time and comparability with other sources take place. At a later stage, statistical checks are carried out to identify the extreme values and the time-domain comparability of the basic variables.

More specifically, for the identification of Enterprises with outlier values in turnover and employment the Interquartile Range method, the Assymetric Fence Method and the Median Absolute Deviation method is used. For the identification of the enterprises affected by influential errors the method of Selective Editing with the use of SeleMix package is applied.

The cases that occur from the above mentioned methods, are further checked for the NACE activity, the turnover and employment either in disseminated financial statements or in co-operation with the enterprise.

11.2. Quality management - assessment

The quality of statistical business register is monitored according the quality assurance procedure described in concept 11.1.

The overall assessment results could be summarised as follows:

- The SBR includes information on all statistical units
- The SBR includes information on all mandatory variables according to the Regulation 2019/2152
- The information on economic variables (turnover, employment, employees)
- The SBR is updated from the results of the national and european profiling.

12. Relevance

12.1. Relevance - User Needs

SBR is important for the compilation of consistent and comparable European business statistics, establishing efficient statistical survey frames, providing identification numbers of all the units and for linking to many different sources, increasing statistical information and reducing the reporting burden on enterprises.

SBR is referred to as the 'backbone' in the production of economic statistics because it provides the core infrastructure to ensure data consistency between various statistical outputs.

The Statistical Business Register is mainly used as a sampling frame for the conduct of ELSTAT's statistical surveys in enterprises. Data of the SBR are also provided to users for the satisfaction of their requests, in accordance with the Statistical Confidentiality Policy and the Dissemination Policy of ELSTAT. The main national users of SBR data are Public Bodies and Local Authorities, Banks, Businesses, Researchers and Economic Analysts, Doctoral Candidates and Students.

At international level, the SBR data are used by Eurostat, the United Nations, the World Bank, etc.

12.2. Relevance - User Satisfaction

Since 2017, Eurostat together with the EU Member States conducts SBR user survey addressing users and potential users of the national statistical business registers (NSBR) and the EuroGroups Register (EGR).

<u>Top</u>

Top

The latest SBR User Survey 2020 show that the NSBR are widely used at national level and users consider that its quality had been significantly improved in the recent years. Most of the NSBR users (97%) had either no issue or manageable issue regarding business registers coverage, units, variables, timeliness and frequency of frames. The results of the SBR User Survey 2020 are available on CIRCABC.

The degree of satisfaction of users is assessed by their comments and remarks expressed:

- in the framework of the annual Users' Conferences organized by ELSTAT,
- through the Advisory Committee of the Hellenic Statistical System (SYEPELSIS), in which
- representatives of variousbodies using statistics participate and

• through the User Satisfaction Survey conducted by the competent Statistical Data Dissemination Section of ELSTAT: <u>http://www.statistics.gr/en/user-satisfaction-survey</u>

12.3. Completeness

The completeness of national statistical business registers is annually assessed by Eurostat. The SBR assessment results are provided to EU Member States and EFTA countries and presented at the Statistical Business Registers Working Group (SBR WG).

The completeness rate for the basic variables of SBR are as follows:

- Economic activity (NACE Rev. 2): 99,8%
- Turnover: 98,6%
- Employment: 93,7%

13. Accuracy

13.1. Accuracy - overall

The main issues regarding accuracy of the data are as follows:

- Misclassification of economic activity
- · Overestimation of employment, from specific administrative sources

The actions taken to reduce bias (if any) and to improve accuracy of the data are as follows:

• Changes in the economic activity of statistically significant enterprises are checked on the basis of published financial statements and survey data.

Top

Top

• The sources used for updating the SBR, are assessed at the level of variable in terms of their completeness and accuracy. Administrative sources presenting overestimation on employment are placed near the bottom of the specific priority list, reducing this way their impact on the SBR.

13.2. Sampling error

Not applicable.

13.3. Non-sampling error

Not applicable.

14. Timeliness and punctuality

14.1. Timeliness

Preliminary frames are available 16 months after the reference year T.

Final frame is available 18 months after the reference year T.

Outline the reasons for the time lag (if any).

Reasons for the time lag:

• The data of statistical surveys that are incorporated in the SBR are available 16 months after the reference year T.

14.2. Punctuality

Aggregated data for the SBR final frame are provided annually to Eurostat according the deadline agreed by the Statistical Business Registers Working Group.

The SBR frames are provided on time to statistical users with regard to their needs and the agreed time frame, as follows:

- T+ 24 months to STS domain, taking into account the requirement for the base year revision.
- T+ 16 months to SBS domain;
- T+ 16 months to FATS;
- T+ 16 months to ITGS;
- T+ 36 months to CIS (Community Innovation Survey);
- T+ 36 months to ICT survey;
- T+ 36 months to R&D;
- T+ 16 months to (PRODCOM).

Outline the reasons for the delay (if any).

Usually there is no delay.

15. Coherence and comparability

<u>Top</u>

15.1. Comparability - geographical

The geographical comparability of national statistical business registers is ensured by the application of common definitions of the statistical units laid down in the Council Regulation (EEC) No 696/93.

The SBR variables are harmonised and set up in accordance with the Annex VIII of the Commission Implementing Regulation (EU) 2020/1197 laying down technical specifications and arrangements pursuant to Regulation (EU) 2019/2152 on European business statistics.

Further guidelines on the variables implementation in the national statistical business registers are given in the <u>EBS methodological manual for Statistical Business Registers (2021 edition)</u>.

15.2. Comparability - over time

The comparability over time of the frames results from the information provided in concept 3.8.

The time series of the statistics in the Statistical Business Register starts from the reference year 2000.

a. Discontinuity of comparability over time due to revision of classifications

For specific tables, which provide information per economic activity, the time series is interrupted. In particular, in the series of tables from the reference year 2000 to 2007, the statistical classification STAKOD 03 is used for the classification of SBR units by economic activity. The classification STAKOD 03, which is based on the corresponding European classification NACE Rev. 1.1, was repealed by the adoption of Regulation No. No 1893/2006 of the European Parliament and of the Council establishing the statistical classification of economic activities NACE Rev.2, which imposed the use of the revised classification from the reference year 2008 onwards.

In order to address the discontinuity between the time series due to the use of the different statistical classifications STAKOD (NACE), the tables of the SBR were also compiled with the classification STAKOD 08 (identical to NACE Rev. 2) from the reference year 2004 onwards.

Also, according to Law 3852/2010, on the "New Architecture of the Local Government and of the Decentralized Administration-Kallikratis Program", the new classification for the administrative division of the Country is applied from the reference year 2010. The tables of the Statistical Business Register for the reference years 2008-2010 were drawn up on the basis of both the Kallikratis project and the Kapodistrias project, which was in force until year 2010.

b. Discontinuity of comparability over time due to the use of new sources

New sources (tax forms and records) of administrative data have been used since reference year 2011, which makes variations in the comparability over time of SBR data. Also, from the reference year 2014, a new source for employment, the Electronic Earnings Attestations (EEA) provided by the IAPR was used. The use of new sources for the SBR results in a break in data comparability between 2010 and 2011 and between 2013 and 2014.

15.3. Coherence - cross domain

The NSBR frame provides information on the active population of enterprises carrying out economic activities which contribute to the gross domestic product (GDP), the legal units of which those enterprises consist of, local

units, kind of activity units and enterprise groups, incl. all-resident and multinational enterprise groups. The national statistical business register is used by statistical users as a coordinated frame population in order to derive consistent statistical output.

The Statistical Business Register is the basis for the estimates of National Accounts data and the sampling frame for statistical business surveys. The cross-checking of the data of administrative sources with data of statistical surveys conducted and satellite statistical registers data, to update the SBR, ensures the cross-domain coherence. Moreover, the results of the profiling process were integrated in the SBR and in the EuroGroups Register, thus ensuring consistency between the two of them.

15.4. Coherence - internal

The SBR data included in the final frame are internally consistent.

Since reference year 2015, when the SBR updating system was fully adopted by the use of administrative data in conjunction with small-scale statistical surveys, the impact on internal coherence was evident. Using more than one administrative source makes more data available. The data available from different sources for the same variables provides the possibility of checking and crossing SBR data, resulting in improved internal coherence. The selection of the most reliable sources for each variable and the comparison between the sources contributes significantly to the above purpose.

16. Cost and Burden

Not available.

17. Data revision

17.1. Data revision - policy

The Revision Policy of ELSTAT is available at the following link:

http://www.statistics.gr/documents/20181/a49dca9a-dacf-4b52-b5df-b156216cb354

17.2. Data revision - practice

Not applicable

18. Statistical processing

18.1. Source data

The national statistical business register is set up in accordance with EBS Regulation (EU) 2019/2152 using any relevant data sources while avoiding excessive burden on respondents and taking due account of the cost effectiveness of the NSAs.

ELSTAT uses the following data sources, including a combination thereof for the national statistical business register:

- Administrative data from the Independent Authority for Public Revenue IAPR (Identification characteristics, demographic characteristics, economic characteristics)
- Employment data from the Single Social Security Entity (EFKA)
- Employment data from the Public Sector Human Resources Register
- Bank of Greece (Relationship information)
- Commercial database (Relationship information)
- Structural Business Survey (SBS) and other surveys conducted by ELSTAT
- · Intraflows survey, conducted by ELSTAT
- EuroGroups Register

18.2. Frequency of data collection

The national statistical business registers shall be updated by means of entries and removals at least annually. The frequency of updating shall depend on the kind of unit, the variable considered, the size of the unit and the source generally used for the update.

The frequency of updating the units and variables in the national statistical business register is as follows:

<u>Top</u>

Top

Top

- Legal units Annually
- Enterprises Annually
- Local units Annually
- Kind of Activity Units Annually
- Enterprise groups Annually

18.3. Data collection

Statistical business registers use data from administrative and statistical data sources, and from any other relevant sources that are comparable and compliant with the applicable specific quality requirements. For more details please see 18.1.

18.4. Data validation

Statistical analysis of the national statistical business register is carried out to ensure the quality of data and frame populations provided to users.

Data validation procedures include:

• Format and file structure checks: Initially is checked that the files received from the administrative sources are in accordance with the specifications set by the elstat. Moreover, these data are subject to a series of preliminary checks on completeness, accuracy and relevance to similar data from previous years.

• Intra-file checks: Consistency checks, at aggregated level, are conducted between the basic variables of the NSBR (turnover, employees and employment). Moreover, a specific process is run for the detection of outliers and influential errors (the attached file contains analytical description of both processes). The most important cases that occur are examined at micro level and are corrected where is needed.

• Intra-domain, intra-source checks (e.g time series checks): Number of legal units, turnover, employees and total employment at 4dgt level of NACE Rev. 2 of the current year is compared to the respective numbers of the previous years.

• Intra-domain, inter-source checks (e.g. mirror checks): The data for the basic variables of the NSBR that occur from the different administrative sources are checked for consistency at aggregated level (2dgt and 4dgt of NACE Rev.2).

• Plausibility/consistency checks between domains inside the NSI: The data of the NSBR are compared with the results of the Statistical Business Survey, the Annual Business Demography and IFATS.

• Plausibility/consistency checks between domains outside the NSI: The data on enterprise groups are compared with data received from a private company and the disseminated financial statements.

Annexes:

SBR Validation Methods

18.5. Data compilation

The sources used for updating the Statistical Business Register, are assessed at the level of variable (economic activity, turnover and employment) in terms of their completeness and reliability.

Based on the above mentioned assessment, a priority list of sources is compiled for each variable. If the first source in that list does not provide the requested information, the next source is used, etc.

After the preliminary checks are carried out, the primary data are entered into the Statistical Business Register and a preliminary draft of the SBR is compiled in accordance with the priority of the sources and the rules set.

Statistical checks are then carried out to identify the outliers and any erroneous data.

The basic procedures applied for the examination of the turnover and the employment are summarized below.

1. Identification of Enterprises with legal form "natural persons"

An initial examination of the SBR, regarding the identification of possible erroneous data, involves the identification of enterprises with legal form "natural persons", and with number of employees greater than 50 persons. Enterprises with such combination of characteristics should be further examined.

2. Identification of Enterprises with outlier values in Turnover and Employment

With regard to the identification of outlier values (and therefore possible erroneous administrative data) of Turnover and Total Employment, we apply **3 different methodological approaches**, in each stratum (combination of 3-digit- NACE code and employment class). In the present study, five employment classes are used (1: 0-4 employees, 2: 5-9 employees, 3: 10-19 employees, 4: 20-99 employees, 5: 100 plus employees).

All methods applied here examine the (logarithmic transformation of the) ratio:

calculated as such to correspond to one calendar year.

The methods used are based on:

- 1. Interquartile Range
- 2. Asymmetric Fence Method (for stratums with more than 100 records)
- 3. Median Absolute Deviation (MAD)

It should be noted that the methods used for the identification of the outliers in the present investigation gives reliable results if the following conditions are satisfied:

- To have enough enterprises in every stratum, where stratum is defined by the combination of NACE (3-digit code) and employment class (5 levels), i.e., at least 3.
- The enterprises that are identified as having outlier values, should be active during the two consecutive years of examination

The above mentioned methods result in a large number of enterprises with outliers in turnover or employment. In order to restrict the number of enterprises that should be further examined we continue to narrow down the resulted cases by examining only the enterprises where:

- The absolute percentage difference of the Ratio between two consecutive years is greater than 50%, and

• The absolute difference in turnover and employment between the two years is considered significant.

3. Identification of Enterprises affected by influential errors

Additionally, the method of Selective Editing has also been performed (M. Di Zio, U. Guarnera, 2013[1]), with the use the package **SeleMix**, in the programming language **R** (U. Guarnera & M. T. Buglielli, 2013[2]). This method allows us to identify enterprises affected by influential errors. In this analysis the variable of Turnover was used as the variable subject to measurement error, and the variable of total Employment as covariate. The examination is performed for each 2-digit NACE code, provided that there is sufficient number of enterprises.

The results of the Selective Editing procedure were compared with the results of the above mentioned methods in order to identify additional enterprises affected by influential errors.

In addition to the above-mentioned methods, control over the evolution of the key variables over time at 2-digit and 4-digit NACE is performed in order to identify the big changes.

The list of enterprises derived by the previously applied methods were transmitted to the competent ELSTAT's Sections for further examination of the accuracy of turnover and employment values.

Where prices are not available for some variables, these are estimated from the corresponding previous years' variables, with the help of the short-term indicators for the particular economic sector.

After completion of the checks and the necessary corrections, the final SBR and the data tables for the reference year are drawn up.

[1] M. Di Zio, U. Guarnera (2013). A contamination model for selective editing, *Journal of Official Statistics*, Vol.**29**(4), 539-555.

[2] U. Guarnera, M.T. Buglielli (2013). SeleMix: an R package for Selective editing, https://cran.r-project.org/web/packages/SeleMix/vignettes/SeleMix-vignette.pdf

18.6. Adjustment

Not applicable.

19. Comment

No comments

Related metadata

<u>Top</u>

Top

Annexes

<u>Top</u>