

Structural Business Statistics (ANNEXES I-IV)

Reference metadata based on the Euro SDMX Metadata Structure (ESMS)

Republika Srpska Institute of Statistics

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1. Contact				
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2. Metadata update			
2.1. M	letadata last certified	20 December 2016	
2.2. M	letadata last posted	20 December 2016	
2.3. M	Metadata last update	20 December 2016	

3. Statistical presentation

3.1. Data description

Structural business statistics (SBS) serve to provide annual indicators necessary for the analysis and monitoring of business activities of market producers. Observation units in the SBS survey are enterprises and entrepreneurs of non-financial business economy. Basic structural items and indicators of market operations of enterprises and entrepreneurs are provided by section of economic activities and by size (by number of employees). Basic items are: number of enterprises, number of entrepreneurs, number of persons employed, turnover, value added at factor costs and personnel costs. Basic indicators are: turnover per person employed, value added per person employed (indicator of productivity), share of value added in production value, labour costs per employee and profitability rate.

3.2. Classification system

Classification of Economic Activities KD BiH 2010, which in its content and structure fully complies with the EU Statistical Classification of Economic Activities NACE Rev 2.

3.3. Sector coverage

Sections B to J, L to N and divisions 95 and 96 pursuant to KD BiH 2010.

3.4. Statistical concepts and definitions

Number of enterpises and entrepreneurs covers entities from the SBR in the population which is subject to observation, which operate commercially and which were active at least for part of the observation year (with either realised turnover or employees). All temporarily inactive (quiescent) and actually inactive enterprises are excluded.

Number of employees covers persons who are employed on a temporary or permanent basis, working in full or part time. Number of employees includes seasonal workers, apprentices, people working from home and persons on strike or on short-term leave. This number does not cover persons on long-term leave. Employees are paid by the employer for performed work, and payments can be in the form of wage, salary, fee, gratuity, piecework pay or remuneration in kind.

Number of persons employed includes number of employees on the payroll and unpaid employed persons such as proprietors, partners, family members, volunteers, etc.

Operating revenues represent the results of enterprises' business operations expressed as a value. These include revenues from the sale of goods, products and services, revenues from the use of own goods, other operating revenues, and changes in stocks of finished goods and ongoing production. They are expressed without value added tax.

Operating expenditure represents enterprises' costs of business operations expressed as a value. These include purchase value of sold goods, intermediate consumption (costs of materials and energy, costs of production services, non-material costs), depreciation and provision costs and personnel costs.

Inventories represent a form of working capital. Their value is a state on the first and last day of the year, expressed in monetary terms. Structural business statistics monitor inventories in terms of materials, energy, goods, ongoing production and finished products.

Gross fixed capital formation into material and non-material fixed assets (new and used) represents the value invested in acquisition of assets and costs of maintenance and emergency repairs of acquired capital assets. This category does not include regular repair and maintenance costs.

Turnover covers calculated revenues from sale of own products, revenues from provided services and revenues from sale of goods for resale, during the observation period. Calculation of turnover covers all billed taxes, except VAT and excise.

Value added at factor costs is given as the gross amount (without depreciation deduction), calculated by adding subsidies to production value at basic prices, and subtracting product and production tax costs and value of intermediate production from it.

Personnel costs are defined as total compensation of employees during the observation period, in money or in kind. These consist of gross wages and salaries, and other personnel costs having the character of personal income.

Turnover per person employed is obtained by dividing total turnover by total number of persons employed. This indicator expresses the enterprise's selling capacity from specific activity.

Value added per person employed is a basic indicator for labour productivity measuring. This indicator shows the amount of value added produced per person employed.

Share of value added in production value is obtained by dividing total value added by total achieved production value.

Labour costs per employee show the average costs of employees in certain activities and these are obtained by dividing total labour costs by number of employees, that is, by number of persons who were paid for performed work.

Profitability represents percentage share of gross operating surplus in turnover. This indicator shows earning capacity of an enterprise or of certain activities.

3.5. Statistical unit

Observation units in the SBS survey are enterprises and entrepreneurs of non-financial business economy, with headquarters on the territory of Republika Srpska. These enterprises and entrepreneurs achieve over 50% of operating income from sale of goods and services on the market.

3.6. Statistical population

Economically active enterprises and entrepreneurs, in the sections of economic activity B to J, L to N and divisions 95 and 96 based on KD BiH 2010.

3.7. Reference area

Republika Srpska

3.8. Time coverage

Since 2010

3.9. Base period

Previous year (T-1)

4. Unit of measure

Absolute values, Convertible Mark, rates (%)

5. Reference period

Calendar year, 1 January-31 December 2015

6. Institutional mandate

6.1. Legal acts and other agreements

Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska, No. 85/03), Statistical Programme of Republika Srpska for the period 2013-2017, current annual Work Plan of the Republika Srpska Institute of Statistics.

6.2. Data sharing

Not applicable

7. Confidentiality

7.1. Confidentiality - policy

The confidentiality of data and protection of personal information are regulated by the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska, No. 85/03) and the Rules of protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured through the Law on the protection of personal data ("Official Gazette of BiH", No. 49/06).

7.2 Confidentiality – data treatment

All collected data are treated as confidential and are used for statistical purposes only. Rules of protection of confidential data of the Republika Srpska Institute of Statistics lists the principles of confidential data treatment, procedures for ensuring confidentiality during the collection, processing and dissemination of data, as well as procedures for accessing microdata.

8. Release policy

8.1. Release calendar

Basic structural items and indicators are published in accordance with the pre-defined release calendar – preliminary data 10 months after the end of the observation year and final data 15 months after the end of the observation year.

8.2. Release calendar access

http://www.rzs.rs.ba/publications/?left mi=15&add=15

8.3. User access

All users have the right to access data and information at the same time and in the same way.

9. Frequency of dissemination

Annual

10. Accessibility and clarity

10.1. Release

Basic structural indicators of business activities of enterprises and entrepreneurs – preliminary results http://www2.rzs.rs.ba/static/uploads/saopstenja/struktura_poslovne_statistike/2015/SPS_2015_Prethodni_podaci.pdf

and Basic structural indicators of business activities of enterprises and entrepreneurs – final results: http://www2.rzs.rs.ba/static/uploads/saopstenja/struktura_poslovne_statistike/2015/SPS_2015.pdf

10.2. Publications

Basic structural indicators of business activities of enterprises and entrepreneurs, final results, are published in printed publications Statistical Yearbook:

http://www2.rzs.rs.ba/static/uploads/bilteni/godisnjak/2016/12sps_2016.pdf

and This is Republika Srpska:

http://www.rzs.rs.ba/front/article/2248/?left_mi=288&add=288.

10.3. Online database

SBS data are not available in an online database.

10.4. Microdata access

Microdata are not available.

10.5. Other

The data are also disseminated through replies to written requests of users according to their specification, as well as at press conferences.

10.6. Documentation on methodology

In addition to the data, the publications also provide brief methodological explanations and definitions of basic indicators and concepts.

The official website of the Institute, in the part referring to SBS http://www.rzs.rs.ba/front/category/237/, provides basic concepts and definitions, the quality report and the methodology Structural indicators of business activities of enterprises and entrepreneurs:

http://www2.rzs.rs.ba/static/uploads/metodologije/strukturne_poslovne_statistike/SPS-Metodologija_2016_v2.pdf

10.7. Quality documentation

Quality Report is available at the website of the Republika Srpska Institute of Statistics: http://www.rzs.rs.ba/front/category/340/?left mi=284&add=284

11. Quality management

11.1. Quality assurance

When it comes to quality assurance for statistical data and maintaining public confidence in the data, the Law on Statistics of Republika Srpska (Article 17, paragraph 1) prescribes the application of principles of impartiality, reliability, transparency, timeliness, professional independence and statistical confidentiality in organisation and production of statistics in Republika Srpska. The Republika Srpska Institute of Statistics follows the recommendations on organisation and quality management defined by the European Statistics Code of Practice (CoP).

11.2. Quality assessment

Final phase of the statistical activity is an overall assessment using information from all processes, from the design of survey instruments and data collection, to data publication and feedback from users. This information is used to produce a quality report, which contains descriptions of all processes of the statistical activities and lists advantages and disadvantages related to quality, as well as quality indicators.

12. Relevance

12.1. User needs

Key users of SBS data are:

- Public sector: Ministry of Finance, Ministry of Economic Relations and Regional Cooperation, Ministry of Trade and Tourism, Ministry of Energy, Industry and Mining, Economics Institute, Directorate for Economic Planning, Directorate for European Integration, Chamber of Commerce, republic and municipal agencies for the development of small and medium-sized enterprises;
- science, research and education: Economics Institute;
- general public: individuals;
- the media: news agencies;
- internal users: Statistical Business Register, national accounts and short-term statistics.

Structural business statistics data for the level of Republika Srpska are submitted to the Agency for Statistics of Bosnia and Herzegovina, the institution responsible for the aggregation of data to the state level and reporting to the Statistical Office of the European Union, Eurostat.

Basic structural items and indicators of market operations of enterprises and entrepreneurs are provided by section of economic activities and by size (by number of employees).

Produced data are used for the analysis of structure of active market enterprises and entrepreneurs, as well as for the analysis of business profit and losses and competitiveness of enterprises and entrepreneurs and the analysis of business developments at the Republika Srpska and international levels.

Sometimes, users require structural business statistics data referring to a specific municipality, but these are not provided through this survey.

12.2. User satisfaction

Satisfaction of users with statistical data is measured through the User Satisfaction Survey relating to the data produced by the Republika Srpska Institute of Statistics. The results of the latest survey are available at the Institute's website, in the section Quality in statistics:

http://www.rzs.rs.ba/front/article/2699/?left mi=306&add=306.

User satisfaction with the SBR data is not specifically measured.

12.3. Completeness

The data obtained through the implementation of this survey allow the calculation of all statistics required by EU Regulation 295/2008 at the level of the observation unit for Annexes I-IV, regardless of these being annual or multi-annual statistics.

13. Accuracy and reliability

13.1. Overall accuracy

The control implies monitoring of the accuracy, logic, completeness and consistency of data at the level of observation unit. The application contains around fifty logical and computational controls, some of which are cautionary (soft), while some indicate mandatory corrections (hard). Accuracy of data is checked by using the prescribed methodology and examining measurement errors, as well as through comparisons with data referring to the previous period or with data obtained through other statistical surveys and additional analyses.

13.2. Sampling error

SBS survey uses a combined method of sample and full coverage. The method of full coverage is applied for enterprises with 20 or more employees, while sampling method is applied for enterprises with fewer than 20 employees. The sample is created on the basis of the SBR data and is designed as a stratified random sample. For the accuracy and reliability of SBS data estimates, EU Regulation 275/2010 requires the calculation of coefficient of variation for a number of items, as well as the calculation of weighted unit non-response rate. The assessment of variance is made using the "Survey" package of programming environment R, taking as the basis the initial sample design. For the part of the population for which a sample was selected, values are assessed for the entire set. The method applied to assess the results is Horvitz-Thompson method. The estimate of entire population is made using the calibration method, which uses all known information from the Statistical Business Register, including: number of enterprises per stratum, number of employees per stratum and total turnover per stratum. Input for the calibration process includes corrected initial weight, known totals of used auxiliary information per stratum, and values of auxiliary variables for units which have responded.

13.3. Non-sampling error

Constant improvements to methodological processes are aimed at reducing non-sampling errors.

Under-coverage and over-coverage errors are rare in the SBS survey; if they do occur, they are small. In 2015, the sampling frame included 0.42% of units that did not belong to the target population of SBS. Measures being taken to reduce coverage errors include timely and regular exchange of information between statistical surveys and the SBR.

The most common reasons for the occurrence of measurement errors:

- Superficial or incomplete completion of the report;
- Lack of understanding of the methodology by the person filling in the report;
- Random errors occurring while data are entered in the report (questionnaire);
- Data are entered in the wrong amount (i.e. amount with decimal places, two zeros, etc.).

If measurement errors are detected, computational and logical controls are applied to make corrections after collected data are compared with the SBS data from the previous year and with the data obtained through other statistical surveys. If major errors are detected, the person who completed the report is contacted.

The most important instrument used to reduce errors occurring while the reports are completed are the Instructions for completing the report, which are sent to reporting units once a year. These instructions describe in detail the method of completing the report. In order to reduce measurement errors, the letter to reporting units provides contact information of the persons in charge of the survey. These persons are able to provide all the necessary explanations for completing the questionnaire.

Weighted non-response rate is 15.1%. Other data on non-response rates are shown in Table 3 of the Quality Report for Structural Business Statistics, 2015.

14. Timeliness and punctuality

14.1. Timeliness

Preliminary results are made available by their publication, 10 months after the observation period, while final results are published 15 months after the observation period.

14.2. Punctuality

Punctuality of SBS data publication for 2015 is 100%.

15. Coherence and comparability

15.1. Comparability - geographical

In all European countries, SBS survey complies with recommendations and regulations of the European Commission; thus, SBS data for Annexes I-IV are fully comparable with data of the European Statistical System members.

15.2. Comparability - over time

Structural business statistics have been produced regularly since 2010. With continuous development of the survey, in line with recommendations and regulations of the European Commission, all sections of activity according to the KD BiH 2010 have been covered since 2012 for enterprises, and since 2014 for enterprises and entrepreneurs.

Due to differences in the coverage of sections of economic activity, SBS data for 2012 and 2013 are not fully comparable with data for the first two years of the survey. A break in the time series occurred in 2014 as well, when entrepreneurs were included in the survey.

There are no specific factors which could affect the comparability of time series, since the recommendation regarding items to be provided has been fully applied. These items are specified in Regulations 295/2008 and 251/2009.

15.3. Coherence - cross domain

Structural business statistics data are compared with data obtained through national accounts statistics, labour statistics, PRODCOM statistics and other statistics associated with structural business statistics. Value of indicators for key variables is compared with the value from national accounts statistics, as the reference source.

CH1 for number of employees is 0.046% and for turnover 0.013%.

15.4. Coherence - internal

SBS data and results are internally coherent. Data at the enterprise level represent the basis for the production of structural items and indicators at higher levels of aggregation (class, group, division and section of economic activity) for the entire Republika Srpska.

16. Cost and burden

Number of hours worked – 5,112 h – estimated data for the following phases of work:

- preparation of instruments and delivery to the field,
- collection,
- data entry and processing,

- calculation of SBS results, and
- publishing;

Material costs (printing and delivery of forms to the field) – 4,243 KM;

Annual number of forms submitted to reporting units -7,742 (two forms are sent to each reporting unit in the sample):

Number of respondents that completed the form -3,324;

Time required to complete a detailed form with an additional one (SBS-D+SBS-DO) for Annexes II and IV – for a total of 559 observation units – 1.4 h;

Time required to complete a detailed form (SBS-D) for Annexes I and III – for a total of 422 observation units – 1.3 h;

Time required to complete an abbreviated form (SBS-S) for Annexes I - IV for a total of 2,343 observation units – 0.6 h;

Total time spent (SBS-D+SBS-DO) - 1,509.3 h;

Total time spent (SBS-D) - 844 h;

Total time spent (SBS-S) - 1,640.1 h.

17. Data revision

17.1. Data revision - policy

Final data are published five months after the publication of preliminary data. Revision of final data for structural business statistics was not implemented or planned.

17.2. Data revision - practice

Final data are published five months after the publication of preliminary data. Revision of final data for structural business statistics was not implemented or planned.

18. Statistical processing

18.1. Source data

Structural indicators of business activities of enterprises and entrepreneurs are a result of the survey, that is, of the statistical processing of data on enterprises and an estimate of data on entrepreneurs. The survey on enterprises uses a combined method of sampling and full coverage. The method of full coverage is applied for enterprises with 20 or more employees, while the sampling method is applied for enterprises with fewer than 20 employees. For the part of the population for which a sample was selected, values are assessed for the entire set. The method applied to assess the results is Horvitz-Thompson method.

The sample is created on the basis of the SBR data and is designed as a stratified random sample. A stratum must contain at least five sampling units. The stratification of units of the sampling frame for sample selection is done by economic activity of enterprises, the number of employees and the initial census for specific strata. The number of employees is used to determine size classes (class I-0 to 19 employees, class II-20 to 49 employees, class II-20 to 10 and 11), except the section Trade (Table 12), for which six size classes based on the number of employees (class I-0 to 1, class II-2 to 9, class III-20 to 19, class II-20 to 49, class II-20 to 249, class II-20 are used for the stratification. In 2015, of 7,442 enterprises in the frame, 3,871 were selected into the sample. Of 286 strata, 139 included enterprises with 20 or more employees and these were fully covered by the sample, while in 147 strata with fewer than 20 employees enterprises were selected randomly.

Data on the number of enterprises in the frame and in the sample and data on sampling rates are available in Tables 10, 11 and 12 of the Quality Report for Structural Business Statistics, 2015.

18.2. Frequency of data collection

Annual

18.3. Data collection

Collection of data for the production of structural business indicators is carried out using the form "Annual report on Structural Business Statistics". For each Annex (I-IV) of EU Regulation 295/2008, two forms have been created

– a detailed one for enterprises with 20 or more employees and an abbreviated one for other enterprises. Thus, the survey uses eight basic forms. In addition to basic forms, additional forms are used for Annexes I, II and IV.

Forms are available at the Institute's website:

http://81.93.77.240/front/category/28/99/?left_mi=41&up_mi=12&add=41

Business entities submit data to the regional offices of the Republika Srpska Institute of Statistics, five months after the observation year.

Data on the characteristics collected using this form are available in the accounting, personnel and other records of enterprises. These include data on revenues, expenditures, inventories, employees, gross fixed capital formation, etc.

18.4. Data validation

Data processing and production of results are carried out at the Production Statistics Division and Services Statistics Division of the Republika Srpska Institute of Statistics. These Divisions perform formal, computational and logical controls, treat extreme values of microdata, assess and analyse results, etc.

Data from "Annual reports on structural business statistics" are entered into the application without prior corrections of possible irregularities, i.e. in the "raw" form. Following completion of data entry, it is possible to see a list of all computational and logical errors, for all reporting units, with red-tagged "hard" errors. The basis for microdata editing are comparisons with structural business statistics data from the previous year and with data from statements of accounts of the observation year. In addition to the above, data are also compared with labour statistics, "PRODCOM" statistics and other statistics associated with structural business statistics. In case of discrepancies, checks are made with reporting units, via telephone. Extreme values (outliers), as potential errors in data, are identified using the Hidiroglou-Berthelot algorithm in the programme environment "R".

18.5. Data compilation

The estimate of entire population is made using the calibration method, which uses all known information from the Statistical Business Register, including: number of enterprises per stratum, number of employees per stratum and total turnover per stratum.

Input for the calibration process includes corrected initial weight, known totals of used auxiliary information per stratum, and values of auxiliary variables for units which have responded. The calibration process serves to find a solution to the optimization problem with additional conditions (seeking related extremes). Calibration is performed using the "Survey" package of the programming environment "R".

18.6. Adjustment

Adjustment methods are not applied in structural business statistics.

19. Comment	