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1 INTRODUCTION TO THE STATISTICAL PROCESS AND OUTPUT

1.1 Purpose of the survey

The purpose of conducting the "Annual report on gross fixed capital formation (INV-01)" is to collect data which, in accordance with the requirements of national accounts, subsequently enable the calculation of Gross domestic product by expenditure approach, determination of the share of gross fixed capital formation in Gross domestic product, compilation of capital account, etc.

The statistical survey "Annual report on gross fixed capital formation (INV-01)" was first established in 2004 and it is carried out annually. The survey provides data on total financing of gross fixed capital formation and gross fixed capital formation by economic activity in Republika Srpska.

1.2 Legal basis and responsibility of statistical institutions

This statistical activity is implemented in accordance with the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No 85/03), the Statistical Programme of Republika Srpska for the period 2018-2021 and the current Work Plan of the Republika Srpska Institute of Statistics.

1.3 Relevant classifications

Since 2013, statistical data on gross fixed capital formation have been monitored, processed and presented in accordance with the Classification of Economic Activities KDBiH 2010, which in its content and structure fully complies with the EU Statistical Classification of Economic Activities NACE Rev 2.

1.4 Reporting unit

Reporting units for the collection of data on gross fixed capital formation are all business entities registered in the territory of Republika Srpska.

1.5 Statistical observation unit

Statistical observation units are all business entities registered in the territory of Republika Srpska. Observation units are most often also reporting units.

1.6 Scope and coverage

The frame for the INV-01 survey coverage in 2018 is the Statistical Business Register of active business entities as on 31 December 2018. The Annual report on gross fixed capital formation covers all business entities registered in the territory of Republika Srpska if they occurred as direct investors. The data do not cover investments by entrepreneurs, nor investments by natural persons.

In 2018 there were 11,129 observation units in the annual coverage.

1.7 Statistical concepts and definitions

The definitions relating to fixed assets are based on the European System of Accounts – ESA 2010 and are part of the total gross fixed capital formation which also includes changes in inventories and net acquisition of valuables.

Gross fixed capital formation into fixed assets includes all purchases made by business entities aimed at acquiring new assets, increasing the value or replacing existing fixed assets. Investment goods can be new or used, bought or received with no compensation in the country and abroad, or self-produced

Financing of gross fixed capital formation includes monetary investments in fixed assets during the year, regardless of the time of their construction or purchase

Gross fixed capital formation represents the value of actually performed construction, making or purchase of infrastructure, equipment and other during the year, regardless whether payment for them has been effected or not during the observation year.

Gross fixed capital formation in new fixed assets relates to the part of fixed assets that has been purchased directly from the contractor or producer of the equipment, or which has been self-produced, i.e. those fixed assets that still have not been object of buying and selling among their direct users, as well as used equipment from import (imported for the first time)

Gross fixed capital formation in construction includes dwellings and other buildings, civil engineering works and hydro engineering, as well as the value of equipment built into constructions

Gross fixed capital formation in equipment includes purchase of equipment, which involves costs of fitting, transportation, insurance costs, custom duties etc.

Gross fixed capital formation in other includes investments into basic herd, afforestation, long-standing plantings, studies, projects, research work etc.

Gross fixed capital formation in new capacities in an existing or new activity refers to investments in establishing of new enterprises, independent units and organisational units in composition of existing enterprises, continuation of building or equipping formerly suspended investments, investments in longstanding plantings, basic herds, investments in new lines of communications etc.

Gross fixed capital formation for reconstruction, renovation and expansion refers to investments for renovation or enlargement of the existing capacities (infrastructure, equipment, machines) within existing work unit, in order to enlarge the volume of production or services or change technology and technique of production.

Gross fixed capital formation for maintaining the level of existing capacities refers to investments for the replacement of obsolete or worn out fixed assets, intensification or rationalisation of production, but without expanding existing capacities and without essential changes to the existing production technology.

2 RELEVANCE, ASSESSMENT OF USERS' NEEDS AND PERCEPTIONS

2.1 Users of statistical survey data

2.1.1 Key users of statistical survey data

The data on gross fixed capital formation for the level of Republika Srpska are submitted to the Agency for Statistics of Bosnia and Herzegovina, as the institution responsible for the aggregation of data to the BiH level and for reporting to the Statistical Office of the European Union, Eurostat.

Key users of data on gross fixed capital formation are:

- Republika Srpska Ministry of Finance, Republika Srpska Ministry of Economy and Entrepreneurship, Directorate for Economic Planning of BiH, Republika Srpska Chamber of Commerce, municipal administrations:
- business entities:
- scientific, research and educational institutions;
- general public, students and other natural persons;
- the media: broadcasters, news agencies;
- international users. World Bank.

2.1.2 Assessment of users' needs

The survey on gross fixed capital formation serves to provide data on:

- Financing of gross fixed capital formation and gross fixed capital formation by source of financing,
- Gross fixed capital formation by activity and headquarters of investor,
- Gross fixed capital formation by purpose and location,
- -Gross fixed capital formation by kind of construction (new capacities; reconstruction, renovation, and expansion of the existing capacities, maintaining the level of existing capacities),
- Technical composition of gross fixed capital formation (for total, new, used and sold fixed assets).

2.1.3 Measuring users' perceptions and user satisfaction

In 2017, the Republika Srpska Institute of Statistics conducted the <u>User Satisfaction Survey</u> and the results are available on the official website of the Institute. There is no specific measurement of user satisfaction related to the survey on gross fixed capital formation.

2.2 Data completeness

2.2.1 Quality and performance indicator – Data completeness - rate (R1)

The rate of available statistics is the ratio of available statistics to statistics required (prescribed) by regulations (this primarily refers to regulations of the European Commission and other relevant international organisations). Since gross fixed capital formation statistics are not regulated by a specific regulation, this indicator is not calculated.

3 ACCURACY AND RELIABILITY

3.1 Sampling error

3.1.1 Quality and performance indicator—Sampling error (A1)

Gross fixed capital formation statistics are not sample-based. Thus, the measurement of sampling errors is not applicable.

3.1.2 Activities to reduce sampling errors

See item 3.1.1

3.2 Non-sampling errors

3.2.1 Non-sampling errors - Coverage errors

3.2.1.1 Quality and performance indicator – Over-coverage rate (A2)

The address book of business entities covered by the regular annual activity is formed and updated annually based on the data from the Statistical Business Register. The address book for gross fixed capital formation includes all business entities. Since gross fixed capital formation statistics are based on the full coverage of observation units, over-coverage does not occur.

3.2.1.2 Quality and performance indicator – Common units - proportion (A3)

Gross fixed capital formation statistics do not use units from two or multiple sources (data are not combined).

3.2.1.3 Undercoverage error

There were no such cases in 2018.

3.2.1.4 Measures to reduce coverage errors

Measures taken to reduce coverage errors are timely and regular updating of the address book of observation units based on the Statistical Business Register.

3.2.2 Non-sampling errors – Measurement errors

3.2.2.1 Reasons behind measurement errors

The most common reasons behind measurement errors are:

- Misunderstanding of the methodology by reporting units;
- Random errors made when entering data into the form;
- Lack of interest of the reporting unit;
- The form is not always completed by the same person.

3.2.2.2 Measures to reduce the number of measurement errors

The person in charge of methodological support in this survey eliminates errors. In the event of a measurement error, depending on the type of error, it is either corrected by the methodologist based on other data in the questionnaire and data from the previous period, or the reporting unit is contacted in order to correct the detected error for the observation unit. In the event of a systemic error, the correction is made in cooperation with the reporting unit, using data from previous quarters.

The most important tools for reducing the occurrence of errors when completing the form are instructions delivered to the reporting units on the form. These instructions describe in detail how the form should be completed. Contacts between the methodologist and reporting units are also of great importance in terms of directly interpreting methodological explanations and pointing out the most common errors that occur when completing the form.

3.2.3 Non-sampling errors – Non-response errors

3.2.3.1 Quality and performance indicator – <u>Unit non-response rate (A4)</u>

Non-response covers all observation units for which reports were not submitted.

Year	2018
Number of observation units	11,129
Number of non-response cases	225
Non-response rate (%)	2.0%

3.2.3.2 Quality and performance indicator – <u>Item non-response rate (A5)</u>

Information that would allow for the calculation of item non-response rate is not available.

3.2.3.3 Procedures in the event of non-response

In the event that an entire report for an observation unit or only certain data within the report are missing, the reporting unit is contacted if necessary in order to fill out the entire report or to complete the missing values.

In the event of non-response for an entire report, data are not imputed.

3.2.3.4 Procedures to reduce non-response rates

The following procedures are most often used to reduce the non-response rate:

- Multiple contacts with the reporting unit (in the event of unavailability);
- Flexible deadlines for the submission of reports (possibility of advancing the deadlines of data submission);
- Combining several different methods of data collection (telephone, urging);
- More precise methodological explanations, which refer to certain question (variable);
- Providing the reporting unit with the name and telephone number of the contact person available for any questions.

3.2.4 Revision

3.2.4.1 Quality and performance indicator – Data revision - average size (A6)

Revision was not planned nor implemented.

3.2.5 Imputation

3.2.5.1 Quality and performance indicator – Imputation – rate (A7)

Data are not imputed in this survey.

4 TIMELINESS AND PUNCTUALITY

4.1 Timeliness of publication

4.1.1 Quality and performance indicator - <u>Time lag – first results (TP1)</u>

Reference period	1 Jan-31 Dec 2018
Date of first/preliminary data publication	15 July 2019
Time lag (number of months)	T+6.5

4.1.2 Quality and performance indicator – Time lag – final results (TP2)

Reference period	1 Jan-31 Dec 2018
Date of final data publication	15 Oct 2019
Time lag (number of months)	T+9.5

4.2 Punctuality of publication

4.2.1 Quality and performance indicator – Punctuality – delivery and publication (TP3)

The indicator is calculated and presented in two ways - from the aspect of application for producers of statistics and for users of statistics.

Indicator for producers of statistics

Punctuality of publication for first results

Reference period	1 Jan -31 Dec 2018
Target date for release (as announced in the Release Calendar)	15 July 2019
Actual release date	15 July 2019
Time lag (number of months)	T+0

Punctuality of publication for final results

Reference period	1 Jan – 31 Dec 2018
Target date for release (as announced in the Release Calendar)	15 Oct 2019
Actual release date	15 Oct 2019
Time lag (number of months)	T+0

Indicator for users of statistics:

The punctuality rate of publication for data on gross fixed capital formation is 100%.

4.3 Reasons for major delays and measures to improve timeliness and punctuality

There were no delays, as both preliminary and final data were published within the deadlines announced in the Release Calendar.

5 COHERENCE AND COMPARABILITY

5.1 Coherence

5.1.1 Quality and performance indicator - Coherence between different data sources (CH1)

Not applicable, multiple different sources of data are not used.

5.1.2 Reasons for major discrepancies

See item 5.1.1.

5.2 Comparability

5.2.1 Quality and performance indicator – Asymmetry for mirror flows statistics (CC1)

Not applicable, as there are no comparable (mirror flows) statistics.

5.2.2 Quality and performance indicator – Length of comparable time series (CC2)

Annual data on gross fixed capital formation have been available since 2004. A comparable series of data by section of the Classification of Economic Activities KD BiH 2010 has been available since 2005.

5.2.3 Breaks in time series

The new Classification of Economic Activities¹ (KD BiH 2010) has been applied since 2013. Due to the need to compare time series by section of the Classification of Economic Activities, the data were backcast to 2005

5.3 Geographical comparability

5.3.1 Comparability with the European Statistical System members

The gross fixed capital formation statistics data are comparable with the data provided by the European Statistical System members in the part referring to business entities.

Official Gazette of Republika Srpska, No 8/14

6 ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS

6.1 Releases in which data are published

The data on gross fixed capital formation are easy to access as they are published on the Institute's website www.rzs.rs.ba in annual releases:

- Gross Fixed Capital Formation, 2018 –preliminary results

 (http://www2.rzs.rs.ba/static/uploads/saopstenja/investicije/2018/Investicije/2018 Prethodni_podaci.pdf) и
- Gross Fixed Capital Formation, 2018 final results
 (http://www2.rzs.rs.ba/static/uploads/saopstenja/investicije/2018/Investicije_2018.pdf).

The release provides the following data:

- Gross fixed capital formation in fixed assets by technical composition;
- Financing of gross fixed capital formation in fixed assets by activity of investor;
- Gross fixed capital formation in fixed assets by activity of investor;
- Gross fixed capital formation in new fixed assets by purpose of investment.

6.2 Publications in which data are published

The data on gross fixed capital formation are published in the following publications:

- Thematic bulletin "GROSS FIXED CAPITAL FORMATION, 2019"
 (http://www2.rzs.rs.ba/static/uploads/bilteni/investicije/Bilten_Investicije_2019_WEB.pdf);
- "This is Republika Srpska";
- "Cities and Municipalities of Republika Srpska";
- Statistical Yearbook.

6.3 Online database

Gross fixed capital formation data are available in an online database.

http://www3.rzs.rs.ba/rzs/faces/indicators.xhtml

6.4 Access to microdata

Microdata are not available.

6.5 Accessibility of methodological documents

The Institute's official website, in the part referring to gross fixed capital formation statistics, provides <u>Basic concepts and definitions</u> for this survey (http://www.rzs.rs.ba/terms/defs/196/?add=111&left_mi=275) as well as https://www.rzs.rs.ba/terms/defs/196/?add=111&left_mi=275) as

(http://www2.rzs.rs.ba/static/uploads/metodologije/investicije/Investicije_Metodologija_ver.2_2017.pdf). In addition, brief metadata are available in printed and online publications – in the Statistical Yearbook and in the release Gross Fixed Capital Formation.

6.6 Measures to improve clarity of disseminated results

The data are presented clearly.

6.7 Quality and performance indicator – Data tables - consultations (AC1)

There is no procedure for recording the number of accesses to sets of metadata.

6.8 Quality and performance indicator – Metadata - consultations (AC2)

There is no procedure for recording the number of accesses to sets of metadata.

6.9 Quality and performance indicator – Metadata completeness - rate (AC3)

The metadata completeness rate (ESMS v.2.0) is 95.0 %.

7 SURVEY COSTS AND BURDEN ON RESPONDENTS

7.1 Costs of survey implementation

No data are available on the costs of the Republika Srpska Institute of Statistics for the implementation of statistical activities within the scope of gross fixed capital formation statistics.

7.2 Burden on respondents

No data are available on costs and burden on reporting units.

7.3 Measures to reduce costs and burden

Measures to be taken to reduce costs and burden on reporting units are:

- Use of administrative data sources;
- Promoting the use of the electronic questionnaire.

8 CONFIDENTIALITY

8.1 Confidentiality - policy

Data collected for the purposes of gross fixed capital formation statistics are subject to the legal frameworks of confidentiality and are used for statistical purposes only.

The confidentiality of data and protection of personal data are regulated by Articles 25 and 27 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska, No. 85/03) and the Rulebook on protection of confidential data of the Republika Srpska Institute of Statistics. The confidentiality of statistical data is also ensured by the Law on protection of personal data ("Official Gazette of BiH", No. 49/06).

8.2 Confidentiality – data handling

The confidentiality of data and protection of personal data are guaranteed by Articles 25 to 29 of the Law on Statistics of Republika Srpska ("Official Gazette of Republika Srpska", No. 85/03). The Institute informs all reporting units that the collected data will be used for statistical purposes only and that confidential data will remain confidential in accordance with this Law.

Collected, processed and stored data are considered confidential if reporting units can be directly or indirectly identified using these data, thereby disclosing individual data.

Statistical data must not be given to users if they contain or disclose confidential data. Confidential data are the data referring to a reporting unit or a group that consists of at least three reporting units, when a share of one of the units in the group exceeds 85%.

In the collection, processing and delivery of data, the Institute and authorised bodies and organisations undertake all organisational, regulatory, administrative and technical measures necessary to protect data confidentiality and to prevent unauthorized access, publication and use of data.

Persons who, while carrying out their duties, may have access to confidential data, must act in accordance with the provisions of this Law even after they cease to perform their functions.

9 STATISTICAL PROCESSING

9.1 Source of data

The source of data for the annual survey on gross fixed capital formation are all business entities registered in the territory of Republika Srpska if they occurred as direct investors. The data do not cover investments by entrepreneurs, nor investments by natural persons.

9.2 Frequency of data collection

The data on gross fixed capital formation are collected and published annually.

9.3 Data collection

The data on gross fixed capital formation are collected and published annually. Annual data of gross fixed capital formation are collected using the paper-based form INV-01

(http://www2.rzs.rs.ba/static/uploads/obrasci/investicije/Obrazac_INV-01_2018_A3.pdf)

from business entities in the territory of Republika Srpska. Reporting units submit two copies of completed reports to the regional offices of the Republika Srpska Institute of Statistics until 15 April for the previous year. The Institute has also launched an internet portal for online data collection for the INV-01 report, which enables business entities that wish to do so to enter data directly using the web application, instead of completing and submitting the report using the paper-based form. Approximately 5% of the observation units submitted their data using this option.

9.4 Data validation

In order to ensure data quality, the data are evaluated prior to their publication and the sources and output are checked. For the purpose of data validation, the results of the Annual report on gross fixed capital formation are compared with the previous years, the response and non-response rates are calculated, etc.

9.5 Data compilation

Statistical material is organised, entered and processed at the headquarters of the Republika Srpska Institute of Statistics, in the National Accounts Division. Data processing is carried out in accordance with the 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, in two ways:

- By principal (prevailing) activity and headquarters of investor organisational approach;
- By purpose of investment and location of investment facilities (for new fixed assets only) approach of pure activities and territories. The data entry application has built-in controls that prevent computationally and logically incorrect data from being entered into the database. These are mainly "HARD" controls that prompt and interrupt the entry until the correct data are entered. This method of data entry provides the database with logically and computationally correct data.

9.6 Adjustments

9.6.1 Seasonal adjustment

Since the Annual report on gross fixed capital formation is implemented once a year, no seasonal adjustments are performed.