

Structural Statistics (Innovation in industry and services)

Metadata

National Bureau of Statistics of the Republic of Moldova (NBS)

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2. Metadata Update

2.1. Last certification of metadata

10.02.2022

2.2. Last update of metadata

10.02.2022

3. Statistical Presentation

3.1. General description

The Statistical Survey on Innovation is a survey designed to collect data on innovative enterprises, the type of innovations and innovators, the turnover of new or improved products, the costs of innovation activities.

The methodological basis for innovation statistics serves the Oslo Manual, which determines the structure, content and methodology of statistical survey. This handbook was developed jointly by EUROSTAT (European Commission Bureau of Statistics) and the Organization for Economic Co-operation and Development (OECD) based on the experience of advanced countries in the field of innovation.

According to Eurostat's recommendations, the Statistical Survey on Innovation is carried out every two years and is based on the Community Innovation Survey (CIS). For the survey regarding the innovation activity of the enterprises from the Republic of Moldova, only the indicators that are mandatory according to the EC Regulation no. 995/2012 were included, excluding the optional indicators.

The scope of Statistical Survey on Innovation refers to enterprises active in industry and services sector. The units were selected according to their size and number of employees.

Statistical survey excludes enterprises with economic activities as: agriculture, construction, retail, public administration, education, health and social assistance, recreational and leisure activities, other service activities.

The enterprises on the left bank of the Dniester river and the municipality of Bender were not included in the survey.

3.2. Concepts and definitions

3.2.1. Definitions

An Innovation is the implementation of a new or significantly improved product, process, organizational method or marketing method in business practices. Innovation should have new features or intentions to use or that provide a significant improvement over what has previously been used or sold by the

enterprise.

There are four types of innovations: product, process, organization, marketing.

Product innovation represents the introduction on the market of a new or significantly improved good or service, with respect to their characteristics, facility in use, components or subsystems. For example, the replacement of some raw goods with others including improved characteristics (breathable textiles, light but resistant mixtures, non-polluting plastics for the environment); introduction of new or improved components to existing product lines (ABS braking systems, GPS navigable systems in transport equipment, front / rear camera built into mobile phones, clothing fastening systems).

Process innovation corresponds to the implementation of a production process, a distribution method or a support activity, new or significantly improved. For example, the installation of new or improved manufacturing technologies, such as automatized or sensors equipment that can regulate processes; new equipment needed for new or improved products.

Organizational innovation is the implementation of a new method of organization in the business practices of the enterprise (including knowledge management), in the organization of the workplace and external relations, which was not used before the enterprise. For example, the first introduction of incentives for individual or group performance; reduction or increase in the hierarchical decision-making structure.

Marketing innovation is the implementation of a new marketing concept or marketing strategy that differs significantly from the existing marketing methods in the enterprise and has never been used before in the enterprise. For example, the use of the Internet to market one type of product is considered a marketing innovation, while the second use for another type of product is no longer an innovation.

Innovative enterprises are enterprises that have launched new or significantly improved products (goods or services) on the market, or introduced new or significantly improved processes, or new methods of organization or marketing.

Expenditures for own research and development activity (RD) include activities undertaken by the enterprise to create new knowledge or to solve scientific or technical issues (includes own development of computer programs - software that meets these requirements). It includes current expenditures, which cover labor expenditures, as well the capital expenditure, which includes buildings and specific equipment used for research and development.

Expenditures for external research and development activity include research and development activities that the company has contracted in addition to other enterprises regardless of the form of ownership.

Expenditures for the acquisition of machinery, equipment and software include the acquisition of machinery, equipment, software and buildings to be used for new or significantly improved products.

Expenditures for the acquisition of existing knowledge from other enterprises or organizations include the acquisition of existing know-how, copyrights, patented and non-patented inventions, etc., from other enterprises or organizations for the development of new or significantly improved products and processes.

Expenditures for other innovative activities includes: internal or external training for staff, for the development and / or introduction of new or significantly improved products and processes, in-house or contracted activities to place innovations on the market, including market analysis and advertising, design or for changing the shape or appearance of goods or services, other own or contracted activities such as: feasibility studies, testing, endowment, industrial engineering for the implementation of new or improved products and processes.

3.2.2. Unit of measurement

Data expressed in absolute values are presented (value indicators) - in lei.

Data expressed in relative values are presented in percentage (%).

3.3. Used classifications

Classifications and nomenclatures used:

- Classification of Economic Activities of Moldova (CAEM-2), harmonized with NACE Rev.2, approved by NBS Order no. 28 of May 7, 2019;
- The classification of the administrative-territorial units of the Republic of Moldova (CUATM), approved by the Decision of the Department of Moldova-Standard no. 1398-ST of 03.09.2003.

3.4. Coverage

3.4.1. Sector coverage

Statistical survey on innovation in enterprises covers the economic sectors according to CAEM-2:

- extractive industry (divisions 05 - 09);
- manufacturing industry (divisions 10 - 33);
- production and supply of electricity and heat, gas, hot water and air conditioning (division 35);
- water distribution, sanitation, waste management, decontamination activities (divisions 36 - 39);
- wholesale trade, except of motor vehicles and motorcycles (Division 46);
- transport and storage (divisions 49 - 53);
- information and communications (divisions 58 - 63);
- financial intermediation and insurance (divisions 64 - 66);
- professional, scientific and technical activities (divisions 71 - 73);

The economic activities that are the subject of the survey were established in accordance with Annex no. 2, Section 3 of European Commission Regulation (EC) No 995/2012.

3.4.2. Statistical population

The population that is the subject of this survey is considered the community of active units and includes exhaustively all enterprises with 10 or more employees, which have economic activities according to CAEM-2, see p.3.4.1.

3.4.3. Geographical coverage

The 1-INOVS survey is carried out in the whole country, except for the localities situated on the left bank of the River Nistru and in Bender municipality.

3.4.4. Time coverage

Time series are available starting with 2015.

3.5. Disaggregation level

The result data are disaggregated by the following major groups:

- types of activities;
- types of innovations;
- by size classes of enterprises: small, medium and large, (by average number of employees)
- territorial profile (regions; North, Center, South, Chisinau municipality, ATU Gagauzia);

3.6. Dissemination periodicity

Once in two years

3.7. Timeliness

December month after the reference period.

3.8. Revision

Data are final at the dissemination.

3.9. Period of reference

The reference period of the questionnaire is 2 calendar years. The last reference period for which statistics are available is 2019-2020.

4. Data Collection and Processing

4.1. Data source

4.1.1. Statistical surveys

Statistical survey on Innovation in industry and services (1-INOV).

4.1.2. Administrative sources

Database on financial reports

4.1.3. Estimations

Not applicable.

4.2. Characteristics of the statistical survey/administrative sources

4.2.1. Objective and background

Statistical survey on business innovation is carried out to collect data on innovative enterprises, type of innovation and innovators, turnover of new or improved products, expenditure on innovation activities.

For the first time the survey was conducted in 2017 and data were collected for the reference period 2015-2016.

4.2.2. Statistical unit

The observed unit is the enterprise, which is defined as the smallest legally constituted unit, which has decision-making autonomy and is organized to carry out, in one or more places, one or more activities for the production of goods and services.

4.2.3. Circle of units covered in the survey

The circle of units included in the survey is determined by the size of the enterprise and its main activity. All enterprises with 10 or more employees in any of the sectors specified in p. 3.4.1 are included in the survey.

4.2.4. Survey periodicity

Once in two years

4.2.5. Data collection

Data collection is carried out on paper by the Territorial Statistics Offices (TSOs). The completed questionnaires are submitted by the enterprises to the territorial statistical bodies after the place of registration of the enterprises. TSOs performs the primary verification of the data and their entry in the information system for data entry and processing on the NBS server. Further processing and generalization of data is performed within the NBS.

4.3. Data processing and compilation

4.3.1. Data validation

Several rules apply to data analysis and quality assurance:

- Mathematical control of data;
- Logical data control;
- Comparing data with similar data in financial statements;
- Setting maximum limits for certain indicators (for example: turnover, amount of expenditure, etc.).

4.3.2. Compilation/extrapolation of data

Not applicable.

4.3.3. Adjustments

Not applicable.

4.3.4. Quality assurance

The quality of statistical data is assured by observing the Fundamental Principles of Official Statistics adopted by the UN General Assembly on 29 January 2014, as well as those set forth in the national Law on Official Statistics no. 93 of 26 May 2017.

In the activity of producing statistical information, the NBS attaches a high importance to ensuring the high quality of data.

To this end, a series of quality assurance measures are implemented at each stage of the statistical approach: in the process of organizing statistical survey, collection, processing and elaboration of statistical information.

Significant efforts are being made to ensure the completeness and quality of data presentation by respondents included in statistical surveys.

Error data, inconsistencies and suspicious data are revealed in order to verify and specify them.

Primary data are verified and analyzed for internal coherence (according to the *Questionnaire*), temporal coherence (with data for previous periods), with data from other similar units, as well as data available from other statistical surveys and administrative sources.

To ensure the quality of primary data, consultations are provided to TSO as well respondents to explain the definitions and how to complete the questionnaire.

4.4. Data accuracy

4.4.1. Non-response rate

The non - response rate for the reference period 2019-2020 was about 2%.

4.4.2. Sampling errors

Not applicable

5. Comparability and Coherence

5.1. International comparability

1-INOV survey is organized according to European standards in the field of enterprise statistics: European Commission Regulation (EC) no. 995/2012, which implements Decision no. 1608/2003 / EC of the European Parliament and of the Council on the production and development of Community statistics in the field of science and technology. The methodological basis for innovation statistics is the Oslo Handbook, developed jointly by EUROSTAT (European Commission Bureau of Statistics) and the Organization for Economic Co-operation and Development (OECD).

5.2. Comparability over the time

The relative indicators (%) that characterize the structure of economic phenomena and innovative processes in industry and services are comparable over time.

5.3. Coherence with other statistics

Consistency with the respective sector statistics data is ensured.

6. Institutional Mandate (normative-legal basis)

The activity of the NBS is based on the observance of the Constitution of the Republic of Moldova, the Law on official statistics no. 93 of 26.05.2017, other legislative and normative acts, orders and dispositions of the NBS management.

The law on official statistics stipulates the organization and functioning of the unique system of official statistics, with the establishment of general principles for the collection, processing, centralization, dissemination, storage of statistical information (art. 1).

Art. 5 of the Law stipulates that the production of statistical information is based on the observance of the principles of professional independence, impartiality, objectivity, relevance, transparency, confidentiality,

cost / efficiency, etc.

In accordance with art.13, par. (1), the NBS has the right to obtain and collect the data necessary for the production of statistical information from all persons covered by this law.

The National Bureau of Statistics, in its capacity as a central statistical body, is an administrative authority created under the Government to lead and coordinate the activity in the field of statistics.

In accordance with Government Decision 935 of 24.09.2018 on the organization and operation of the NBS, the Bureau exercises the following tasks:

- 1) Coordinates the national statistical system on the development and production of official statistics;
- 2) Develop and implements strategies for the development of the national statistical system, annual and multiannual statistical programs;
- 3) Develop the normative and institutional framework necessary for the achievement of the strategic objectives in its field of activity, as well as the mechanisms for their implementation in practice;
- 4) Performs the management and control of the achievement in quality conditions of the programs and statistical plans adopted at central and regional level;
- 5) Harmonizes and aligns national statistical indicators, methodologies, methods and techniques with international regulations and standards;
- 6) Promotes the statistical culture in the society.

The legislative and normative acts ruling the activity of the NBS are available on its official page www.statistica.gov.md, under the heading About NBS <https://statistica.gov.md/pageview.php?l=en&idc=323>

7. Confidentiality

7.1. Principles

According to art. 18 of the Law on official statistics no. 93/2017:

- the data collected, processed and stored for the production of statistical information are confidential if they allow the direct or indirect identification of the respondents;
- confidential data may not be transmitted to other natural or legal persons;

According to art. 19 of the Law on Official Statistics No. 93 dated 26.05.2017, producers of official statistics shall take all regulatory, administrative, technical and organizational measures to protect confidential data and prevent their disclosure.

Chapter VII of the above-mentioned law stipulates that the data collected, processed and stored for the production of statistical information are confidential if they allow the direct or indirect identification of the respondents.

Are not considered confidential:

- a) data that can be obtained from public access sources, according to the legislation;
- b) individual data regarding the address, phone number, name, type of activity, number of employees of legal entities and individual entrepreneurs;
- c) data concerning the public enterprises, institutions and organizations funded from the budget, submitted at the request of the public administration authorities.

According to the Law on official statistics, art. 20, have access to the individual data the persons who, according to the service attributions, participate in the production of the statistical information, insofar as the individual data are necessary for the production of this information.

The same article stipulates that access to individual data that do not allow direct identification of respondents may be granted for scientific research projects whose expected results do not refer to identifiable individual units, in accordance with the regulation approved by the central statistical authority.

Art. 23 (5) of the Law stipulates that “Statistical information may not be disseminated to users if it

refers to 1–3 statistical units”.

7.2. Practical assurance of the confidentiality rules

In order to ensure the protection of confidential statistical data, in accordance with the Law on official statistics no. 93 of 26.05.2017, the National Bureau of Statistics undertakes all regulatory, administrative, technical and organizational measures for the protection of confidential data and the non-admission of their disclosure.

According to the Law, the staff of producers of official statistics, including temporary employees, who, according to their duties, have direct access to individual data, are obliged to respect the confidentiality of these data during and after the cessation of activity in that position.

Until the dissemination, the statistical data are checked for compliance with the requirements for the protection of confidential data. If the statistical data contain confidential information (see p.7.1), their dissemination is not carried out and the data is aggregated to the minimum available level which ensures the protection of the confidentiality of it.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Calendar of statistical publications

Annually, the Press release calendar of statistical information produced by the NBS is developed.

8.1.2. Access to the calendar of statistical publications

The press release calendar is posted on the NBS official page www.statistica.gov.md.

8.1.3. Access to statistical data

According to the Law on Official Statistics No. 93 dated 26.05.2017, art. 23:

a) Producers of official statistics are obliged to disseminate statistical information within the deadlines set out in the Program of Statistical Work and in the timetable for the dissemination of official statistical information.

b) The dissemination of the statistical information provided in the Program of Statistical Works to all categories of users is carried out free of charge and in equal conditions of access in terms of volume, quality and terms of dissemination;

The program of statistical work may be accessed on the web page www.statistica.gov.md, under the heading About NBS / legislative and normative acts (<http://www.statistica.gov.md/pageview.php?l=en&idc=323&>)

The NBS web page www.statistica.gov.md represents the most important information source for ensuring users' access to different statistical information and transparency about the NBS activity.

All the operative information, informative notes, time series, as well as the statistical publications developed by NBS are posted on its official web page.

8.2. Dissemination format

8.2.1. Operative information / Analytical notes

The operative information and analytical notes are published on the official page of NBS: <http://www.statistica.gov.md> under Press Releases, according to the Press Release Calendar.

Press releases on innovation activity:

<https://statistica.gov.md/newsview.php?l=ro&idc=168&id=5882> (for the reference period 2015-2016)

<https://statistica.gov.md/newsview.php?l=ro&idc=168&id=6541> (for the reference period 2017-2018)

8.2.2. Publications

Not applicable

8.2.3. Databases/time series

Statistical databank <http://statbank.statistica.md>, under *Economic statistics / Entrepreneurship / Innovation in industry and services*

8.2.4. Questionnaires/data sent upon request from international organizations

Not applicable

8.2.5. Requests for additional data

The NBS provides users with additional statistical information to those available in statistical publications, information notes, operational information, those placed on the official website within the available information, in accordance with the Law on Official Statistics. The request can be sent in person at the NBS headquarters, by mail, by e-mail moldstat@statistica.gov.md or online - www.statistica.gov.md section Products and services / Request for statistical information http://www.statistica.gov.md/solicitare_informatii_statistice.php?l=en

9. Useful References (links)

9.1. Accessibility of documentation on methodology

The methodology is available on the official page www.statistica.gov.md, under Metadata (<http://www.statistica.gov.md/pageview.php?l=en&idc=351&nod=1&>).

9.2. Accessibility of documentation on Evaluation Reports

The NBS assessment reports are available on the official page www.statistica.gov.md, under About NBS / Assessments and Opinions on NBS / Assessment Reports (<http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2739>).

9.3. Accessibility of information on user surveys

User surveys are available on the official page www.statistica.gov.md, under About NBS / Assessments and Opinions on NBS / User Surveys (<http://www.statistica.gov.md/pageview.php?l=en&idc=399&id=2740>).

9.4. Other useful references

EUROSTAT database	http://ec.europa.eu/eurostat/data/database
UNData database	http://data.un.org/Browse.aspx
UN Economic Commission for Europe database	http://w3.unece.org/pxweb/Dialog/