

Industry Statistics

Metadata

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

1. Contact Information

1.1. Responsible subdivision within NBS

Industry, Energy, and Constructions Statistics Division

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2. Metadata Update

2.1. Last certification of metadata

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2.2. Last update of metadata

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3. Statistical Presentation

3.1. General description

Industrial production statistics covers short-term and annual indicators on industrial production in value and physical expression, as well as their evolution.

Industrial activities are represented in Section B “Mining and quarrying”, Section C “Processing Industry” and Section D “Production and supply of electricity, heat, steam, hot water and air conditioning”, E “Water supply; sewerage, waste management and remediation activities” of the Classifier of Activities in Moldova Economy (CAEM rev.2 - Clasificatorul Activităților Economice a Moldovei in Romanian) harmonized to the European standard NACE Rev. 2.

The statistical data on industrial production are developed based on statistical surveys of enterprises dealing with industry, as their main activity, covering:

- monthly - enterprises with 20 employees and over – exhaustively and enterprises with 4-19 employees – via a random sample;
- annually – all enterprises which carry out industrial activities, including secondary activities.

3.2. Concepts and definitions

3.2.1. Definitions

Industrial production represents:

- direct and useful result of extracting raw material and material existing in nature;
- result of agricultural and forestry products’ primary processing;
- result of previously processing of industrial products;
- activities for restoring initial technical and qualitative parameters of industrial products (such as: repairing works, maintenance works, etc.).

Industrial production is composed of *end products*, *semi-finished products*, and *works (services)* of industrial nature meant for investments, population consumption, export, productive internal consumption, and other needs of national economy, identified via a code of the PRODMOLD-2013 nomenclature.

End products are considered to be the products which were processed within the enterprise (have passed the whole technological process) and meet the technical standards and conditions set in the contract. In the framework of industrial statistics, products are expressed in quantities and values.

End products may be also manufactured in undertaking, meaning by several executors. Especially, when an enterprise (client) orders production and offers free-of-charge materials to another enterprise, which carries out virtually the production process, and subsequently the later one returns the end product to the client.

To avoid double reporting, the enterprise which virtually carried out the production process and obtained the end product reports the indicator regarding the physical production volume of the respective product (piece, t, m, etc.) and the value of the production process (costs incurred by the producer) in current prices, meaning without the value of client's materials which were offered free of charge.

In this case, the client who orders the production reports only the value indicator **"Sale revenues" (turnover)**, which will include all the costs afferent to manufacturing the product (integral price), including the cost of raw material, the cost of processing service (for manufacturing the product), which was ordered and paid to the producer, other costs.

Works (services) of industrial nature represent the works performed by the economic units within some cooperation actions, which do not provide for some essential form transformation of the product subject to processing. Only the works which are executed for third parties or those executed for non-industrial sectors of the enterprises are reported.

Industrial works are grouped mainly in:

- industrial works (services) performed over some products (offered to the executor free of charge), which do not modify the form of the product, representing a part (operation) from the technological processes (for instance, painting, gilding, etc.);
- maintenance and repairing works which aim to restore the technical and qualitative parameters of machines and devices.

The following activities similar to industrial processes **are not covered in the industrial production**, but are included in other activity sectors:

- assembling the built-ups on the site, of the component parts for bridges and water reservoirs, building spaces for storing metal elements, railroads and signaling installation, district heating installations and networks, electrical networks, as well as mining works for quarries' exploitation, these are included in section F "Constructions";
- repairing and maintenance of office machines, computers – these are included in class 9511 "Repair of computers and peripheral equipment";
- repairing domestic appliances and motor vehicles – these are included in activity 952 "Repair of personal and household goods", as well as in group 452 "Maintenance and repairing motor vehicles" or in class 4540 "Sale, maintenance and repair of motorcycles and related parts and accessories";
- vulcanization of tires – is included in activity 4520 "Maintenance and repairing of motor vehicles", excluding the repairing the motor vehicles carried out within specialized (industrial) enterprises, and respectively in activity 4540 "Sale, maintenance and repair of motorcycles and related parts and accessories";
- bottling and labeling beverages – are included in class 4634 "Wholesale of beverages" if executed as parts of the retail sale-purchasing or in class 8292 "Packing activities" – if executed for fees or on contract basis by a specialized enterprise in the given area.

The following is not included in the industrial production value:

- cost of industrial items and works which do not meet technical standards, conditions, and documentation;
- cost of materials, semi-finished products, and items purchased and resold without being processed by the respective enterprise;
- cost of industrial waste, which represents leavings of initial raw material (parts, chips, etc.) as well as pieces of cloth, etc. If before delivery, the waste is washed, sorted, and packed, the production value includes only the costs of preparing the items for selling, which are performed with own forces;
- cost of own manufactured production, which was subject to lab analyses or sampling surveys, if the production became unusable as a result of such activities.

3.2.2. Unit of measurement

Value indicators regarding the manufactured production, delivered (sold) production, sale revenues, and other are expressed in *thousand lei*.

Production manufactured by types of products in physical units is expressed for every product in its unit

of measurement, in line with the Nomenclature of Industrial Products and Services PRODMOLD-2013. Relative indicators are calculated in %.

3.2.3. Formula of calculation

Industrial Production Index is calculated according to the following formula:

$$IPI_{pr.c}^j = \frac{V_{pr.c(T_1)}^j}{V_{pr.c(T_0)}^j} * 100 \quad (1) \text{ - the calculation formula for the elementary index}$$

$IPI_{pr.c}^j$ at the level of PRODMOLD product j manufactured during the reported period (T_1) as against the baseline period (T_0) in current prices;

$V_{pr.c(T_1)}^j$ = value of the manufactured product j in current (delivery) prices during the current period (T_1);

$V_{pr.c(T_0)}^j$ = value of the manufactured product j in current (delivery) prices during the baseline period (T_0), calculated as a monthly arithmetic mean for the 12 months of the baseline year (2012);

$$IPI_{pr.c} = \frac{\sum IPI_{pr.c}^i * W_{(T_0)}^i}{\sum W_{(T_0)}^i} * 100 \quad (2) \text{ - calculation formula of}$$

Laspeyres type for the aggregated index for all the superior levels of the product (group of products, CAEM, rev.2 class, CAEM rev.2 group, CAEM rev.2 division, CAEM rev.2 section, total) in current prices.

where:

$W_{(T_0)}^i$ = the element to weight the individual indicator within the respective aggregation level. At the level of CAEM, rev.2 product, group of products, and class - the value of the products manufactured during the baseline year T-2 is used for weights. At the level of CAEM, rev.2 groups, divisions, and sections and Total – the gross value added (GVA) from baseline year T-2 is used for weights, being structured by the respective aggregation levels and being calculated in the National Accounts.

The calculation of volume index of industrial production, $IPI_{vol(T_1)}^{Cl}$ is done beginning with the class level of CAEM (4 digits of the code) by deflating the value of production index in current prices applying producer price index, using the following formula:

$$IPI_{vol}^{Cl} = \frac{IPI_{pr.c(T_1)}^{Cl}}{IPPI_{(T_1)}^{Cl}}, \text{ where}$$

$IPI_{pr.c(T_1)}^{Cl}$ - industrial production index at the level of CAEM, rev.2 class level, in current prices

$IPPI_{(T_1)}^{Cl}$ - producer price index for CAEM, rev.2 class in the period T_1 .

3.3. Used classifications

Economic activity: the survey results are classified in line with the Classifier of Activities in Moldova Economy rev.2 (CAEM - *Clasificarea Activităților Economiei Moldovei in Romanian*), harmonized with NACE rev.2, approved via NBS Collegium Decision no. 20 dated 29.12.2009.

Classification of products: the data are collected and presented in line with:

- Statistical Classification of Moldova Products and Services (CSPM - *Clasificatorul Statistic al Produselor și Serviciilor Moldovei in Romanian*), harmonized with the EU CPA Classification, approved

by the NBS Collegium via Decision no. 4 dated 26.12.2008
- Nomenclature of Industrial Products and Services (PRODMOLD, 2013 list), harmonized with the European standard PRODCOM-2013, approved by the NBS Collegium via Decision dated 07.11.2013.
Administrative-territorial units: the data are grouped according to the Classifier of Administrative-Territorial Units of the Republic of Moldova (CUATM - <i>Clasificatorul unităților administrativ-teritoriale al Republicii Moldova in Romanian</i>), approved via Moldova-Standard Department Decision no. 1398-ST dated 03.09.2003, with subsequent modifications.
3.4. Scope
3.4.1. Sector coverage
Statistical surveys on industrial production cover the activities enlisted in section B “Mining and quarrying”, section D “Processing Industry” and section E “Energy” from CAEM, rev.2.
3.4.2. Statistical population
Statistical surveys cover: <ul style="list-style-type: none"> - monthly – enterprises, especially, the ones with their main activity in industry, with 20 and over employees – exhaustively, and those with 4 -19 employees – random sample; as an exception, the monthly survey also covers some secondary industrial units of the non-industrial enterprises, which have an important share in the corresponding industrial activity, such as the production of poultry in some poultry farms, or the wine-making units from some agricultural enterprises, etc. -annually – enterprises with their main activity in industry and secondary industrial units of the non-industrial enterprises.
3.4.3. Geographical coverage
The information is developed and disseminated without the data of the enterprises and organizations from the left part of the River Nistru and Bender municipality.
3.4.4. Time coverage
Time series for the main indicators are available in publications since 1970, as well as on NBS web page: monthly - starting with 2004 – according CAEM, rev.1, starting with 2010 – according CAEM rev.2 ; annual – starting with 2000.
Over the time, the time series from the web page will be extended to include data for the last years.
3.5. Level of disaggregation
The data are available by: <ul style="list-style-type: none"> - activities at the level of CAEM, rev.2 class, group, division, and section, - in territorial profile – by development regions, mun. Chisinau, TAU Gagauzia following the requirements set for confidentiality of disseminated data.
3.6. Periodicity of dissemination
Monthly, quarterly, annually
3.7. Timeliness
Monthly data – the 40th day after the reported month.
Preliminary annual data – by February 17; final data– by July 27 after the reported year.
3.8. Revision
Monthly data on Industrial Production Index (IPI) are provisional at the first dissemination with possible revision during the next month, when rectifications are made by the economic units.
Annual data are preliminary at the first dissemination (concomitantly with the data for the month of December of the respective year) and final – when data are presented based on the annual survey – in July after the reference year.
3.9. Period of reference
Reference period: the previous month, the corresponding month of the previous year, the monthly average

for the base year T-2, cumulative period since the beginning of the year, the reference year.

4. Data Collecting and Processing

4.1. Data source

4.1.1. Statistical surveys

The monthly statistical surveys are carried out based on the monthly statistical survey, Short-term Indicators in Industry (IND TS - *Indicatori pe termen scurt în industrie în Romanian*).

Annual statistical survey is carried out based on the PRODMOLD-A “Annual Industrial Production Statistical Survey”

4.1.2. Administrative sources

Not used.

4.1.3. Estimations

Value indicators are estimated on monthly basis: the Value of manufactured industrial production in current prices based on surveyed products and Turnover based on data extension methods in sampling surveys.

4.2. Characteristics of the statistical survey

4.2.1. Objective and background

The objective of the Industrial Production Index is to assess the growth or decrease of industrial production in the current period (month) compared to average monthly level from the base year.

Starting with 1994, the development of the indicators for industry statistics was performed in compliance with the Classification of Activities in Moldova Economy (CAEM) – version 1, harmonized with UN ISIC classification. In 2001, the version of CAEM harmonized with the EU NACE classification was implemented, and between 2005 and 2014 the CAEM version rev. 1.1 was used. Beginning with 2014 it is used CAEM rev.2 harmonized with NACE rev.2, approved via NBS Collegium Decision no. 20 dated 29.12.2009

Starting with 2004, the Nomenclature of Industrial Products and Services PRODMOLD was implemented, harmonized with the European standard PRODCOM.

Beginning with 2014 PRODMOLD-2013 is implemented, harmonized to PRODCOM, 2013 list.

4.2.2. Statistical unit

The statistical unit for the monthly statistical surveys is the enterprise with its main activity in industry, having the status of legal entity, and (as exception) the secondary industrial units of the non-industrial enterprises, which represent an important share in the corresponding industrial activity; in the annual statistical survey – the unit is the type of industrial activity (main and secondary).

4.2.3. Circle of units covered in the survey

The information from points 3.1 and 4.1.1 is relevant, and especially:

The monthly survey includes about 1200 enterprises with their main activity in industry, and (on exceptional basis) some industrial units from other sectors, with 20 and over employees involved in the main activity, and with 4-19 employees – via a random sample.

The annual survey– about 3500 enterprises with their main activity in industry and over 1300 industrial units of non-industrial enterprises.

4.2.4. Survey periodicity

Monthly, annually

4.2.5. Data collecting

Statistical surveys (forms) are sent online via online portal e-Reporting.

The method for filling in statistical questionnaires (report forms) – self-registration carried out by the economic unit. The filled in statistical report is submitted by the enterprises to the territorial statistical

office not later than the 15 th day of the month following the reported month.
4.3. Processing and compilation of data
4.3.1. Validation of data
<p>Data are verified and analyzed from their quality point of view, especially in relation to their internal coherence, temporal coherence, as well as coherence with other data, at the first stage – by the territorial statistical body, and afterwards – at the central level by the IT main Division of NBS. The control methods allow verifying:</p> <ul style="list-style-type: none"> – integrity of the data filled in the report; – compliance of the identification data; – observance of logical conditions for data correlation. <p>Controls are based on visual methods, as well as automated ones, by using soft applications.</p>
4.3.2. Compilation/extrapolation of data
<p>The “Value of Manufactured Production” Indicator is compiled:</p> <ul style="list-style-type: none"> - monthly – based on the monthly survey of the manufactured industrial products, applying the estimation of the Industrial Production Value by CAEM, rev.2 activities (classes, groups, divisions, sections, Total); - monthly – based on the monthly survey data for the Turnover on the established sample of enterprises, applying the procedure of data extension and compiling the value of the turnover for the entire totality of statistical population;
4.3.3. Adjustments
Not applicable.
4.3.4. Quality assurance
<p>The quality of statistical data is assured by observing the fundamental principles of official statistics approved by the UN Economic Commission for Europe in 1992 (and Statistical Commission/UN in 1994), as well as those set forth in the Republic of Moldova Law on Official Statistics.</p> <p>In its activity of producing statistical information, NBS pays huge importance to ensuring high quality of data. In this respect, a number of measures for quality assurance are carried out at every stage of the statistical process: organization of statistical surveys, collection, processing, and development of statistical information.</p> <p>Important efforts are undertaken to ensure the plenitude and quality of data presentation by the respondents included in the statistical surveys.</p> <p>Errors, inconsistencies, and suspicious data are brought to light so as to be verified and corrected.</p> <p>The primary data are verified and analyzed from internal coherence point of view (within the questionnaire), temporal coherence (with data from previous periods), with data of other similar units, as well as with data available from other statistical surveys and administrative data sources. The missing or inconsistent data are imputed, if needed.</p> <p>To ensure the quality of the primary data, meetings (seminars) are organized with interviewers – respondents for explaining the definitions, the correct way to fill in the questionnaires, especially when they are modified or implemented. At the same time, the NBS web page contains updated information related to metadata of reference, statistical surveys forms and questionnaires, and methodological notes for concluding them, etc.</p>
4.4. Data accuracy
4.4.1. Non-response rate
Usually, the non-response rate is insignificant and does not influence the results of the survey as a whole.
4.4.2. Sampling errors
Not applicable.

5. Comparability and Coherence

5.1. International comparability

International comparability is ensured, first of all, by using central classifiers harmonized with the respective UN and EU standards. The way for calculating the statistical indicators corresponds to the “International Recommendations on Industry Statistics, 2008” and “International Recommendations on Industrial production Index 2010”, edited by the UN Statistical Section and the “Short-Term Statistics Methodology, Eurostat 1998” Manual.

5.2. Comparability over the time

Comparability over the time of the main indicators is generally ensured.

5.3. Coherence with other statistics

Coherence with other statistics is ensured by using the same classified, but also of common definitions and notions in the calculation methodology of the economic and statistical indicators.

6. Institutional Mandate (normative-legal basis)

The NBS activity is based on respecting the Republic of Moldova Constitution, the Law on Official Statistics No. 93 dated 26.05.2017, other legislative and normative acts, NBS management decisions and orders.

The Law on Official Statistics regulates the organization and operation of the unique system of official statistics, establishing the general principles for collecting, processing, centralizing, diminishing, and stocking statistical information (art.1).

Art. 5 of the Law provides that the production of statistical information is based on respecting the following principles: impartiality, objectiveness, relevance, transparency, confidentiality, cost-efficiency etc.

Being the central statistical body, the National Bureau of Statistics is an administrative authority created under the Government for leading and coordinating the activity in the statistics area.

In line with the Government Decision No. 1034 dated 29.12.11 on approval of the NBS Regulation and the Nominal Composition of the NBS Collegium, the National Bureau of Statistics:

- develops alone or jointly with other central administrative authorities and approves the methodologies for statistical surveys, as well as the methodologies for calculating statistical indicators, in line with the international standards, especially the EU standards, and with the advanced practice of other countries, and taking into account the peculiarities of the social-economic conditions of the Republic of Moldova;
- organizes, in line with the Program of Statistical Work, approved annually by the Government, statistics surveys regarding the economic, social, and demographic situation and development of the country, carrying out collection, processing, centralization, stocking, and dissemination of statistical data;

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

7. Confidentiality

7.1. Principles

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.) The following shall not be considered confidential:

- a) data that can be obtained from publicly accessible sources according to the legislation;
- b) individual data on address, telephone, name, type of activity, number of employees of legal entities and individual entrepreneurs;

c) data referring to 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, access to confidential information is granted to the persons who, according to their official functions, participate in the production of statistical information shall have access to individual data in so far as individual data are necessary for producing this information.

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

Art. 23 (5) of the Law stipulates that the the statistical information cannot be disseminated to users if it refers to 1-3 statistical units.

7.2. Practical assurance of the confidentiality rules

To ensure the protection of confidential statistical data in compliance with the Law on Official Statistics No. 93 dated 26.05.2017, the National Bureau of Statistics undertakes all the regulatory, administrative, technical, and organizational measures to protect the confidential statistical information and prevent its disclosure.

In compliance with the above-mentioned law, the employees of producers of official statistics, including temporary employees who, according to their official functions, have direct access to individual data shall be obliged to observe the confidentiality of these data during and after termination of employment.

Before being disseminated, the statistical data are verified if they meet the protection requirements set for confidential data. If the statistical data contain confidential information (see p. 7.1), they are not disseminated, but aggregated at the minimum available level which ensures the protection of data confidentiality.

8. Access to Information and Dissemination Format

8.1. Access to information

8.1.1. Calendar of statistical publications

Annually the Advance release calendar is developed by NBS.

8.1.2. Access to the calendar of statistical publications

The press release calendar is posted on the NBS official page www.statistica.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 shall be obliged to disseminate the statistical information within the deadlines specified in the programme of statistical works and in the press-release calendar.
- b) The dissemination of statistical information laid down in the programme of statistical works to all categories of users shall be made free of charge and under equal access conditions in terms of volume, quality and time of dissemination

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

The NBS web page www.statistica.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 placed 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.md> under Press Releases, according to the Press Release Calendar.

8.2.2. Publications

Publications developed by NBS covering statistical data on industry:

- Statistical Yearbook,
- Territorial statistics
- Statistical pocket-book "Moldova in figures",
- Social-economic situation of the Republic of Moldova,
- Quarterly statistical bulletin,

Access to publications:

- in electronic format, on NBS official page www.statistica.md, under Products and services / Publications <http://www.statistica.md/pageview.php?l=en&idc=350&nod=1&>)
- on hardcopies – in the NBS library (more details at the address <http://www.statistica.md/libview.php?l=en&idc=340&id=2400>)
- or may be bought from NBS office (more details on www.statistica.md, under Publications <http://www.statistica.md/pageview.php?l=en&idc=350&id=2219>)

8.2.3. Database/time series

- NBS official page: <http://www.statistica.md> under: Press Releases, Statistics by themes / Industry, Publications;
- Statistical databank <http://statbank.statistica.md> , under Economic statistics / Industry
- Special Data Dissemination Standard (SDDS): <http://www.statistica.md/SDDS/NSDP/>

8.2.4. Questionnaires/data sent upon request from international organizations

UN, EEC, Eurostat, CIS, etc. international questionnaire.

8.2.5. Request for additional data

NBS makes available for users additional statistical information beyond the data presented in the statistical publications, informative notes, operative information, as well as the data placed on the official web page in the limits of available information, in line with the Law on Official Statistics. Request can be sent personally, by post, by e-mail or via online web form – www.statistica.md heading Products and services / Statistical data request http://www.statistica.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.md , under Metadata (<http://www.statistica.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.md , under About NBS / Assessments and opinions on NBS / Assessment reports (<http://www.statistica.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.md , under About NBS / Assessments and opinions on NBS / User surveys (<http://www.statistica.md/pageview.php?l=en&idc=399&id=2740>).

9.4. Other useful references

IMF Special Data Dissemination Standard (SDDS)	http://www.statistica.md/SDDS/?lang=en
EUROSTAT database	http://ec.europa.eu/eurostat/data/database
UNData database	http://data.un.org/Browse.aspx
United Nations Economic Commission for Europe statistical database	http://w3.unece.org/pxweb/Dialog/