

Quality Report

Index of prices for the purchase of industrial and technical products by industrial enterprises for 2024

Content

- S.1 Contact details
- S.2 Introduction-Relevance
- S.3 Updating metadata
- S.4 Presentation of statistical information
- S.5 Unit of measurement
- S.6 Reporting period
- S.7 Legal basis
- S.8 Confidentiality and data protection
- S.9 Publication policy
- S.10 Frequency of dissemination
- S.11 Dissemination format, accessibility and legibility
- S.12 Availability of documentation
- S.13 Quality management
- S.14 Relevance
- S.15 Accuracy and reliability (to be completed according to the type of observation)
- S.16 Timeliness and punctuality
- S.17 Comparability
- S.18 Coherence
- S.19 Load
- S.20 Data revision
- S.21 Statistical data processing
- S.22 Remarks

S.1 Contact details

S.1.1 Organization

Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan (further - Bureau)

S.1.2 Structural unit

Department of Price Statistics

S.1.3 Name of the contact person

Kabykbaeva Malika Saidullovna

S.1.3.1 Name of the head of the responsible structural unit

Director of the Department Zhakypbekuly Kuanyshbek

S.1.5 Postal address of the contact person

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S.2 Introduction-Relevance

The purpose of constructing the purchase price index is to measure the average change in prices of industrial and technical products at the time of their purchase, which takes into account the prices of products (goods) and services purchased by industrial enterprises as intermediate products, both domestically produced and imported.

The purchase price index characterizes the change in prices of industrial and technical products required by industrial enterprises for the production process and purchased by them.

Purchase price is the price of a specific type of product (service) for industrial and technical purposes, taking into account value added tax, transportation, trade and sales, intermediary and other expenses.

The purchase price index has been formed since 1996. The purchase price index meets the needs of the System of National Accounts for the purpose of determining the main aggregates (for calculating gross accumulation, revaluation of inventories of material and working capital). Data on changes in these prices are used to analyze profits and the relationship between the dynamics of prices for production factors and finished products.

The Bureau holds meetings of working groups (focus groups) with the participation of potential users and respondents, representatives of interested government agencies, as well as the «Atameken» National

Chamber of Entrepreneurs, where indicators of national statistical forms are analyzed in detail for their relevance and elimination of duplication with indicators of departmental statistical forms and administrative data forms.

- S.3 Updating metadata
- S.3.1 Latest confirmation of updated metadata
- S.3.2 Last metadata posting

30.12.2024

S.3.3 Last metadata update

30.12.2024

S.4 Presentation of statistical information

S.4.1 Data description

The price indices for the purchase of industrial and technical products by industrial enterprises are calculated by regions of the Republic of Kazakhstan, by type of economic activity, by type of product, by acquisition channels, by comparison periods (reporting month to the previous month, December of the previous year, to base years; month and period of the reporting year to the corresponding months and periods of the previous year).

S.4.2 Classification system

The following classifications are used to construct producer price indices for industrial products:

The General Classifier of Economic Activities (OKED) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «National»;

The Directory of Industrial Products (Goods, Services) (SKPP), Directory of products (services) of agriculture, forestry and fisheries (DFFS) is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistical Classifications» / «Directories».

S.4.3 Sectoral coverage

The indices of purchase prices of industrial and technical products reflect changes in the purchase prices of products from units operating in a particular class of industrial activity in accordance with the General Classifier of Economic Activities (hereinafter referred to as OKED).

In accordance with OKED, industrial activity is classified in sections B «Mining and quarrying», C «Manufacturing industry», D «Supply of electricity, gas, steam, hot water and air conditioning».

S.4.4 Statistical concepts and definitions

1. Monitoring of changes in prices of manufacturing enterprises for

industrial products (goods, services) is carried out according to the «Methodology for constructing producer price indices in industry», which is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Methodology».

The Methodology uses the following definitions:

- 1) aggregation combining low-level economic indicators into larger aggregates at all subsequent levels;
- 2) base price period the period for which prices are indicated in the denominator of price ratios in the calculations of elementary aggregates;
- 3) base object a legal entity selected for monitoring and recording prices in it;
- 4) classification dividing a set of objects into groups based on similarity or difference in accordance with accepted characteristics;
- 5) specification a description or list of characteristics that are used to identify a separate product (service) selected for price registration;
- 6) index weight a value reflecting the significance of each individual element in their totality;
- 7) representative product (service) a certain type of product (service) in a product group that differs in minor features (details) that do not affect the quality and basic consumer properties of the goods (services) and are homogeneous in their purpose;
- 8) manufacturer's price the price of a unit of the product sold at the time it leaves the «enterprise gates» excluding value added tax and excise taxes, trade and sales margins, transportation and other costs associated with the movement of products from the manufacturer to the buyer;
- 9) industrial enterprise a legal entity or its structural subdivision engaged in the extraction and production of industrial products, the provision of industrial services;
- 10) base period of weights the period for which the cost indicators serve as the information basis for determining the weight components of price indices;
- 11) weighing a procedure used in index calculations to obtain summary indicators and ensure the commensurability of different goods that cannot be directly summed up;
- 12) weighing scheme a set of weights of specific types of products, goods, services, determined for all degrees of aggregation according to the standard classification;
- 13) purchase price the price of a specific type of product (service) for industrial and technical purposes, taking into account value added tax,

transport, trade and sales, intermediary and other expenses;

- 14) sample individual items from approved classifiers, nomenclatures and reference books used in collecting and processing statistical data.
- 2. Data collection tool statistical form of the national statistical observation «Report on prices of manufactured industrial products (goods, services) and prices of purchase of industrial and technical products» (index 1-CP, monthly frequency).

The statistical form is available on the Bureau's Internet resource www.stat.gov.kz in the section «For respondents» / «Statistical forms for 2024» / «Monthly forms».

S.4.5 Statistical object

The statistical object for the producer price index is a sample network of basic objects, taking into account the geographical, industry coverage and market characteristics, engaged in the production of industrial products and providing industrial services of all types of ownership, various organizational and legal forms.

S.4.6 General population (principle of selecting survey units)

National statistical monitoring of prices of manufacturing enterprises for industrial products (goods, services) is carried out on a sample population of basic objects, products (goods, services).

The sample population of basic objects is compiled taking into account the geographical, industry coverage and market characteristics. The general population for compiling samples of basic objects is the data of the statistical business register.

Samples of basic objects are created by combining the methods of continuous and sample observation, applied depending on the type of economic activity being surveyed and the size of industrial enterprises by the number of people employed in them.

Continuous observation covers large and medium-sized industrial enterprises in the mining industry, industrial enterprises related to the sphere of natural monopolies, and industrial enterprises specializing in the provision of production services.

When selecting large and medium-sized industrial enterprises in the manufacturing industry, a sample observation method is used based on the «cost of manufactured products and services rendered». Small enterprises are included when the goods they produce are the basis for the formation of economic indicators for the type of economic activity as a whole.

The optimal sample size is achieved by selecting basic objects with the maximum possible coverage of the main product groups defined for national statistical observation.

S.4.7 Territorial coverage

The Republic of Kazakhstan regions, cities of republican significance.

S.4.8 Time coverage

The index of prices for the purchase of industrial products by industrial enterprises has been formed since January 1996; there are time series from 1996 to the present.

S.4.9 Base period

The base period changes every five years. In 2011-2015 the base period is December 2010, in 2016-2020 - December 2015, in 2021-2025 - December 2020, etc.

S.5 Unit of measurement

Percentage

S.6 Reporting period

Month

S.7 Legal basis

S.7.1 Legal basis

- 1. Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV «On state statistics»;
- 2. Rules for the submission of primary statistical data by respondents, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 9, 2010 No. 173 (registered with the Ministry of Justice of the Republic of Kazakhstan on September 8, 2010, No. 6459);
- 3. The plan of statistical work, approved in accordance with the established legislative procedure of the Republic of Kazakhstan by the Order of the Head of the Bureau:
- 4. The schedule for the dissemination of official statistical information, approved by the order of the Head of the Bureau;
- 5. «Methodology for constructing producer price indices in Industry», approved by the order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated May 31, 2016 No. 98.

S.8 Confidentiality and data protection

S.8.1 Privacy policy

1. Article 8 of the Law of the Republic of Kazakhstan dated March 19, 2010 No. 257-IV «On State Statistics» ensures the guarantee of confidentiality and protection of the data provided by respondents;

- 2. Article 28 of the Entrepreneurial Code of the Republic of Kazakhstan dated October 29, 2015 No. 375-V ensures the protection of information constituting a commercial secret;
- 3. The Information Security Policy (hereinafter referred to as the Policy), approved by the Order of the Head of the Bureau dated February 10, 2021 No. 20 defines the goals, objectives, guidelines and practical techniques in the field of ensuring information security of the Bureau. The main goal of the Policy is to ensure the availability of official statistical information, the confidentiality of information stored and processed on the computing equipment of the Bureau, subject to its integrity and authenticity.

S.8.2 Confidentiality - data handling

Rules for the presentation of databases in de-identified form for use in scientific and scientific-technical activities, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 2, 2010 No. 168 (registered in the Ministry of Justice of the Republic of Kazakhstan on August 13, 2010 No. 6388).

S.9 Publication policy

S.9.1 Publication calendar

Item 1, Item 2 of Article 26 of the Law of the Republic of Kazakhstan «On State Statistics» dated March 19, 2010 No. 257;

The Statistical Work Plan and the Schedule for the Dissemination of Official Statistical Information for 2025 are available on the Unified Portal of Government Agencies www.gov.kz in the section «Government Agencies» / «Others» / «Agency for Strategic Planning and Reforms of the Republic of Kazakhstan» / «Bureau» / «Documents».

S.9.2 Access to the Schedule

The schedule for dissemination of official statistical information for 2025 is available on the Unified Portal of Government Agencies www.gov.kz in the section «Government Agencies» / «Others» / «Agency for Strategic Planning and Reforms of the Republic of Kazakhstan» / «Bureau» / «Documents».

S.9.3 User access

Official statistical information shall be disseminated in accordance with the schedule for dissemination of official statistical information in the volumes stipulated by the statistical work plan.

State statistics bodies shall provide users with equal rights to simultaneous access to high-quality official statistical information and statistical methodology by posting them on the Internet resource of the Bureau's www.stat.gov.kz.

Internet resource of the Bureau www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics».

S.10 Frequency of dissemination

Monthly

S.11 Dissemination format, accessibility and clarity

S.11.1 News publications

Not published.

S.11.2 Publications

Electronic tables «The price index and purchase prices of industrial and technical products by industrial enterprises of the Republic of Kazakhstan» contains data on the price level in the republic and price changes in the republic and by region for all periods.

The information is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Electronic tables».

S.11.3 Online databases

IAS «Taldau» https://taldau.stat.gov.kz in the section «Price statistics» S.11.3.1 AC1. Consultation data tables

Not implemented.

S.11.4 Access to microdata

Rules for the presentation of databases in de-identified form for use in scientific and scientific-technical activities, approved by the order of the Chairman of the Agency of the Republic of Kazakhstan on Statistics dated July 2, 2010 No. 168 (registered in the Ministry of Justice of the Republic of Kazakhstan August 13, 2010 No. 6388).

S.11.5 Other

No.

S.11.5.1 AC2. Consultation metadata

Not implemented.

S.12 Availability of documentation

S.12.1 Methodology documentation

«Methodology for constructing producer price indices in industry»,

approved by the order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated May 31, 2016 No. 98 (registered with the Ministry of Justice of the Republic of Kazakhstan on June 29, 2016 No. 13845). The information is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Methodology» / «Price statistics».

S.12.2 Quality documentation

- 1. Quality Policy approved by the Order of the Head Bureau of November 16, 2020;
- 2. Standard methodology for describing the process of producing statistical information by government agencies, approved by the Order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated March 30, 2015 No. 53;
- 3. The methodology for assessing the quality of official statistical information, approved by the Order of the Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan dated May 23, 2018, No. 63;
- 4. The rules for assessing the quality of administrative data, approved by the Order of the Head of the Bureau dated March 19, 2024, No. 2 (registered in the Ministry of Justice of the Republic of Kazakhstan on March 20, 2024, No. 34168).

S.13 Quality Management

S.13.1 Quality Assurance

The quality and reliability of price statistics data is maintained by generally accepted procedures:

- compliance with the basic principles of primary accounting;
- use of standard statistical classifications of goods, products, services;
- all control schemes (format-logical, arithmetic) have been developed and implemented at the stages of collecting and processing primary data;
- to confirm the reliability of primary data, the possibility of obtaining additional information from respondents is established by law;
- a comparative analysis of statistical data is carried out (in dynamics, with administrative data, inter-industry);
- rotation of sample sets of lists of goods, products, services and basic objects selected for price observation;
- annual revision of weighting systems;
- application of uniform formulas for calculating price indices at all levels of aggregation.

S.13.2 Quality assessment

The methodology for constructing producer price indices in industry

developed taking into account the principles was and recommendations of the «Manual on the Producer Price Index: Theory and Practice», prepared by the International Labour Organization, the International Monetary Fund, the Organisation for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations Economic Commission for Europe and the World Bank. Improvement of the Methodology is envisaged within the framework of the project «KAZSTAT: Project for Strengthening the National Statistical System», taking into account the study of the experience of European countries in the field of statistics of producer prices in industry.

S.14 Relevance

S.14.1 Needs

The index of prices for the purchase of industrial products by industrial enterprises satisfies the needs of a wide range of users, internal (industry statistical agencies), external (government bodies, economists, employees of management bodies and financial and economic services of enterprises, organizations, scientific, business and banking employees, faculty, students, mass media).

S.14.2 User satisfaction

The user questionnaire is available on the Bureau's Internet resource www.stat.gov.kz in the section «Main» / «Surveys» / «User questionnaire».

In addition, in order to maintain constant feedback with users and respondents, the Unified Contact Center of Bureau 1446 operates.

S.14.3 Completeness/R1. Completeness of data-share

The price indices for the purchase of industrial and technical products by industrial enterprises are calculated based on the results of sample statistical observation in all regions of the republic and are formed from data provided by 2123 respondents. This ensures coverage of about 70% of the volume of industrial production in the republic.

S.15 Accuracy and reliability (filled out taking into account the type of observation)

S.15.1 Overall accuracy

The analysis of the accuracy and reliability of the calculated average prices of purchase of industrial products by industrial enterprises over the past five years was carried out using the coefficient of variation.

The variation coefficient is a measure of the relative dispersion of a random variable. It shows what share the average dispersion of a

random variable makes up of the average value of this variable. The higher the value of the standard deviation, the relatively greater the dispersion and the less evenness of the studied values. The variation coefficient is calculated using the formula:

$$C_V = \frac{\text{SD}}{\overline{X}} * 100\%$$

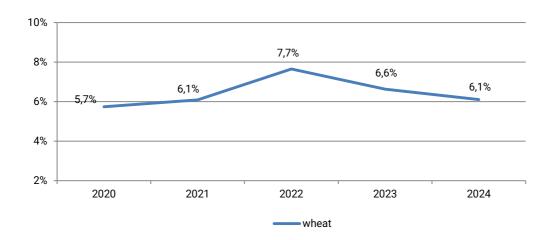
where:

SD - standard deviation;

 \overline{X} – average value.

The standard deviation is calculated using the formula: $SD = \frac{\sqrt{\sum_{i=1}^{n}(X_i - \overline{X})^2}}{n-1}$

Coefficient of variation of average prices for wheat purchased by industrial enterprises in the Republic of Kazakhstan



An analysis of average prices for wheat purchased by industrial enterprises for the period 2020-2024 showed that the data are within the acceptable limit of average homogeneity. The greatest price range was noted in 2022.

S.15.2 Sampling errors-indicators/A1.

Cannot be estimated due to purposive sampling.

S.15.3 Non-sampling error

Non-sampling errors are not calculated.

S.15.3.1 Coverage error

Cannot be estimated due to purposive sampling.

S.15.3.1.1 A2. Excess coverage-share

Cannot be estimated due to purposive sampling.

S.15.3.1.2 A3. Common units - ratio

Cannot be estimated due to the use of purposive sampling.

S.15.3.3 Non-response errors

S.15.3.3.1 A4. Missing unit - share

The methods for calculating «notional» prices are used in accordance with the Methodology for constructing producer price indices in industry.

The share of missing responses is not calculated.

S.15.3.3.2 A5. Missing response point - share

No calculation is made.

- S.16 Timeliness and punctuality
- S.16.1 Timeliness

S.16.1.1 TP1. Waiting period - first results

The first results are published on the 7th day after the reporting period and are final. The release dates are approved and published in the Statistical Work Plan and the Schedule for Dissemination of Official Statistical Information on an annual basis.

S.16.1.2 TP2. Waiting period - latest results

The first results are final.

S.16.2 Punctuality

S.16.2.1 Punctuality/TP3

The data are published and disseminated in accordance with the Schedule for the dissemination of official statistical information, approved annually by the order of the Head of the Bureau. The publication dates are set in the Statistical Work Plan, approved annually by the order of the Head of the Bureau and registered with the Ministry of Justice of the Republic of Kazakhstan.

The actual and planned dates coincide; there were no failures to meet publication deadlines for 2024. The release of publications is postponed to the next business day if the publication falls on a weekend or holiday.

S.17 Comparability

S.17.1 Geographical comparability

Within the territories of the Republic of Kazakhstan.

S.17.1.1 Asymmetry in mirror statistics of flows-coefficient/CC1

No.

S.17.2 Duration of comparable time series/CC2

The dynamic series of prices and price indices for the purchase of industrial and technical products by industrial enterprises are comparable and continuous since 1996.

Published on the Internet resource of the Bureau www.stat.gov.kz in the section «Main» / «Statistics» / «Economy» / «Price statistics» / «Dynamic series».

S.18 Consistency

S.18.1 External, cross-consistency

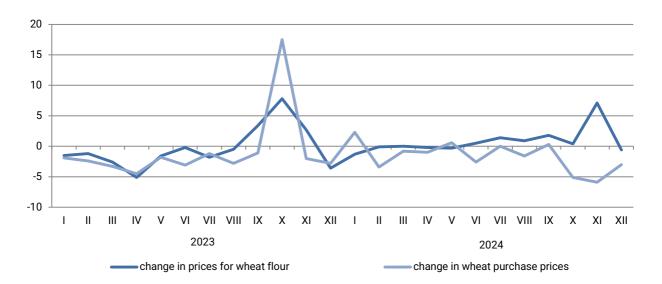
The main approaches of the methodology for constructing the price index of industrial enterprises are agreed upon and developed taking into account the principles and recommendations of the «Manual on the Producer Price Index: Theory and Practice, 2004», prepared by the International Labor Organization, the International Monetary Fund, the Organization for Economic Cooperation and Development, the Statistical Office of the European Communities, the United Nations Economic Commission for Europe and the World Bank.

S.18.2 Internal consistency

The indices of purchase prices of industrial products by industrial enterprises and the indices of prices of industrial product manufacturers are internally consistent. The consistency of the change in prices of manufacturing enterprises with the change in purchase prices is presented below.

Change in purchase prices for wheat and prices for wheat flour from manufacturing enterprises

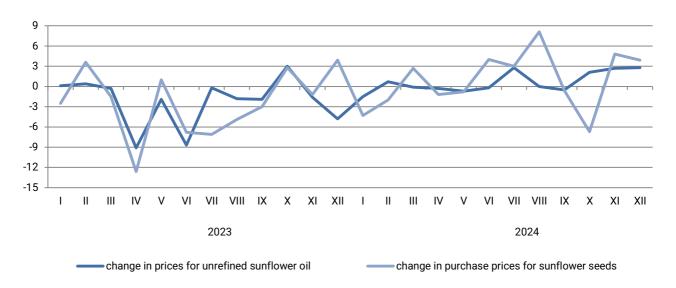
in percent, compared to the previous month, increase +, decrease -



In 2023-2024, the dynamics of changes in purchase prices for wheat and wheat flour at manufacturing enterprises were similar. A significant increase in purchase prices for wheat was noted in October 2023 due to an increase in wheat prices among agricultural producers.

Change in purchase prices for sunflower seeds and prices for unrefined sunflower oil from manufacturing companies

in percent, compared to the previous month, increase +, decrease -



In 2023-2024, the dynamics of changes in purchase prices for sunflower seeds in the Republic of Kazakhstan and for unrefined vegetable oil from manufacturing enterprises were similar.

S.19 Workload

Data collection is carried out electronically or on paper. The statistical form is filled out electronically through the «Respondent's Office» on the Bureau's Internet resource (https://cabinet.stat.gov.kz/), in which automated arithmetic and logical controls are provided for the respondent, eliminating the possibility of typical input errors.

Information processing processes are automated using local software packages, controls for input and output information, and procedures for imputing missing data are provided.

There is no duplication with other surveys.

Administrative data or other sources are not used.

S.20 Data revision

S.20.2 Data revision/A6

There was no republication for 2024.

S.21 Statistical data processing

S.21.1 Initial data

The construction of the index of prices for the purchase of industrial and technical products involves the use of two data streams: weight components (weighing scheme) and changes in prices for purchased products.

The weighting scheme is formed centrally for each region and the republic as a whole.

Its construction is based on the distribution of cost data for manufactured industrial products by subspecies, types, classes, groups, departments and sections included in the observation.

The use of sample populations (products (goods, services), basic objects) for price assessment necessitates the adjustment of weights to account for data not included in the producer price index.

Collection of information on changes in prices for industrial products is carried out within the framework of statistical observation «Report on prices of manufactured industrial products (goods, services) and purchase prices of industrial and technical products» (1-CP, monthly).

S.21.2 Survey frequency

Monthly

S.21.3 Method (way) of collecting primary statistical data

Submission of statistical form 1- CP «Report on prices of manufactured industrial products (goods, services) and prices of purchase of products for industrial and technical purposes» is carried out electronically or on paper. Completion of the statistical form in electronic form is carried out through the «Respondent's Office» on the

Bureau's Internet resource (https://cabinet.stat.gov.kz/).

S.21.4 Reliability of Primary Statistical Data

In accordance with Article 17 of the Law of the Republic of Kazakhstan «On State Statistics», the respondent is obliged to submit reliable primary statistical data when conducting statistical observations in accordance with the schedule for the submission of primary statistical data by respondents and with the statistical methodology.

S.21.5 Imputation - share /A7

Imputation is carried out in accordance with the «Methodology for constructing producer price indices in industry».

In case of temporary cessation of product acquisition, it is envisaged to use "conditional" prices until data on actual acquisition prices is received. To ensure continuity of the dynamic series of the acquisition price index, the following methods of calculating "conditional" prices for temporarily unavailable price information exist:

- 1) using the price of the last (previous) registration;
- 2) using the price of similar types of resources, services from other consumers;
- 3) determining the "calculated" price obtained by using the price of the last registration and the producer price index (regional or republican).

S.21.6 Adjustment

Not applicable.

S.21.6.1 Adjustment for seasonal fluctuations

Not applicable.

S.22 Comments

Continue work to ensure the quality of statistical data.