هيئة المعلومات والحكومة الإلكترونية
Information & eGovernment Authority

الرقم القياسي لأسعار المنتج

الربع الثاني- 2023

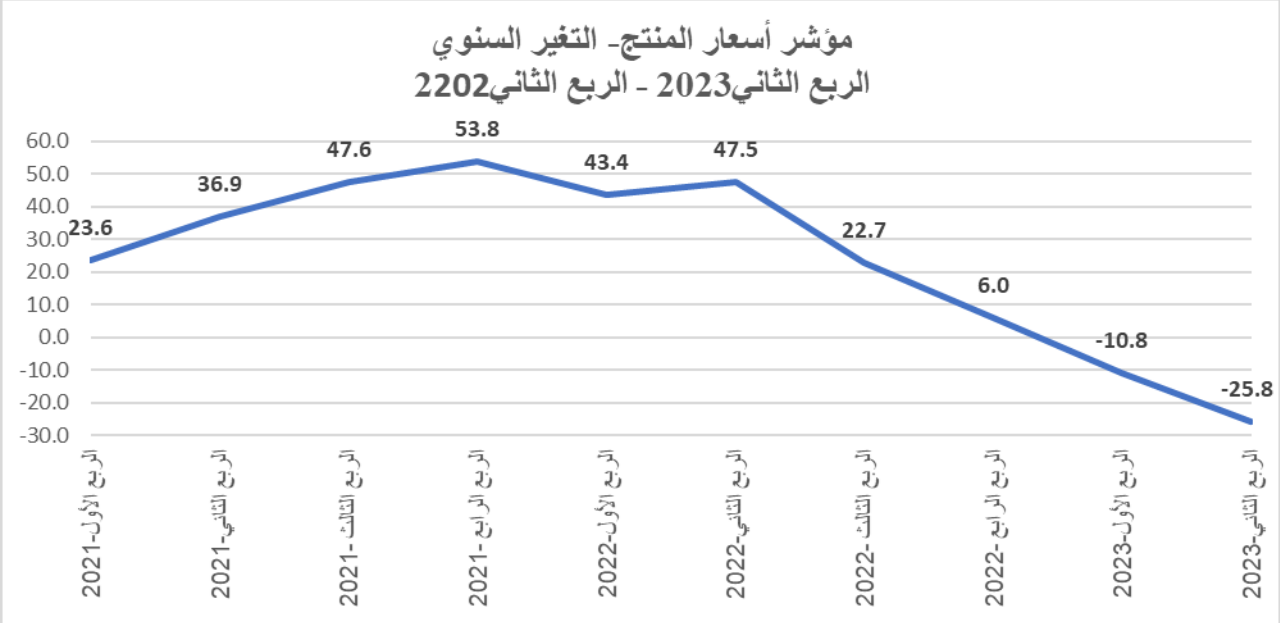
تاريخ النشر: 12-9-2023

الملخص:

معدل التضخم في الربع الثاني من عام 2023

السنوي: -25.8%

الربعي: -5.1%



انخفض الرقم القياسي لأسعار المنتج في الربع الثاني من عام 2023

سجل الرقم القياسي لأسعار المنتج انخفاضاً مقداره 25.8% مقارنة بالربع الثاني من عام 2022.

حركة أسعار المنتج ضمن الأنشطة الرئيسية:

- سجلت أسعار منتجات صناعة التعدين واستغلال المحاجر انخفاضاً نسبته 26.9% نتيجة لانخفاض اسعار النفط الخام عالميا.
- سجلت أسعار المنتجات النفطية المكررة انخفاضاً في أسعار ها بنسبة 30.6% وذلك بسبب انخفاض اسعار النفط المكرر.
- سجلت صناعة الفلزات القاعدية انخفاضاً في أسعارها بنسبة 24.2% بسبب انخفاض أسعار الألمنيوم.

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لمزيد من المعلومات حول مؤشر اسعار المنتجين يمكنكم مرسلتنا عبر البريد الالكتروني:PPI@iga.gov.bh
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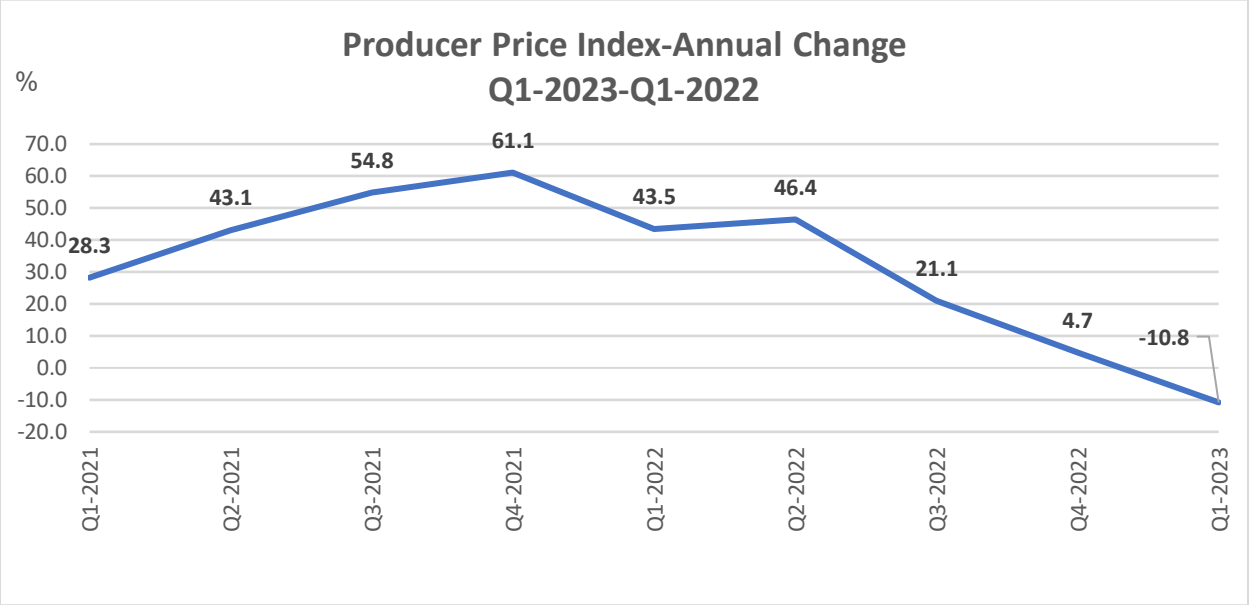
Producer Price Index

Second Quarter - 2023

Released on 12th Sep 2023

Key Figures:
Inflation Rate for second quarter 2023:
Annual: -25.8%
Quarterly: -5.1%



Decrease in Producer Price Index (PPI) during second quarter 2023

The overall producer price index (2020=100) decreased by 25.8% compared with the second quarter 2022.

The most notable changes were:

- Extraction of crude petroleum and natural gas decreased by 26.9% due to the global decrease in the crude oil prices.
- Manufacture of coke and refined petroleum products decreased by 30.6% due to the decrease on refined oil prices.

- Manufacture of basic metals decrease by 24.2% due to the decrease in aluminum prices.

- **For more information on this release:**

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METHODOLOGY

1. Overview

1.1 Definition

PPIs measure the rate of change in the prices of goods and services bought and sold by producers.

An output PPI measures the rate of change in the prices of products sold as they leave the producer. An input PPI measures the rate of change in the prices of the inputs of goods and services purchased by the producer. A value-added PPI is a weighted average of the two.

The aggregation of the PPI may take various forms such as the stages of production approach. With this concept, each commodity is allocated to the stage in which it is used.

Alternatives are the stage of processing, net output price indices per industry, PPI for the country or region, etc. The selection of the aggregation method depends on the intended uses of the PPI.

1.2 Uses of the PPI

The PPI may be used for purposes of:

- As a short-term indicator of inflationary trends – The PPI with detailed product and industry data allows short-term price inflation to be monitored through different stages of production.
- Contract price adjustments – The purpose of using the PPI for indexing long-term contracts to take the inflationary risk out of the contract.
- A deflator in the compilation of national accounts – a fundamental use of the PPI is as a deflator in the national accounts. Therefore, the concepts underlying the PPI are often conditioned by those underlying the national accounts.

1.3 Aggregation of the Bahrain PPI -Scope and coverage

When selecting the aggregation type, number of guidelines were taken into consideration. With the analysis of these guidelines, the level of aggregation most suited to the Bahrain PPI, is the output approach. The decision rests on the fact that although the PPI is a key inflation indicator, it is also used for deflation of the national accounts.

Currently the PPI consists of the output of Mining and quarrying, manufacturing, electricity, and water activities.

Pricing Concept: In the PPI "basic" price concept is used. The basic price is the price the good producer receives from the purchaser of the goods, minus any tax payable and plus any subsidy received on that unit as a result of its production or sale.

3. Classification

The PPI uses two classification systems, the Central Product Classification (CPC) and International Standard Industry Classification (ISIC) systems.

The CPC is used to identify and aggregate products. The CPC is a classification based on the physical characteristics of goods or on the nature of the services rendered. Each type of good or service distinguished in the CPC is defined in such a way that it is normally produced by only one activity as defined in ISIC.

The CPC covers products that are an output of economic activities, including transportable goods, non- transportable goods, and services (OECD).

It is a 5-digit classification system, consisting of:

- Sections – one-digit code.
- Divisions – two-digit code.
- Groups – three-digit code.
- Classes – four-digit code.
- Subclasses – five-digit code

Each product grouping is then assigned an industry classification according to ISIC, which classifies the different industries.

International Standard Industry Classification version 4 (ISIC v4) and Central Product Classification version 2 (CPC v2) are used in the PPI.

The structure of the PPI is made up of 1-digit, 2-digit, 3-digit, 4-digit, 5-digit and 7-digit classification levels (within CPC), where the 7-digit code is an elementary index attached to a weight.

Each elementary index contains of detailed price indexes called representative commodities – there are over 1300 of these. The price indexes for one or more representative commodities are combined into a higher-level price index at the CPC commodity level – there are about 390 of these. Generally, a representative commodity contributes only to one CPC commodity.

Every CPC commodity then feeds into the lowest breakdown of industry level indexes – ISIC level 4. These level 4 indexes then aggregate to published industry level indexes – ISIC level 3, then level 2, then level 1, and finally aggregating to all industries PPI.

4. Weights

The source of weight information for the PPI is industry survey conducted in 2017 for the purpose of compiling the PPI. This survey has been covered 75 establishments. The total number of employees serves as a proxy for the size of the establishment. All establishments classified as medium, large, and extra-large were included in the sample. Through this survey the sales data from sampled establishments was collected. These data be used to develop the preliminary weights for each 4-digit ISIC industry to be included in the PPI.

The 4-digit ISIC industry weight has been distributed in the proportion using the total value of production from the national account.

5. Sampling procedures

There are two types of sampling in the PPI, sampling of businesses and sampling of sampled products.

5.1 Selection of businesses

The establishment sample was selected from registration records maintained by the Labor Market Regulatory Authority. Though these data include the total number employees by establishment is available. The total number of employees serves as a proxy for the size of the establishment in terms of the value of production. IGA classified all establishments according to size. All establishments classified as medium, large, and extra-large were included in the sample. A sample of 75 establishments in manufacturing have been selected. All establishments in mining, refined petroleum products and utilities have been included in the sample.

5.2 Selection of a sampled product from the respondent

When selecting sampled products from an establishment, the price collector must ensure that the selected ones are the volume sellers, in other words the products for which the highest volumes and/or turnover are sold. Once this is established the item and transaction characteristics should be established.

The item characteristics include for example:

- Type of product
- Brand name or model number
- Main price determining characteristics, size, weight, power, etc.

The transaction characteristics include for example:

- Type of buyer: exporter, wholesaler, retailer, manufacturer, government
- Type of contract: single/multiple deliveries, orders, one year, agreed volume
- Unit of measure per unit: metre, kilogram etc.)
- Delivery basis: free on board, sale with/without delivery to customer,
- Type of price: average, list, free on board, net of discount
- Type of discount: seasonal, volume, cash, competitive, trade per indicator product

6. Price collection

Around 4000 quotes are collected every quarter.

7. Processing and data validation

Once the questionnaires are received from the companies, the questionnaires are quality controlled to ensure that all fields were completed, and that each questionnaire was completed accurately. Thereafter, the questionnaire is captured, and the data validated and edited if required.

Verification includes logical, range, variance and consistency checks

- Validation edits - to check the validity of basic identification of classificatory items in unit data.
- Logical edits - ensure that two or more data items do not have contradictory values.
- Consistency edits - check to ensure that precise and correct arithmetic relationships exist between two or more data items.
- Range edits - identify whether or not a data item value falls inside a determined acceptable range compared to previous month.

8. Index Calculation

The calculations of price indices are usually conducted in two stages. First, price indices are calculated for the elementary aggregates, and then these elementary price indices are averaged to obtain higher level indices using the relative sales values of the elementary aggregates as weights.

8.1 Elementary indices

Elementary aggregates are constructed by grouping individual goods into relatively homogeneous products and transactions. In other words, compilers of the PPI must select representative products within an elementary aggregate and then collect a sample of each of the representative products, usually from a sample of different producers. The individual representative products for which prices are collected are described as the sampled products.

For elementary index compilation, the Jevons index is used. The Jevons index is defined as the unweighted geometric mean of the price ratios, which is identical to the ratio of the unweighted geometric mean prices. The chained monthly indices link together the month-to-month changes through successive multiplication. The Jevons formula is transitive as the chained monthly indices are identical to the corresponding direct indices which compare prices in each successive month directly with those of the reference month.

8.2 High-level indices

Modified Laspeyres is used for compilation of upper-level aggregation indices.

8.3 Imputation

IGA uses imputation by average price change which considered once there is no data available to calculate an average percentage change for a specific indicator product. The lack of data could be attributed to various causes, for example seasonal behaviour, shortage in the market, etc. If data for a specific indicator product is missing, it is imputed on a similar product or group of products. An alternative to average price change on elementary index level is to use price change for a particular comparable product or specific comparable product from a similar establishment(s).

9. Dissemination

9.1. Availability: The PPI issued in a publication called Producer Price Index after 30 days of the reference quarter. The data is published in electronic format on the Bahrain data portal.

9.2 Rounding Policy: PPI is calculated using maximum precision, and then rounded to one decimal place for publication.

FOR MORE DETAILED INFORMATION ON THE PPI

Email: PPI@iga.gov.bh