



مركز الإحصاء  
STATISTICS CENTRE

3 2014 The Emirate Of Abu Dhabi



# Industrial Producers Price Index

(Manufacturing)

First Quarter 2014

(Base year: 2012)

Release Date: June 2014  
Statistics Centre- Abu Dhabi

www.sca.d.a.e

## **Introduction**

In the light of the rapid economic and social changes in Abu Dhabi Emirate, price indices and indicators are considered key tools that express price and quantity change in industrial and commercial production, and in services. Indices are also considered important economic indicators that provide accurate data to decision makers, economists, researchers and development policy makers and planners.

The remarkable economic development witnessed by Abu Dhabi Emirate has called for the construction of a statistical index that reflects the growth of the economic production sectors. Therefore, Statistics Centre – Abu Dhabi constructed the industrial producers price index in the Emirate of Abu Dhabi.

The Producers Price Index (PPI), which will be calculated on a quarterly basis, will cover the manufacturing sector. The PPI design is based on the main list of products of the industrial manufacturing activities in the International Standard Industrial Classification-revision 4 (ISIC4) which covers all manufacturing economic activities.

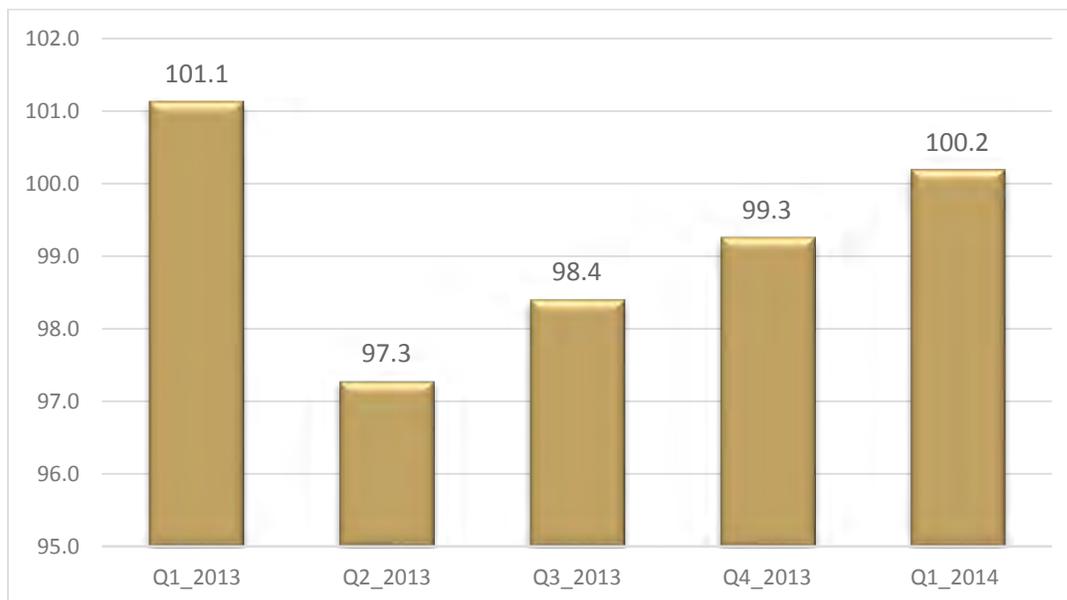
The calculated figures build a time series that measures the changes in the production prices during a specific period compared with the base year (2012). SCAD follows the best international practices and methodologies for the calculation of the PPI and the processing of data. Further development of the PPI will cover more activities such as mining and quarrying, and water and electricity .

## Executive summary

This publication presents the Producers Prices Index results for the manufacturing industry in the first quarter of 2014 (base year 2012) .The key findings are as follows:

1. In the first quarter of 2014, the PPI declined by 0.9% compared with the same quarter in 2013, falling to 100.2 points in the first quarter of 2014 from 101.1 points in the first quarter of 2013.
2. In the first quarter of 2014, the PPI increased by 0.9% compared to the fourth quarter of 2013, reaching 100.2 points in the first quarter of 2014 compared with 99.3 points in the fourth quarter of 2013.

**Figure (1 )** Quarterly Producers Price Indices for 2013, 2014 (2012=100)



## **The Producers Price Index for the first quarter of 2014 compared with the first quarter 2013**

The Producers Price Index decreased in the first quarter of 2014 by 0.9% compared with the same quarter in 2013. The decline resulted from changes (increases and decreases) in the rates of the economic activities indices. The key economic activity contributing to this decline was the “Manufacture of coke and refined petroleum products” which dropped by 4.5% and contributed 178% of the total decline in the industrial producer prices. Also, the price rates of the “Manufacture of basic metals” activity declined by 6.3% contributing 41% of the total decline, the “Manufacture of other non-metallic mineral products” activity declined by 3.1% contributing 36%, and “Manufacture of electrical equipment” activity price rates declined by 6.0% contributing 26% of the overall decline.

The key activities that contributed to rising the producer prices index during the first quarter of 2014 compared with the corresponding quarter in 2013 are the “Manufacture of fabricated metal products, except machinery and equipment” activity whose price rates rose by 16.3% resulting in an increase of its contribution to 168% in the producers price index. Likewise, the price rates of the “Manufacture of other transport equipment” activity increased by 21.8% contributing 42% of the rise in the general index.

Figure (2) shows relative changes in the Industrial Producers Price Index during the first quarter of 2014 compared with the same quarter in 2013 at economic activity level.

**Figure (2)** Relative change in Producers Price Index in Q1 2014 compared with Q1 2013

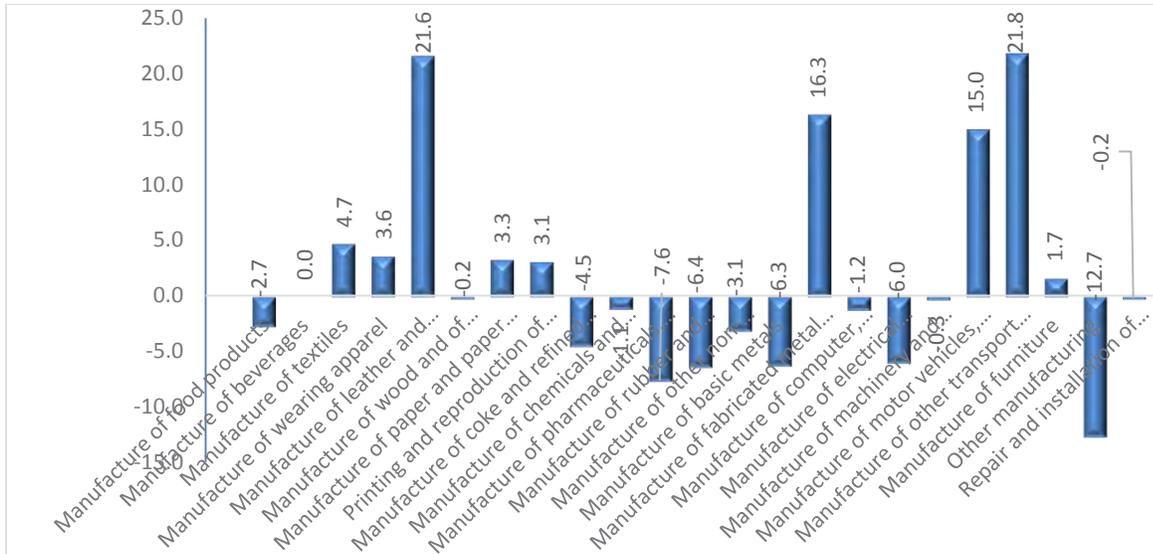


Table (3) shows the contribution of each activity to the change in the general index in the first quarter of 2014 compared with the corresponding quarter in 2013.

**Table (3)** Activity contribution to change in Producers Price Index in Q1 2014 compared with Q1/2013

Activity Name	Sharing %
Manufacture of food products	-8.6
Manufacture of beverages	0.0
Manufacture of textiles	1.7
Manufacture of wearing apparel	4.6
Manufacture of leather and related products	1.4
Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	-0.1
Manufacture of paper and paper products	1.3
Printing and reproduction of recorded media	1.1
Manufacture of coke and refined petroleum products	-177.6
Manufacture of chemicals and chemical products	-21.3
Manufacture of pharmaceuticals, medicinal chemical and botanical products	-1.8
Manufacture of rubber and plastics products	-8.6
Manufacture of other non-metallic mineral products	-36.4
Manufacture of basic metals	-40.6
Manufacture of fabricated metal products, except machinery and equipment	167.6
Manufacture of computer, electronic and optical products	-0.2
Manufacture of electrical equipment	-26.1
Manufacture of machinery and equipment n.e.c.	-0.2
Manufacture of motor vehicles, trailers and semi-trailers	1.9
Manufacture of other transport equipment	42.2
Manufacture of furniture	1.3
Other manufacturing	-0.9
Repair and installation of machinery and equipment	-1.0

## **The Producers Price Index for the first quarter of 2014 compared with the fourth quarter 2013**

The industrial producers price index increased by 0.9 % in the first quarter of 2014 compared with the fourth quarter of 2013, due to the rise in the producers price index of the “Manufacture of fabricated metal products, except machinery and equipment” and “Manufacture of leather and related products” activities by 17.0% each. The prices of the “Manufacture of wearing apparel” and “Manufacture of chemicals and chemical products” activities increased by 3.3% and 2.8% respectively.

The price rates of the “Manufacture of other transport equipment” activity declined by 21.0%, and similarly the “Other manufacturing industries” and “Manufacture of pharmaceuticals, medicinal chemicals and botanical products” activities decreased by 8.5% and 7.6% respectively.

Table (1) shows the producers price indices for the first and fourth quarter of 2013, and the first quarter of 2014. The table also shows the relative importance (weights) and the relative change in the price rates in the first quarter of 2014 compared with the fourth quarter of 2013 by economic activity.

Table (1) Relative change in the IPI in Q1 of 2014 compared with Q4 in 2013

isic4 2dgt	Economic activity	Relative importance	Q1 2013	Q4 2013	Q1 2014	Relative change
	Manufacturing industry	10,000	101.1	99.3	100.2	0.9
10	Manufacture of food products	287.4	103.1	100.8	100.3	-0.5
11	Manufacture of beverages	84.9	100.0	100.0	100.0	0.0
13	Manufacture of textiles	33.9	101.2	106.1	106.0	-0.1
14	Manufacture of wearing apparel	118.4	100.9	101.7	104.5	2.8
15	Manufacture of leather and related products	5.3	118.2	122.8	143.7	17.0
16	Manufacture of wood, wood products and cork, except furniture, and manufacture of straw items and plaiting material	65.8	100.1	100.0	99.9	-0.1
17	Manufacture of paper and paper products	37.7	100.0	103.7	103.3	-0.4
18	Printing and reproduction of recorded media	33.1	101.7	103.1	104.8	1.7
19	Manufacture of coke and refined petroleum products	3653.8	101.5	98.2	97.0	-1.3
20	Manufacture of chemicals and chemical products	1690.4	103.1	98.6	101.9	3.3
21	Manufacture of pharmaceuticals, medicinal chemicals and botanical products	23.0	98.4	98.4	90.9	-7.6
22	Manufacture of rubber tyres and pipes, and renewal and restructure of outer surfaces of the rubber tyres	126.3	100.2	98.9	93.8	-5.2
23	Manufacture of other non-metallic mineral products	1104.4	99.5	96.3	96.4	0.1
24	Manufacture of basic metals	626.5	97.0	92.0	90.9	-1.2
25	Manufacture of fabricated metal products, except machinery and equipment	960.1	100.4	99.9	116.8	17.0
26	Manufacture of computer, electronic and optical products	11.7	98.1	99.0	96.9	-2.1
27	Manufacture of electrical equipment	410.9	99.1	94.8	93.1	-1.8
28	Manufacture of machinery and equipment n.e.c.	59.0	100.3	100.0	100.0	0.0
29	Manufacture of motor vehicles, trailers and semi-trailers	12.1	99.5	115.6	114.4	-1.0
30	Manufacture of other transport equipment	164.5	110.4	170.4	134.5	-21.0
31	Manufacture of furniture	75.0	100.9	102.4	102.5	0.1
32	Other manufacturing industries	7.5	90.5	86.3	79.0	-8.5
33	Repair and installation of machinery and equipment	408.0	100.1	100.1	99.9	-0.2

***Next Release***

The PPI for the second quarter of 2014 will be released in September 2014. For more information, please visit the website of the Statistics Centre Abu Dhabi: [www.scad.ae](http://www.scad.ae)

## **The PPI Methodology**

### ***Definition***

The Producers Price Index (IPI) is an economic and statistical indicator that measures the change in the prices of industrial production (manufacturing industries) in two periods, the base period and the comparison period.

### ***PPI importance***

- The PPI reflects the trends of the industrial producers' prices in the Emirate of Abu Dhabi, which help decision makers, planners and researchers to make sound decisions that support the industry sector.
- The PPI measures the change in the prices of industrial production and is used by the government to process and create economic plans and strategies.
- The PPI is used as a main deflator for economic indicators over time. It is used to deflate time series economic data, based on price changes that reflect inflation, to their real values in fixed prices within the national accounts estimates.
- The PPI is used as a tool that monitors abrupt rises in sale and purchase contracts, especially futures contracts in which a future date for payment is set. It is often recommended to list the items whose prices have increased for further study, and to identify their impact on input prices.
- The PPI is used by international economic organisations such as the International Monetary Fund as a tool for comparison and evaluation.

### ***PPI representation and coverage level***

The Producers Price Index (PPI) covers all manufacturing activities in the Emirate of Abu Dhabi; representing all twenty three manufacturing activities based on the International Standard Industrial Classification, revision 4 (ISIC4/2-digit). At the current time, SCAD is developing the PPI to include the “Mining and quarrying” activities and “Water and electricity”.

### ***Data Collection***

Prices are collected on a monthly basis from the sampled establishments through field visits or e-mail; these 65 establishments are carefully selected to represent the manufacturing industry. SCAD field enumerators, who have been appropriately prepared and trained for this purpose, explain the items of the questionnaire and the required data to ensure the collection of accurate

data. Field enumerators are also provided with questionnaires that are specially designed for this purpose.

### ***Data source***

The prices of 290 products are collected from 65 establishments at the 2-digit level. The sample distribution covers 52 establishments in the Abu Dhabi region and 13 establishments in the Al Ain region.

### ***PPI periodicity***

The PPI is designed on a quarterly basis; while prices are collected on a monthly basis. The PPI sample is fixed; all establishments included in the sample are visited by enumerators to collect the prices of the establishment's key products.

### ***Editing***

The editing phase aims to validate all data to ensure consistency. It also includes comparing the prices against the quantities and the prices of the month with the previous month to avoid input errors, collection errors and incorrect specification of products.

### ***PPI calculation***

The PPI is calculated using the "Laspeyres Equation":

$$PPI_L = \sum \frac{P_{li}}{P_{0i}} \times W_{0i}$$

The quarterly average price of the product is calculated using the arithmetic mean of the product price during the three months. Then, the price level is calculated for the product in each establishment.

The quarterly average price of the product is calculated using the arithmetic mean of the product price during the three months. Then, the price level is calculated for the product in each establishment. Then, the higher levels are aggregated using the product weights within the same economic activity.

### ***Base year***

The year 2012 was adopted as a base year for the industrial producers price index, while 2009 was adopted as a base year for the weights used in the PPI, when the latest economic data was provided from field surveys. Accordingly, the base year for the PPI weights is 2009 and for the PPI prices is 2012.

### ***Weights and relative importance***

The weights used in the PPI calculation depend on the available data of the economic establishment census, which was conducted in 2010. The census has provided a frame for the economic establishments in Abu Dhabi Emirate. This frame was used to design and select the 2009 Economic Survey's sample. The PPI sample was drawn as a partial sample of the 2009 Economic Surveys sample to represent the index for the industrial producers' prices. The data provided on production and revenues in the partial sample was used to calculate weights at the two-digit economic activity level. Weights were also calculated at establishment level. Weights at item level were calculated through the proportional distribution of the establishment's weight by its key products.

**Relative importance of manufacturing activities in 2012**

<i>Activity name</i>	<i>Weight</i>
<b><i>Manufacturing industry</i></b>	<b><i>10,000.0</i></b>
<i>Manufacture of food products</i>	<i>287.4</i>
<i>Manufacture of beverages</i>	<i>84.9</i>
<i>Manufacture of textiles</i>	<i>33.9</i>
<i>Manufacture of wearing apparel</i>	<i>118.4</i>
<i>Manufacture of leather and related products</i>	<i>5.3</i>
<i>Manufacture of wood, wood products and cork, except furniture, and manufacture of straw items and plaiting material</i>	<i>65.8</i>
<i>Manufacture of paper and paper products</i>	<i>37.7</i>
<i>Printing and reproduction of recorded media</i>	<i>33.1</i>
<i>Manufacture of coke and refined petroleum products</i>	<i>3653.8</i>
<i>Manufacture of chemicals and chemical products</i>	<i>1690.4</i>
<i>Manufacture of pharmaceuticals, medicinal chemicals and botanical products</i>	<i>23.0</i>
<i>Manufacture of rubber tyres and pipes, and renewal and restructure of outer surfaces of the rubber tyres</i>	<i>126.3</i>
<i>Manufacture of other non-metallic mineral products</i>	<i>1104.4</i>
<i>Manufacture of basic metals</i>	<i>626.5</i>
<i>Manufacture of fabricated metal products, except machinery and equipment</i>	<i>960.1</i>
<i>Manufacture of computer, electronic and optical products</i>	<i>11.7</i>
<i>Manufacture of electrical equipment</i>	<i>410.9</i>
<i>Manufacture of machinery and equipment n.e.c.</i>	<i>59.0</i>
<i>Manufacture of motor vehicles, trailers and semi- trailers</i>	<i>12.1</i>
<i>Manufacture of other transport equipment</i>	<i>164.5</i>
<i>Manufacture of furniture</i>	<i>75.0</i>
<i>Other manufacturing industries</i>	<i>7.5</i>
<i>Repair and installation of machinery and equipment</i>	<i>408.0</i>

### ***Producer's prices***

Compiling PPI depends on monthly price data for the main products of establishments, using producer prices (at factory gate price) without any production tax. The prices of 2012 as price base year. The prices cover local production and exports.

### ***Publishing***

SCAD publishes the PPI quarterly report 30 days after each quarter and it is made accessible to everyone.

