

INFORMATION NOTE ON THE REVISION

**OF THE PRODUCER PRICES INDEX IN INDUSTRY (PPI)**

Base year 2015 = 100.0

## **Revision of the Producer Prices Index in Industry (PPI), 2015=100.0**

### General Information

The Producer Price Index in Industry (PPI) is revised every five (5) years, as the other variables of the Short-Term Statistics Regulation (EC) 1165/98 and in particular with the base year of the calendar year ending in 0 or 5, in accordance with Article 11 of the Regulation.

The compilation of the index and its transmitting to Eurostat started in 1982 with the base year 1980=100.0, and from the beginning of its compilation covered the needs of the European Union.

The Producer Price Indices (Output Price Indices) are internationally the most important and appropriate indicators for monitoring of the prices in the first stage of the transactions of goods and services and replaced other similar indices, both in international organizations and national bodies in the context of the economic and financial policy.

With the announcement of the revised Producer Price Index in Industry with base year 2015=100.0, is repealed and replaced by this indicator the previous time series with base year 2010=100.0.

The development of the methodology of PPI in the industry is based on the methodological manuals of Eurostat, and the Regulation (EC) 1158/2005 of the European Parliament and of the Council, which amends and supplements the basic Regulation (EC) 1165/98 for short-term statistics.

### Objective, theoretical background

The purpose of the Producer Price Index in Industry (PPI) is to measure the monthly rates of change in the prices of goods that are produced in the domestic market and are available in this market or are exported.

The composition of two sub-indices of domestic and non-domestic market determines the change of the PPI from the detailed level of the product up to the level of the general index.

The measurement of the monthly change of the producer prices provides the information of the short-term and long-term development of the economic activity at national and European level, allows the monthly monitoring of prices at the various stages of the manufacturing process and allows the calculation of the actual changes in economic activities, providing information to the business community for the development of markets and industries.

The purpose of the revision is the adjustment of the index according to the transactions (sales of products) during the base year, i.e., year 2015. The sales are divided into sales to domestic market and sales to the non-domestic market. Furthermore, sales to non-domestic market are divided into sales to eurozone countries and sales to other countries outside the eurozone. According to this latter distinction of transactions two sub-indices of the non-domestic market are compiled: the eurozone (EU) and non-eurozone (EU) countries indices.

### Base period – Compiled indices

The base period for compiling and calculating the revised PPI in Industry is the year 2015. According to the market's distinction, the following indices are compiled:

- PPI overall (both domestic and foreign market)
- PPI of Domestic Market
- PPI of Non-Domestic Market
- PPI of Non-Domestic Market - Eurozone Countries
- PPI of Non-Domestic Market – Non-Eurozone Countries

### Statistical classifications – Product selection

NACE rev.2 classification is followed for economic activities (Regulation (EC) 1893/2006) and CPA 2008 classification for products (Regulation (EC) 451/2008).

The criteria for the selection of the products were the sales in the economic activity in which are classified (i.e., the most representative species within the economic activity), and the possibility of the price collection for these products during the time.

In particular, they were selected to be monitored at the 6-digit NACE Rev.2 classification code, 403 domestic market products (21 of which relate to new products) and 171 non-domestic market products. Of the 171 non-domestic market products, 141 of them are available in eurozone countries (13 of which are new products) and 156 are in non-eurozone countries (18 of which are new products).

#### Weighting sources – Calculation of weights

For the calculation of the weights of the compiled indices, the following annual data for the year 2015 have been taken into account:

- The results of the annual Structural Business Survey (SBS) for the year 2015;
- The results of the annual survey of the Production and Sales of Industrial Products for the year 2015 (Prodcom) (value of production and sales by product in 8-digit code of Prodcom);
- The export data of foreign trade statistics, only of the manufacturing enterprises, in order to exclude exports of products which had been imported. The classification of the foreign trade statistics is the Combined Nomenclature (CN8), which corresponds to the Prodcom classification;
- The export data from the survey of the Turnover Index in Industry, which are based on a sample of enterprises and compared with the data of foreign trade statistics;
- Specific calculations for olive oil, other agricultural products and the production of slaughtering with data of the Economic Accounts in Agriculture and input and output indices for agriculture;
- Administrative data sources such as for natural gas distribution, production of lignite and electricity power, sales values, sales and categories of medicines by EOF.

The weights for total market, domestic and non-domestic market are calculated using the turnover data of the annual Structural Business Survey (SBS), sales of the Prodcom survey and the exports from foreign trade statistics for the year 2015.

The compilation of PPI in industry requires: a) the weighting coefficients of the products based on their sales value and b) prices for these products during the time. The weights and the prices refer to the product level (CPA 2008 classification).

The weighting coefficients which resulted from the sales of industrial products on the domestic and non-domestic markets, broken into eurozone and non-eurozone countries and into main industrial groupings, are shown in the table below.

**Table 1:** Weighting coefficients of Producer Price Indices in Industry for Overall Market (Domestic and Non-Domestic) in Main Industrial Groupings (MIGs), 2015=100.0

Main Industrial Groupings - MIGs	Total	Domestic Market	Non-Domestic Market		
			Total	Eurozone Countries	Non-Eurozone Countries
Total Industry	100.00	75.97	24.03	8.72	15.31
Intermediate Goods	20.24	12.34	7.91	3.10	4.81
Capital Goods	4.69	3.36	1.33	0.29	1.04
Durable Consumer Goods	1.34	1.09	0.24	0.10	0.14
Non-Durable Consumer Goods	26.35	20.34	6.02	3.10	2.92
Energy	47.39	38.85	8.54	2.14	6.40

\* The divergences in the sums of the weighting coefficients of the Markets are due to rounding up to two decimal digits.

## Price collection – Reporting units – Geographical coverage

The price data collected for the purpose of compilation of PPI in Industry refer mainly to transactions between the enterprises that produce and sell the selected products for reporting and the enterprises that buy those products, irrespective of whether those products are to be used as raw materials or as merchandise. The data are collected from approximately a sample of 821 enterprises. The index covers the whole of the country, with data from 48 Regional Units of the country.

The prices collected for products sold in the domestic market are basic prices, excluding VAT, duties and other taxes on products and including subsidies on products. Similar deductible taxes with VAT, directly linked to turnover are excluded. The prices collected for products sold to the non-domestic market are quoted FOB (Free on board).

Price data refer mainly to the middle of the reference month, with monthly periodicity, but in exceptional cases they refer to the mean prices of the month in question.

When the collected prices refer to foreign currency are converted into euros using the euro exchange rate with the foreign currency at the monthly average fixing prices of the Bank of Greece.

The selected price sources (i.e., enterprises), both for the domestic and non-domestic market, have been chosen with the basic criterion of their turnover in the base year 2015 regardless of their location in the territory, according to the Business Register of ELSTAT.

## More specific issues

For each product selected for observation, the determining characteristics (variety, weight, packaging and other qualitative attributes) as well as its transactional characteristics (usual quantity, discounts, method of payment, etc) are defined fully and in great detail (tight item specification).

The compilation of the indicators was mainly based on data collected by the enterprises (via email, phone). When a break occurs in the flow of price data or when data are not available, the method used during the break is the so-called “carry forward” method, i.e. the repetition of the last observed price. Other options for dealing with the shortage of prices are administrative and other sources (data from the internet, from the press), as well as the application of an estimation method for the calculation of missing data using the monthly average change of other pricing sources at the product level. If an entire product index is missing, it is recommended to use the change/index of the next level up in aggregation as the basis for performing the imputation.

If certain products or varieties of products cease to be representative, or if any change occurs in their determining characteristics, they are replaced by new products or varieties. In these cases, the calculation of the prices for the base year is calculated with the index of group in which these products are classified.

## Calculation of the PPI in Industry

The PPI in Industry is calculated by means of a variation of the Laspeyres formula, as follows:

$$I^{(t)} = \sum_{i=1}^n R_i^{(t)} * w_i$$

where:

$I^{(t)}$  , is the general index of the current period (month) t,

$R_i^{(t)}$  , is the individual index for the product i during the current period (month) t,

$$w_i = \frac{p_i^{(0)} q_i^{(0)}}{\sum_{i=1}^n p_i^{(0)} q_i^{(0)}}, \quad \sum_{i=1}^n w_i = 1$$

$w_i$  = the corresponding weight of the product  $i$ ,  
 $p_i^{(0)}, q_i^{(0)}$  = the price and quantity of the product  $i$  during the base period 0,  
 $i = 1, 2, \dots, n$  products  
 $t$  = current period (month or year)

The individual index of product  $i$ , i.e.  $R_i^{(t)}$ , is calculated as the simple arithmetic mean of the relevant prices of the product's variations from all the reporting units (enterprises).

That is:

$$R_i^{(t)} = \frac{1}{N_i} \sum_{j=1}^{N_i} \left( \frac{p_{ij}^{(t)}}{p_{ij}^{(0)}} * 100 \right)$$

where:

$N_i$ , is the count of product  $i$  variations from all the reporting units,  
 $p_{ij}^{(t)}$ , is the price  $j$  of product  $i$  variation in the current period  $t$ ,  
 $p_{ij}^{(0)}$ , is the price  $j$  of product  $i$  variation during the base period 0,  $j=1, 2, 3, \dots, N_i$ .

The above calculations are applied for the compilation of the individual indices for domestic and non-domestic markets with the distinction in eurozone and non-eurozone countries. The Overall PPI is calculated as the weighted average of the 2digit, 3digit, 4digit branches of NACE Rev. 2 classification, as they are forming in the MIGs (Main Industrial Groupings) indices; and as weighted average index of the domestic and non-domestic markets indices.

#### Back casting of time series

Backdated calculations for the monthly, annual and product groups PPI for the period January 2000 - December 2019, were calculated using the individual annual price index of every product in 2015 year, according to the following type:

$$R_{i(2015)}^{(t)} = R_{i(2010)}^{(t)} * \frac{100}{\bar{R}_{i(2010)}^{(2015)}}$$

Where:

$R_{i(2015)}^{(t)}$  : is the individual index of product  $i$  in the current period (month, year)  $t$ , with 2015 as base year,  
 $R_{i(2010)}^{(t)}$  : is the individual index of product  $i$  in the current period (month, year)  $t$ , with 2010 as base year and  
 $\bar{R}_{i(2010)}^{(2015)}$  : is the mean individual annual index of product  $i$  in 2015, with 2010 as base year.

For the new products for which individual indices were not available in the revision 2015=100.0, those of the correspondent groups where they belong to were used.

#### Methodology

The methodological manual for the Producer Price Indices in Industry, which includes a set of guidelines for the calculation of short-term statistics, is available:

<http://ec.europa.eu/eurostat/web/short-term-business-statistics/methodology>

While the methodological manual on Producer Price Indices (PPI) by Eurostat, is available:

[Handbook on industrial producer price indices \(PPI\)](#)

### Publication of the revised PPI in Industry and data transmission to Eurostat

The PPI figures are released monthly in a Press Release, 30 days after the end of the reference month. The dates of the Press Releases are scheduled at the end of the previous year and are listed in the ELSTAT annual calendar of Press Releases.

The announcement of the Revised PPI in the industry, will be held on March 30, 2020, with a specially designed press release, having as first reference month February 2020 and then transmitted to Eurostat on a 2-digit code and above of NACE Rev. 2 classification.

### Tables

The following tables show the weighting coefficients for the 2015 revision (by grouping at 2-digit of NACE Rev. 2 classification) and by market, as well as the annual General PPI for the 2010-2019 year period, with base year 2015=100.0.

Table 2: Weighting coefficients by in Industry Groups for overall, domestic and non-domestic market

Base year: 2015=100.0						
NACE Rev.2 code	Industry Groups	Overall Market	Domestic Market	Non-Domestic Market		
				Total	Eurozone Countries	Non-Eurozone Countries
05	Mining of coal and lignite	0.87	0.87			
06	Extraction of crude petroleum and natural gas	0.03		0.03	0.03	
07	Mining of metal ores	0.22	0.13	0.09	0.03	0.06
08	Other mining and quarrying	0.59	0.31	0.28	0.10	0.18
10	Manufacture of food products	19.15	15.45	3.70	1.97	1.73
11	Manufacture of beverages	2.44	2.20	0.24	0.14	0.10
12	Manufacture of tobacco products	0.81	0.23	0.58	0.16	0.42
13	Manufacture of textiles	0.91	0.53	0.38	0.18	0.20
14	Manufacture of wearing apparel	1.27	0.86	0.41	0.24	0.17
15	Manufacture of leather and leather products	0.24	0.19	0.05	0.02	0.03
16	Manufacture of wood and of products of wood and cork	0.49	0.44	0.05	0.02	0.03
17	Manufacture of paper-pulp, paper and paper products	1.75	1.50	0.25	0.11	0.14
18	Printing and reproduction of recorded media	0.26	0.26			
19	Manufacture of coke and refined petroleum products	19.56	11.23	8.33	1.96	6.37
20	Manufacture of chemicals and chemical products	3.13	2.26	0.87	0.28	0.59
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	2.49	1.74	0.75	0.45	0.30
22	Manufacture of rubber and plastic products	2.31	1.49	0.82	0.32	0.50
23	Manufacture of other non-metallic mineral products	2.47	1.69	0.78	0.09	0.69
24	Manufacture of basic metals	5.11	1.65	3.46	1.63	1.83
25	Manufacture of fabricated metal products except machinery and equipment.	3.20	2.00	1.20	0.30	0.90
26	Manufacture of computer, electronic and optical products	0.55	0.20	0.35	0.09	0.26
27	Manufacture of electrical equipment	1.81	1.02	0.79	0.32	0.47
28	Manufacture of machinery and equipment n.e.c.	1.18	0.87	0.31	0.07	0.24
29	Manufacture of motor vehicles, trailers and semi-trailers	0.16	0.12	0.04	0.02	0.02
30	Manufacture of other transport equipment	0.07	0.06	0.01	0.01	
31	Manufacture of furniture	0.65	0.61	0.04	0.02	0.02
32	Other manufacturing	0.45	0.40	0.05	0.02	0.03
33	Repair and installation of machinery and equipment	0.90	0.90			
35	Electricity, gas, steam and air conditioning supply	25.90	25.73	0.17	0.14	0.03
36	Water collection, treatment and supply	1.03	1.03			
	<b>Total</b>	<b>100.00</b>	<b>75.97</b>	<b>24.03</b>	<b>8.72</b>	<b>15.31</b>

Table 3: Annual General PPI in Industry for the years 2010–2019 (2015=100.0)

Base year: 2015=100.0

Producer Price Indices in Industry for the years 2010–2019 (Overall Market)											
NACE Rev.2 code	Industry Groups	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
05	Mining of coal and lignite	87.3	100.3	99.3	89.2	93.6	100.0	108.2	128.1	121.3	115.1
06	Extraction of crude petroleum and natural gas	87.2	117.8	129.9	123.0	115.5	100.0	98.6	99.9	101.7	101.7
07	Mining of metal ores	91.6	93.7	96.0	99.6	100.3	100.0	106.1	115.2	116.8	115.6
08	Other mining and quarrying	98.6	99.4	100.3	101.2	102.0	100.0	100.1	101.0	101.5	101.7
10	Manufacture of food products	93.8	96.7	97.9	99.7	100.0	100.0	99.6	100.3	99.5	99.1
11	Manufacture of beverages	97.9	99.4	100.6	102.1	101.9	100.0	101.6	101.5	101.4	101.4
12	Manufacture of tobacco products	96.8	92.0	95.2	92.4	93.8	100.0	100.1	100.8	100.2	102.0
13	Manufacture of textiles	93.0	98.2	98.0	98.2	97.7	100.0	101.0	101.2	101.5	102.0
14	Manufacture of wearing apparel	98.8	99.6	99.5	100.8	100.6	100.0	99.0	99.2	99.3	100.2
15	Manufacture of leather and leather products	93.0	96.9	97.7	97.8	97.9	100.0	98.6	98.4	95.3	94.8
16	Manufacture of wood and of products of wood and cork	101.9	102.5	103.6	103.0	101.8	100.0	99.1	99.9	100.3	101.1
17	Manufacture of paper-pulp, paper and paper products	98.8	102.4	101.6	101.3	101.1	100.0	98.4	98.1	98.4	98.9
18	Printing and reproduction of recorded media	97.0	98.2	99.2	98.9	99.2	100.0	100.1	99.4	99.5	100.1
19	Manufacture of coke and refined petroleum products	115.6	147.2	164.2	153.1	141.0	100.0	83.3	100.5	119.8	118.2
20	Manufacture of chemicals and chemical products	92.2	95.8	98.6	100.3	99.3	100.0	98.5	99.4	100.3	100.7
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	108.2	103.7	105.3	104.9	101.2	100.0	98.3	93.9	90.4	89.7
22	Manufacture of rubber and plastic products	96.0	99.8	100.8	101.3	100.8	100.0	98.9	99.5	99.9	100.5
23	Manufacture of other non-metallic mineral products	100.1	100.3	101.2	100.6	100.4	100.0	99.5	101.0	101.1	101.3
24	Manufacture of basic metals	99.7	107.4	108.6	104.4	100.9	100.0	94.7	98.4	101.8	101.4
25	Manufacture of fabricated metal products except machinery and equipment.	100.0	100.3	100.6	100.4	100.0	100.0	100.1	100.9	103.2	103.1
26	Manufacture of computer, electronic and optical products	100.0	100.1	100.7	100.8	100.4	100.0	99.5	98.8	99.3	99.6
27	Manufacture of electrical equipment	101.4	108.4	106.0	101.0	98.7	100.0	94.9	100.4	100.1	103.8
28	Manufacture of machinery and equipment n.e.c.	101.5	101.7	101.3	101.3	100.4	100.0	99.8	99.9	99.8	99.8
29	Manufacture of motor vehicles, trailers and semi-trailers	96.1	97.0	98.4	98.6	99.5	100.0	100.5	100.7	101.0	101.0
30	Manufacture of other transport equipment	93.2	94.4	98.4	100.1	101.2	100.0	100.0	100.0	100.0	100.4
31	Manufacture of furniture	101.2	100.4	99.5	99.4	99.3	100.0	99.8	100.2	100.2	100.3
32	Other manufacturing	93.1	94.8	96.6	97.0	97.2	100.0	103.3	106.3	107.6	108.2
33	Repair and installation of machinery and equipment	101.6	102.5	101.9	101.9	100.4	100.0	100.0	100.0	100.0	100.3
35	Electricity, gas, steam and air conditioning supply	78.2	79.4	89.8	96.8	103.6	100.0	90.7	92.5	92.9	97.4
36	Water collection, treatment and supply	98.0	98.7	100.1	100.1	100.3	100.0	100.1	100.1	100.4	101.2



Table 3 (continuous): Annual General PPI in Industry for the years 2010–2019 (2015=100.0)

Base year: 2015=100.0

Producer Price Indices in Industry for the years 2010–2019 (Domestic Market)											
NACE Rev.2 code	Industry Groups	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
05	Mining of coal and lignite	87.3	100.3	99.3	89.2	93.6	100.0	108.2	128.1	121.3	115.1
06	Extraction of crude petroleum and natural gas	87.2	117.8	129.9	123.0	115.5	100.0	98.6	99.9	101.7	101.7
07	Mining of metal ores	88.7	90.7	93.1	97.4	98.3	100.0	100.2	103.3	105.5	105.6
08	Other mining and quarrying	97.7	98.7	99.3	100.2	101.1	100.0	101.6	102.4	102.2	102.6
10	Manufacture of food products	94.2	97.2	98.2	99.6	99.6	100.0	99.5	99.5	98.8	98.7
11	Manufacture of beverages	98.2	99.7	100.9	102.3	102.1	100.0	101.7	101.8	101.7	101.7
12	Manufacture of tobacco products	106.3	98.6	101.2	97.0	98.5	100.0	100.0	101.1	101.8	102.6
13	Manufacture of textiles	90.0	95.4	96.1	96.8	96.8	100.0	101.7	102.3	102.6	102.6
14	Manufacture of wearing apparel	99.4	99.7	99.9	100.1	99.5	100.0	100.1	99.9	99.8	101.1
15	Manufacture of leather and leather products	99.8	100.0	99.7	99.9	100.2	100.0	99.5	99.2	99.8	99.4
16	Manufacture of wood and of products of wood and cork	103.3	103.5	104.2	103.0	101.9	100.0	99.1	100.0	100.5	101.6
17	Manufacture of paper-pulp, paper and paper products	98.6	102.3	101.6	101.3	101.1	100.0	98.2	97.9	98.2	98.8
18	Printing and reproduction of recorded media	97.0	98.2	99.2	98.9	99.2	100.0	100.1	99.4	99.5	100.1
19	Manufacture of coke and refined petroleum products	113.2	144.4	161.0	149.4	137.1	100.0	83.0	98.4	116.0	114.0
20	Manufacture of chemicals and chemical products	93.1	96.8	99.6	101.4	100.2	100.0	99.0	99.3	100.5	100.8
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	111.2	103.7	106.6	105.9	100.9	100.0	97.6	92.3	87.6	86.8
22	Manufacture of rubber and plastic products	95.7	99.1	99.8	99.7	99.9	100.0	99.5	100.0	100.4	100.9
23	Manufacture of other non-metallic mineral products	100.8	101.1	101.4	101.0	100.8	100.0	99.6	101.3	101.6	101.7
24	Manufacture of basic metals	99.8	107.7	109.1	104.5	101.5	100.0	95.4	98.9	102.3	102.6
25	Manufacture of fabricated metal products except machinery and equipment.	98.9	99.2	99.7	99.5	99.4	100.0	99.8	100.0	102.6	103.0
26	Manufacture of computer, electronic and optical products	99.8	100.2	100.5	100.8	100.5	100.0	99.0	95.7	94.6	95.3
27	Manufacture of electrical equipment	101.0	110.5	106.8	100.7	97.7	100.0	95.1	99.6	98.3	106.2
28	Manufacture of machinery and equipment n.e.c.	102.9	103.1	101.7	101.6	100.0	100.0	99.8	99.9	100.2	100.3
29	Manufacture of motor vehicles, trailers and semi-trailers	97.7	98.8	100.4	100.4	100.9	100.0	100.5	100.5	100.5	100.5
30	Manufacture of other transport equipment	93.2	94.4	98.4	100.1	101.2	100.0	100.0	100.0	100.0	100.4
31	Manufacture of furniture	101.6	100.7	99.8	99.7	99.6	100.0	99.9	100.6	100.6	100.7
32	Other manufacturing	93.2	95.0	96.9	97.2	97.4	100.0	103.7	107.2	107.9	108.6
33	Repair and installation of machinery and equipment	101.6	102.5	101.9	101.9	100.4	100.0	100.0	100.0	100.0	100.3
35	Electricity, gas, steam, and air conditioning supply	78.1	79.3	89.7	96.8	103.5	100.0	90.8	92.5	92.8	97.4
36	Water collection, treatment, and supply	98.0	98.7	100.1	100.1	100.3	100.0	100.1	100.1	100.4	101.2

Table 3 (continuous): Annual Overall PPI in Industry for the years 2010–2019 (2015=100.0)

Base year: 2015=100.0

Producer Price Indices in Industry for the years 2010–2019 (Non-Domestic Market)											
NACE Rev.2 code	Industry Groups	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
05	Mining of coal and lignite										
06	Extraction of crude petroleum and natural gas										
07	Mining of metal ores	95.8	98.2	100.0	100.1	100.1	100.0	114.4	132.0	132.7	129.7
08	Other mining and quarrying	99.9	99.4	101.6	102.4	103.0	100.0	98.1	99.1	100.5	100.5
10	Manufacture of food products	91.1	93.8	96.2	100.1	101.2	100.0	100.4	104.6	102.9	101.2
11	Manufacture of beverages	94.1	96.3	97.5	100.1	100.6	100.0	99.7	98.0	96.9	96.8
12	Manufacture of tobacco products	84.8	85.0	89.6	89.1	90.4	100.0	100.3	100.5	98.3	101.3
13	Manufacture of textiles	96.4	101.6	100.5	100.4	99.4	100.0	100.3	99.9	100.1	101.3
14	Manufacture of wearing apparel	98.1	99.3	99.0	100.9	100.9	100.0	97.9	98.3	98.8	99.2
15	Manufacture of leather and leather products	69.4	86.9	92.1	91.7	90.9	100.0	95.4	95.4	80.1	79.2
16	Manufacture of wood and of products of wood and cork	94.9	97.0	100.4	103.2	101.5	100.0	99.3	99.3	99.3	98.8
17	Manufacture of paper-pulp, paper and paper products	101.1	103.2	101.0	100.7	100.3	100.0	100.1	100.2	100.0	99.8
18	Printing and reproduction of recorded media										
19	Manufacture of coke and refined petroleum products	120.3	152.1	170.2	160.6	149.5	100.0	83.9	104.5	127.1	126.3
20	Manufacture of chemicals and chemical products	90.6	93.9	96.7	98.1	97.8	100.0	97.7	99.4	99.8	100.5
21	Manufacture of basic pharmaceutical products and pharmaceutical preparations	103.4	102.4	102.5	102.5	100.3	100.0	99.3	96.6	94.9	94.5
22	Manufacture of rubber and plastic products	96.7	101.4	103.1	104.9	102.6	100.0	97.9	98.6	99.0	99.7
23	Manufacture of other non-metallic mineral products	96.5	95.9	100.6	98.5	98.2	100.0	99.3	99.0	98.5	98.6
24	Manufacture of basic metals	99.6	107.1	108.1	104.3	100.3	100.0	94.1	98.1	101.3	100.6
25	Manufacture of fabricated metal products except machinery and equipment.	103.8	104.0	103.7	103.4	101.6	100.0	101.3	104.1	105.2	103.3
26	Manufacture of computer, electronic and optical products	100.0	100.0	100.8	100.8	100.4	100.0	99.7	100.5	101.9	102.0
27	Manufacture of electrical equipment	101.8	105.7	105.0	101.4	99.9	100.0	94.6	101.3	102.1	101.2
28	Manufacture of machinery and equipment n.e.c.	99.1	99.4	100.2	100.5	100.2	100.0	99.9	100.0	99.1	98.9
29	Manufacture of motor vehicles, trailers, and semi-trailers	92.8	92.3	92.3	94.2	98.2	100.0	100.4	101.2	102.0	102.0
30	Manufacture of other transport equipment										
31	Manufacture of furniture	95.6	95.9	95.4	95.3	95.4	100.0	97.0	94.5	94.6	94.6
32	Other manufacturing	92.6	94.3	95.8	96.3	96.4	100.0	102.3	103.8	106.8	107.1
33	Repair and installation of machinery and equipment										
35	Electricity, gas, steam, and air conditioning supply	96.0	111.5	112.3	100.0	119.2	100.0	80.1	89.8	108.4	89.4
36	Water collection, treatment, and supply										