

PRESS RELEASE

PRODUCER PRICE INDEX (2018=100) February 2023

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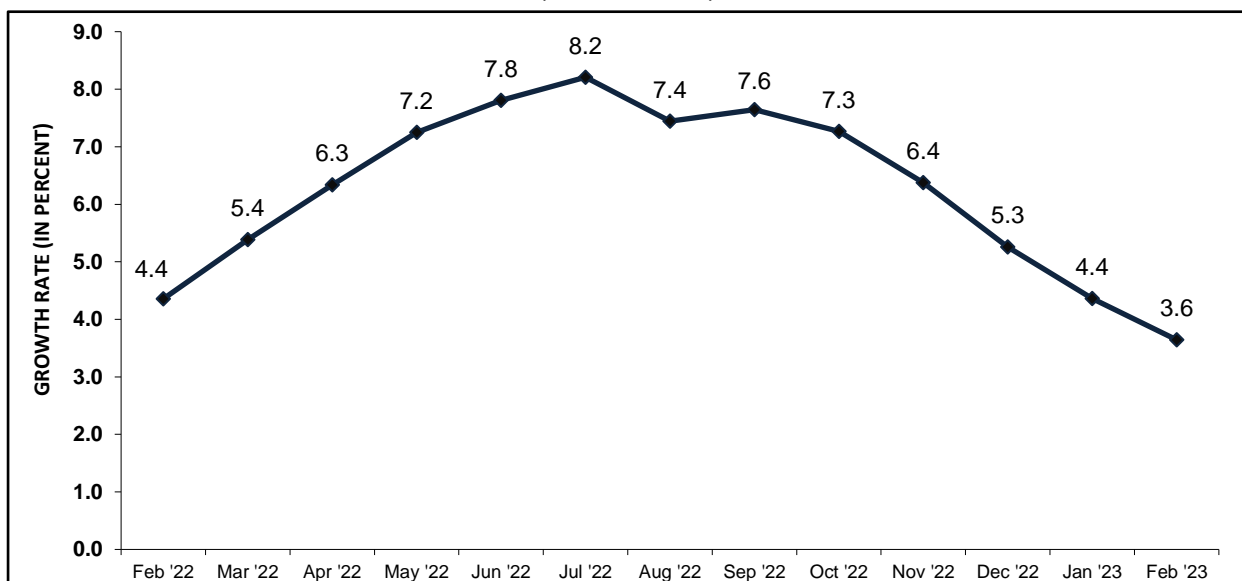
Table A. PPI and Year-on-Year Growth Rates for Manufacturing Sector (2018=100)
February 2022, January 2023^r, and February 2023^p

Category	February 2022	January 2023 ^r	February 2023 ^p
Producer Price Index (2018=100)	94.8	98.2	98.2
Year-on-Year Growth (%)	4.4	4.4	3.6
Month-on-Month Growth (%)	0.7	0.3	-0.02

p - preliminary, r - revised

Source: Philippine Statistics Authority

Figure 1. Year-on-Year Change in Producer Price Index for Total Manufacturing
February 2022 - February 2023^p
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

A. Year-on-Year Growth for February 2023

1. Manufacture of coke and refined petroleum products industry division drove the slower annual increase of producer price index for manufacturing sector

The Producer Price Index (PPI) for manufacturing registered an annual increase of 3.6 percent in February 2023. This was lower than the 4.4 percent annual increment posted in January 2023. The PPI in February 2022 was also at 4.4 percent annual increase. (Figure 1, and Tables A and 1)

The deceleration of PPI in February 2023 was mainly brought about by the slower annual increase in the index of manufacture of coke and refined petroleum products industry division with 4.2 percent annual increase in February 2023 from 7.8 percent annual growth rate in January 2023. The manufacture of coke and refined petroleum products contributed 39.3 percent to the slower annual growth rate of the PPI for manufacturing sector in February 2023. Out of the 22 industry divisions for the manufacturing sector, this industry division has the fifth highest weight¹ in the computation of PPI.

Other primary contributors to the slower annual growth of PPI in February 2023 were manufacture of transport equipment with faster annual decline of -1.7 percent during the period from -0.7 percent in the previous month, and manufacture of other non-metallic mineral products with an annual growth of 5.5 percent in February 2023 from 8.0 percent in January 2023. In addition, slowdowns in the annual growth rates were observed in the indices of 12 industry divisions, which include the manufacture of food products.

Moreover, contributory to the slowdown in the year-on-year growth rate of PPI in February 2023 was the annual decline exhibited by the manufacture of basic metals at -0.04 percent during the period from 1.2 percent annual increase in the previous month.

On the contrary, there were three industry divisions that registered higher annual growth rates in their PPI in February 2023 than in January 2023. Manufacture of beverages led these industry divisions posting 5.1 percent annual growth in February 2023 from 4.9 percent in January 2023.

¹ Refer to Method of Computation in the Technical Notes

Furthermore, the indices of manufacture of fabricated metal products, except machinery and equipment, manufacture of tobacco products, and manufacture of wood, bamboo, cane, rattan articles and related products retained their year-on-year increases in January 2023 at 5.5 percent, 3.9 percent, and 0.8 percent, respectively. (Tables B and 1)

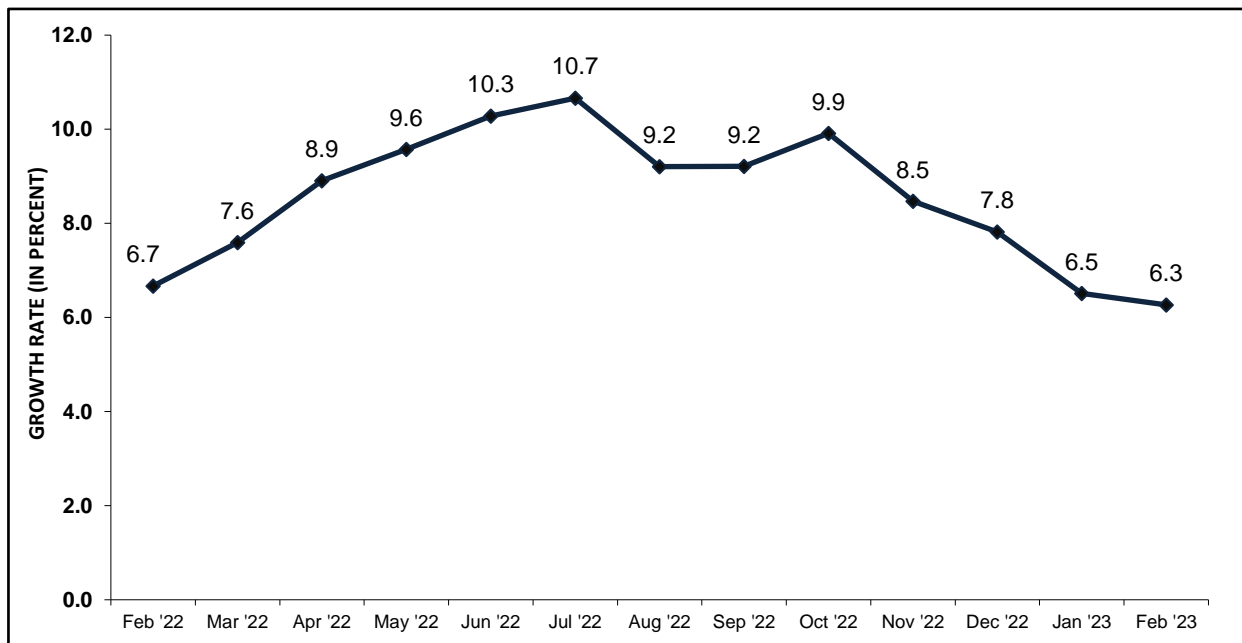
2. Manufacture of grain mill products, starches and starch products was the main contributor to the slowdown in the annual increase of producer price index for food manufacturing

The PPI for the manufacture of food products posted an annual rate of 6.3 percent in February 2023. This was slower compared with its annual growth rates in January 2023 and February 2022 at 6.5 percent and 6.7 percent, respectively. (Figure 2, and Tables 1 and 2)

The deceleration in the annual growth of the PPI for the manufacture of food products in February 2023 from January 2023 was primarily attributed to the lower annual increase in the index of manufacture of grain mill products, starches and starch products industry group with 5.2 percent annual increment in February 2023 from 8.5 percent in the previous month. In addition, slowdowns in the annual growth rates were observed in the indices of two industry groups of manufacture of food products during the month. Moreover, two industry groups of manufacture of food products exhibited faster annual decreases in February 2023 than in the past month.

On the contrary, there were three industry groups that registered higher annual growth rates in February 2023 than in January 2023, led by manufacture of prepared animal feeds with 14.2 percent annual increase during the month from 13.3 percent in January 2023. (Table 2)

Figure 2. Year-on-Year Change in PPI for Food Manufacturing
February 2022 - February 2023^p
(2018 = 100)



p - preliminary
Source: Philippine Statistics Authority

B. Month-on-Month Growth for February 2023

3. Manufacture of computer, electronic and optical products was the main driver to the monthly decline of producer price index for manufacturing sector

Month-on-month, the PPI for manufacturing posted a decrement of -0.02 percent in February 2023, after exhibiting a 0.3 percent monthly growth rate in January 2023. In February 2022, the PPI posted a monthly increase of 0.7 percent. (Figure 3, and Tables A and 1)

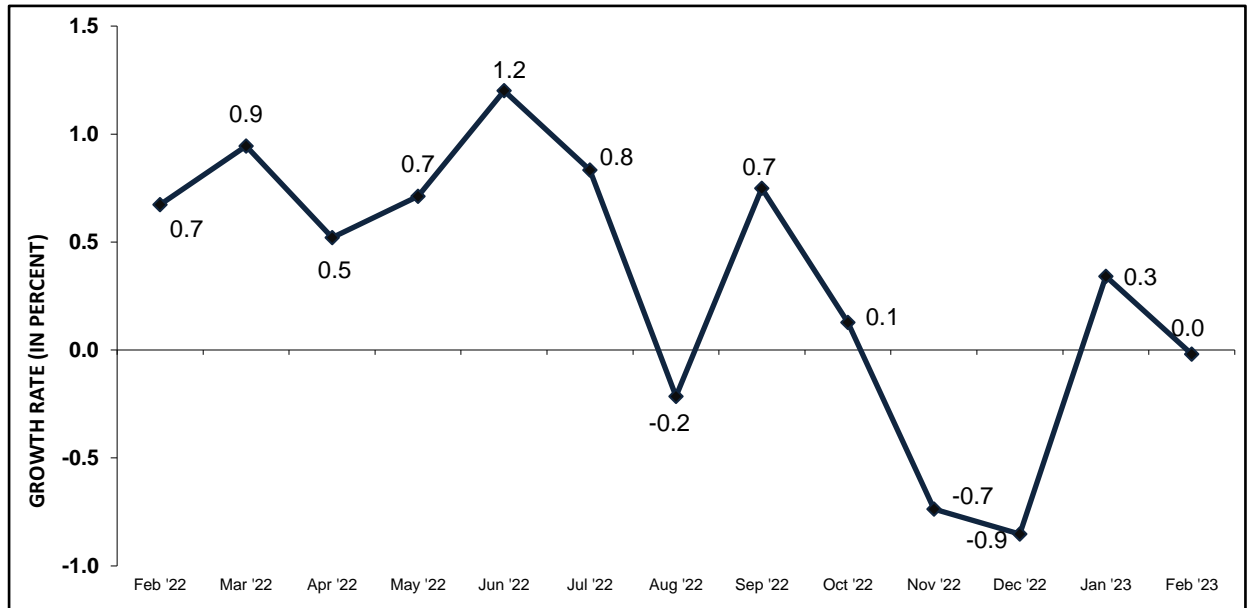
The monthly decrement of PPI in February 2023 was mainly contributed by the lower monthly growth rate in the index of manufacture of computer, electronic and optical products at 0.3 percent. This industry division contributed 31.3 percent to the downtrend in the monthly growth rate of the PPI for manufacturing sector in February 2023. Completing the top three contributors were manufacture of coke and refined petroleum products and manufacture of fabricated metal products, except machinery and equipment, which posted monthly rates of -1.9 percent and 0.5 percent, respectively.

In addition, three industry divisions exhibited slowdowns in their month-on-month growth rates, while the indices of nine industry divisions recorded monthly declines during the period after posting monthly increments in January 2023.

On the other hand, manufacture of food products and manufacture of textiles registered higher monthly increments in February 2023 than in the previous month. Meanwhile, manufacture of wood, bamboo, cane, rattan articles and related products and manufacture of basic pharmaceutical products and pharmaceutical preparations posted positive month-on-month growth rates during the period after exhibiting negative monthly rates in January 2023.

Lastly, three industry divisions continued to record negative monthly rates during the period but at a slower pace as compared with the previous month. The manufacture of chemical and chemical products registered the fastest monthly drop of -0.5 percent during the period from -2.3 percent in January 2023. (Tables C and 1)

Figure 3. Month-on-Month Change in PPI for Total Manufacturing
February 2022 - February 2023^p
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

4. Manufacture of vegetable and animal oils and fats was the primary contributor to the monthly increase in the producer price index for food manufacturing

Month-on-month, the PPI for the manufacture of food products posted an increase of 0.6 percent in February 2023 from 0.4 percent in the previous month. In February 2022, the PPI for the manufacture of food products grew with a monthly increment of 0.9 percent. (Figure 4, and Tables 1 and 2)

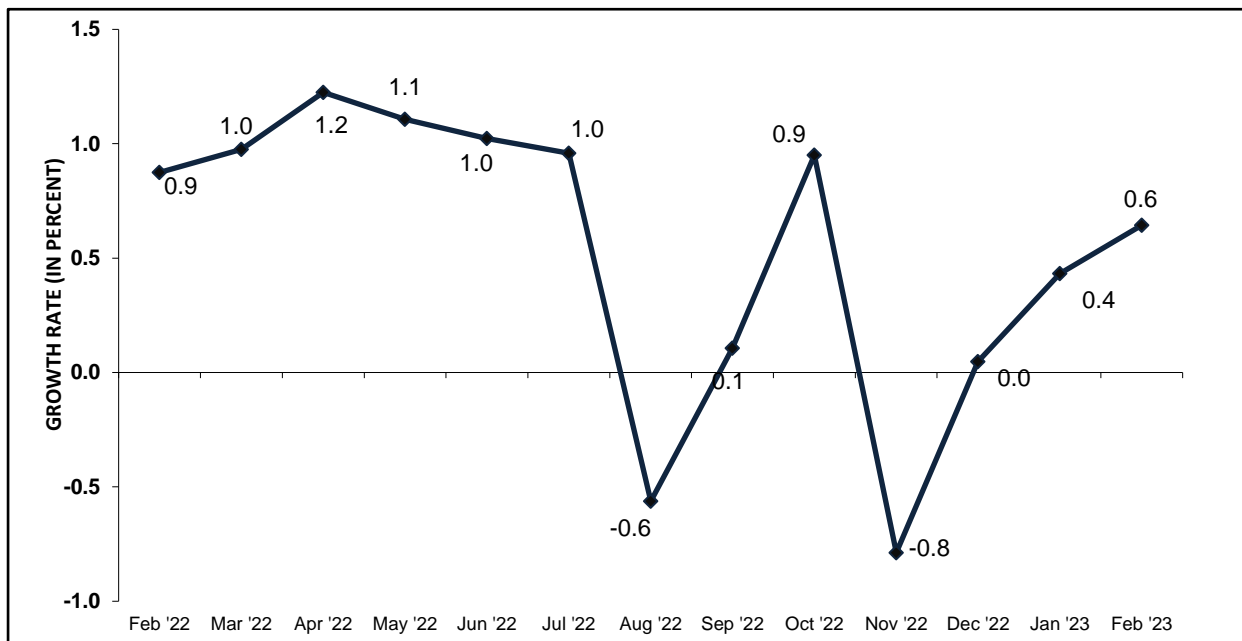
The monthly increase in the PPI for food manufacturing during the period was brought about by five of the eight industry groups. This was led by manufacture of vegetable and animal oils and fats, which posted a monthly growth rate of 0.5 percent from a -0.5 percent monthly drop in January 2023. This industry group contributed 29.1 percent to the month-on-month upturn of the PPI for the manufacture of food products. Other contributors to the upturn were the following:

- a. Processing and preserving of fish, crustaceans and mollusks, 2.8 percent from 1.8 percent in January 2023;
- b. Manufacture of dairy products, 0.9 percent from 0.1 percent in the previous month;
- c. Processing and preserving of fruits and vegetables, 0.2 percent from -0.3 percent in the past month; and
- d. Manufacture of grain mill products, starches and starch products, 0.03 percent from -0.3 percent in January 2023.

On the other hand, a slowdown was recorded in the PPI of manufacture of prepared animal feeds with 1.8 percent during the month from 2.5 percent in the past month. Meanwhile, the PPI for manufacture of other food products, which includes bakery products, sugar, and condiments, among others, retained its monthly growth rate in January 2023 at 0.3 percent.

Lastly, the monthly growth rate of processing and preserving of meat was recorded at 0.0 percent in February 2023. (Table 2)

Figure 4. Month-on-Month Change in PPI for Food Manufacturing
February 2022 - February 2023^p
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

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Table B. Year-on-Year Growth Rates of PPI in Percent by Industry Division:
January 2023^r and February 2023^p
(2018=100)

INDUSTRY DIVISION	January 2022 ^r	February 2023 ^p
With Slower Annual Growth Rates		
1. Manufacture of coke and refined petroleum products	7.8 ^r	4.2
2. Manufacture of other non-metallic mineral products	8.0 ^r	5.5
3. Manufacture of food products	6.5 ^r	6.3
4. Manufacture of chemical and chemical products	2.9 ^r	2.2
5. Manufacture of computer, electronic and optical products	4.1 ^r	3.9
6. Manufacture of machinery and equipment except electrical	3.7 ^r	2.4
7. Other manufacturing and repair and installation of machinery and equipment	1.3 ^r	0.2
8. Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.7 ^r	0.1
9. Manufacture of rubber and plastic products	3.7 ^r	3.5
10. Manufacture of wearing apparel	4.5 ^r	3.8
11. Printing and reproduction of recorded media	2.5 ^r	1.8
12. Manufacture of paper and paper products	6.3 ^r	6.1
13. Manufacture of electrical equipment	0.7 ^r	0.6
14. Manufacture of furniture	2.6 ^r	2.4
With Negative Annual Growth Rate from Positive Annual Growth Rate in January 2023		
15. Manufacture of basic metals	1.2 ^r	b/
With Faster Negative Annual Growth Rate		
16. Manufacture of transport equipment	-0.7 ^r	-1.7
With Higher Annual Growth Rates		
17. Manufacture of beverages	4.9 ^r	5.1
18. Manufacture of leather and related products, including footwear	4.4 ^r	4.7
19. Manufacture of textiles	2.6	2.9
With Constant Annual Growth Rates		
20. Manufacture of fabricated metal products, except machinery and equipment	5.5 ^r	5.5
21. Manufacture of tobacco products	3.9 ^r	3.9
22. Manufacture of wood, bamboo, cane, rattan articles and related products	0.8 ^r	0.8

p - preliminary, r – revised
b/ - less than 0.05 percent decrease
Source: Philippine Statistics Authority

Table C. Month-on-Month Growth Rates of PPI in Percent by Industry Division:
January 2023^r and February 2023^p
(2018=100)

INDUSTRY DIVISION	January 2023 ^r	February 2023 ^p
With Slower Growth Rates in February 2023		
1. Manufacture of computer, electronic and optical products	1.6 ^r	0.3
2. Manufacture of fabricated metal products, except machinery and equipment	3.8 ^r	0.5
3. Manufacture of beverages	0.6 ^r	0.4
4. Manufacture of tobacco products	1.0 ^r	0.1
5. Manufacture of leather and related products, including footwear	0.9 ^r	0.3
With Negative Monthly Growth Rates from Positive Monthly Growth Rates in January 2023		
6. Manufacture of coke and refined petroleum products	0.3 ^r	-1.9
7. Manufacture of other non-metallic mineral products	0.6 ^r	-1.2
8. Manufacture of basic metals	0.9 ^r	-0.3
9. Manufacture of paper and paper products	0.8 ^r	-0.4
10. Manufacture of machinery and equipment except electrical	0.7 ^r	-0.3
11. Manufacture of wearing apparel	0.8 ^r	-0.4
12. Printing and reproduction of recorded media	1.4 ^r	-0.3
13. Manufacture of electrical equipment	0.2 ^r	-0.2
14. Manufacture of rubber and plastic products	0.1 ^r	-0.1
15. Manufacture of furniture	0.1 ^r	-0.1
With Higher Growth Rates in February 2023		
16. Manufacture of food products	0.4 ^r	0.6
17. Manufacture of textiles	0.0	0.4
With Positive Monthly Growth Rates from Negative Monthly Growth Rates in January 2023		
18. Manufacture of wood, bamboo, cane, rattan articles and related products	-1.9 ^r	0.1
19. Manufacture of basic pharmaceutical products and pharmaceutical preparations	-0.7 ^r	0.4
With Slower Negative Growth Rates in February 2023		
20. Manufacture of chemical and chemical products	-2.3 ^r	-0.5
21. Other manufacturing and Repair and installation of machinery and equipment	-1.2 ^r	-0.4
22. Manufacture of transport equipment	-4.0 ^r	-0.2

p - preliminary, r - revised
Source: Philippine Statistics Authority

TECHNICAL NOTES

- **Introduction**

Starting with the January 2021 reference period, the Producer Price Index (PPI) for Manufacturing uses 2018 as base year, from the previously used 2000 base period. The PPI for Manufacturing measures the changes in the producer price of key commodities produced by the Manufacturing sector. One of its uses is as a deflator to derive the Volume of Production Index (VoPI) and Volume of Net Sales Index (VoNSI).

The PPI for Manufacturing is generated from the results of the Producer Price Survey (PPS) which is conducted nationwide. The survey gathers monthly producer prices of selected products included in the market basket of PPI from sample establishments.

- **Method of Index Computation**

The PPI utilizes the chained Paasche-type method of index computation where the base year is normalized. The weights are computed from the value of production from the Census of Philippine Business and Industry (CPBI) or Annual Survey of Philippine Business and Industry (ASPBI), whichever is the more recent. The weights are updated as soon as new results of the CPBI or ASPBI are available, and these are applied at the beginning of each survey year.

For the 2023 PPI, the base year used is 2018 and the weights of the industry divisions and industry groups were computed based on the results of the 2020 ASPBI for Manufacturing establishments with total employment of 20 and over.

The computation of PPI adopts the following formula:

- 1) Computation of Index for Industry Group Level

- a. Monthly Index at the base year

$$PPI_{ijm} = \frac{H_{ijm}}{H_{ij0}} \times 100$$

where:

- PPI_{ijm} = PPI for industry group j in industry division i at current month m
- H_{ijm} = harmonic mean of price relatives of products for industry group j in industry division i at month m of the base year computed as:

$$H_{ijm} = \frac{n_{ij}}{\sum_{h=1}^{n_{ij}} \frac{1}{p_{hijm}/p_{hij0}}} \times 100$$

- H_{ij0} = average of the harmonic mean of price relatives of products for industry group j in industry division i at base year
 p_{hijm} = producer price of commodity h for industry group j in industry division i at current month m
 p_{hij0} = average monthly producer price of commodity h for industry group j in industry division i at base year
 n_{ij} = total number of representative commodities for industry group j in industry division i

b. Monthly Index after the base year

$$PPI_{ijm} = PPI_{ij(m-1)} \times \frac{n_{ij}}{\sum_{h=1}^{n_{ij}} \frac{1}{p_{hijm}/p_{hij(m-1)}}}$$

where:

- PPI_{ijm} = PPI for industry group j in industry division i at current month m
 $PPI_{ij(m-1)}$ = PPI for industry group j in industry division i at previous month m-1
 p_{hijm} = producer price of commodity h for industry group j in industry division i at current month m
 $p_{hij(m-1)}$ = producer price of commodity h for industry group j in industry division i for the previous month m-1
 n_{ij} = total number of representative commodities for industry group j in industry division i

2) Computation of Index for Industry Division Level

$$PPI_{im} = \frac{1}{\sum_{j=1}^{p_i} \left(W_{ij} \times \frac{1}{PPI_{ijm}} \right)}$$

where:

- PPI_{im} = PPI for industry division i at current month m
 PPI_{ijm} = PPI for industry group j in industry division i at current month m
 W_{ij} = weight for industry group j in industry division i
 p_i = number of industry groups in industry division i

Note:

Industry divisions with no industry groups use the same computation of index as that for industry group level.

3) Computation of Index for Total Manufacturing

$$PPI_m = \frac{1}{\sum_{i=1}^{22} \left(W_i \times \frac{1}{PPI_{im}} \right)}$$

where:

PPI_m	=	PPI for total manufacturing at current month m
PPI_{im}	=	PPI for industry division i at current month m
W_i	=	weight for industry division i

Note:

A linking factor is computed every time weights are changed. The linking factor is used to adjust new series for comparability with the old series.

- **Computation of Growth Rates**

Year-on-year growth rates are computed by dividing the current month's index by the index of the same month of the previous year less 1.

Month-on-month growth rates are computed by dividing the current month's index by the previous month's index less 1.

- **Imputation and Revision**

Imputation is done for sample establishments that are in operation during the reference period but with no received response during the release date. Results are revised accordingly when the actual data are received, and these revisions are reflected in the next release.

- **Industry Coverage**

Starting with the January 2013 reference month, PPI utilizes the 2009 Philippine Standard Industrial Classification (PSIC) to classify sectors and industries. Selected industry groups of the 2009 PSIC were grouped to form the 22 industry divisions of the 2022 PPS. These are presented in the table below.

2009 PSIC CODE	INDUSTRY DESCRIPTION
C10	Manufacture of food products*
C11	Manufacture of beverages
C12	Manufacture of tobacco products
C13	Manufacture of textiles
C14	Manufacture of wearing apparel
C15	Manufacture of leather and related products, including footwear
C16	Manufacture of wood, bamboo, cane, rattan articles, and related products products*
C17	Manufacture of paper and paper products
C18	Printing and reproduction of recorded media
C19	Manufacture of coke and refined petroleum products
C20	Manufacture of chemical and chemical products*
C21	Manufacture of basic pharmaceutical products and pharmaceutical preparations
C22	Manufacture of rubber and plastic products*
C23	Manufacture of other non-metallic mineral products*
C24	Manufacture of basic metals*
C25	Manufacture of fabricated metal products, except machinery and equipment*
C26	Manufacture of computer, electronic and optical products*

2009 PSIC CODE	INDUSTRY DESCRIPTION
C27	Manufacture of electrical equipment*
C28	Manufacture of machinery and equipment except electrical*
C29, C30	Manufacture of transport equipment*
C31	Manufacture of furniture
C32, C33	Other manufacturing

**Industry divisions categorized further into industry groups*