REPUBLIC OF THE PHILIPPINES
PHILIPPINE STATISTICS AUTHORITY

PRESS RELEASE

PRODUCER PRICE INDEX (2018=100) January 2023

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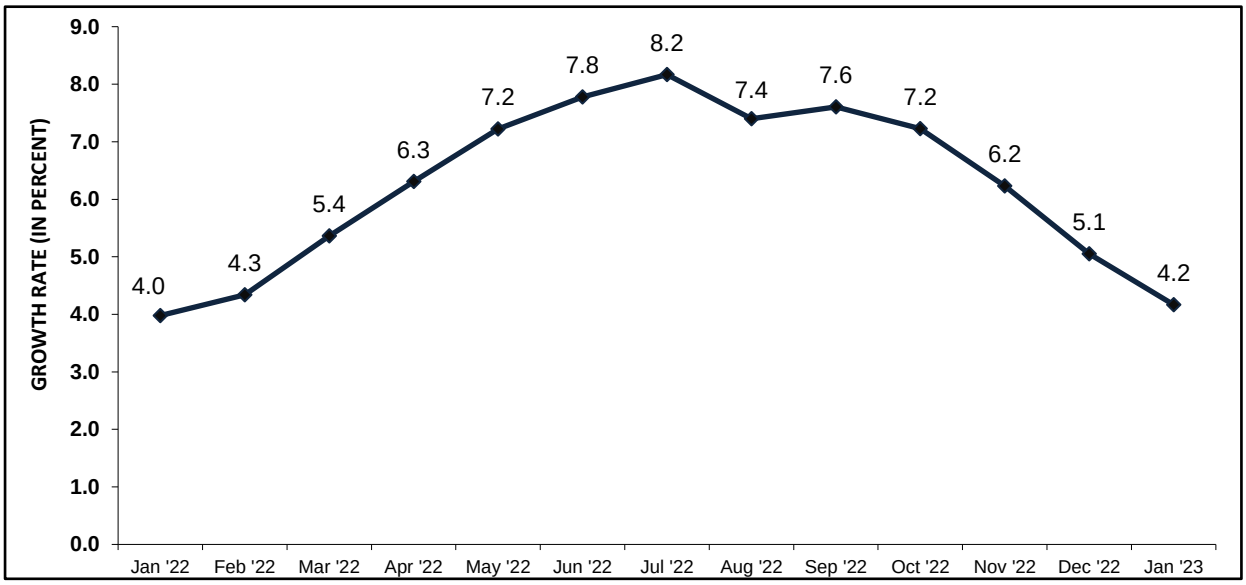
Table A. PPI and Year-on-Year Growth Rates for Manufacturing Sector (2018=100)
January 2022, December 2022[r], and January 2023[p]

Category	January 2022	December 2022[r]	January 2023[p]
Producer Price Index (2018=100)	**94.1**	**97.7**	**98.0**
Year-on-Year Growth (%)	**4.0**	**5.1**	**4.2**
Month-on-Month Growth (%)	**1.2**	**-0.9**	**0.3**

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

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



p - preliminary
Source: Philippine Statistics Authority

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A. Year-on-Year Growth for January 2023

1. Manufacture of transport equipment industry division was the primary driver to the slower annual increase of producer price index for manufacturing sector

The Producer Price Index (PPI) for manufacturing registered an annual increase of 4.2 percent in January 2023. This was slower than the 5.1 percent annual increment noted in December 2022. In January 2022, an annual increase of 4.0 percent was observed. (Figure 1, and Tables A and 1)

The slower year-on-year growth rate of PPI in January 2023 compared with its annual growth rate in December 2022 was mainly brought about by the decline in the index of manufacture of transport equipment industry division with -0.8 percent annual decrease in January 2023 from 4.2 percent annual increase in December 2022. The manufacture of transport equipment contributed 41.4 percent to the slower annual growth rate of the PPI for manufacturing sector in January 2023. Out of the 22 industry divisions for the manufacturing sector, this industry division has the third highest weight[1] in the computation of PPI.

Other primary contributors to the slower annual growth of PPI in January 2023 were manufacture of food products with 6.5 percent annual growth rate during the period from 7.7 percent in the previous month, and manufacture of chemical and chemical products with an annual growth of 2.6 percent in January 2023 from 6.9 percent in December 2022. In addition, slowdowns in the annual growth rates were observed in the indices of 10 industry divisions.

On the contrary, there were eight industry divisions that registered higher annual growth rates in their PPI for January 2023 than in December 2022. Manufacture of fabricated metal products, except machinery and equipment led these industry divisions registering 6.5 percent annual growth in January 2023 from 3.5 percent in December 2022.

Furthermore, the index of manufacture of basic pharmaceutical products and pharmaceutical preparations retained its year-on-year increase in December 2022 at 1.2 percent. (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 continued to post a positive growth with an annual rate of 6.5 percent in January 2023. However, this was slower compared with the December 2022 annual growth rate of 7.7 percent, but faster

[1]Refer to Method of Computation in the Technical Notes

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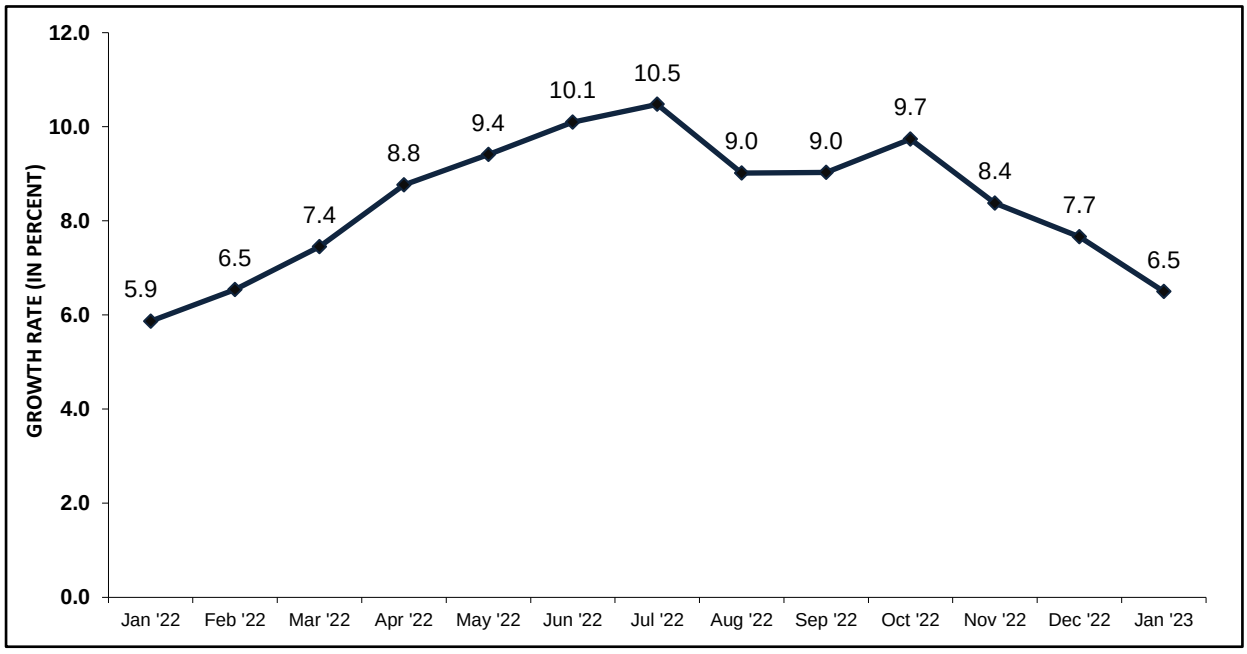
relative to the January 2022 annual increase of 5.9 percent. (Figure 2, and Tables 1 and 2)

The deceleration in the annual growth of the PPI for manufacture of food products in January 2023 from December 2022 was primarily attributed to the slower annual increase in the index of manufacture of grain mill products, starches and starch products industry group with 8.0 percent annual increment in January 2023 from 13.6 percent in the previous month. Other main contributors were processing and preserving of fish, crustaceans and mollusks with 6.9 percent annual increase during the month from 11.5 percent in December 2022, and manufacture of other food products, which includes bakery products, sugar, condiments, among others, with 8.3 percent annual upturn in January 2023 from 9.5 percent in the previous month. (Table 2)

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



p - preliminary
Source: Philippine Statistics Authority

B. Month-on-Month Growth for January 2023

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

Month-on-month, the PPI for manufacturing posted an increment of 0.3 percent in January 2023, after exhibiting a -0.9 percent monthly rate in December 2022. In January 2022, the PPI posted a monthly increase of 1.2 percent. (Figure 3, and Tables A and 1)

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The monthly increase of PPI in January 2023 was mainly contributed by the month-on-month upturn in the index of manufacture of computer, electronic and optical products at 1.7 percent. This industry division contributed more than half or 55.6 percent to the uptrend in the monthly growth rate of the PPI for manufacturing sector in January 2023. Completing the top three contributors were manufacture of coke and refined petroleum products and manufacture of fabricated metal products, except machinery and equipment with monthly increases of 0.1 percent and 4.7 percent, respectively. In addition, six industry divisions exhibited higher month-on-month increments in their indices during the month, which include the manufacture of food products.

On the other hand, there were three industry divisions that showed slowdowns in their monthly increments in January 2023, with manufacture of paper and paper products posting the largest deceleration at 0.7 percent from 1.4 percent in the previous month.

Moreover, there were four industry divisions that continued to record negative monthly growth rates during the period which was led by the manufacture of transport equipment at -4.0 percent from -1.3 percent in December 2022. Meanwhile, the indices of manufacture of wood, bamboo, cane, rattan articles and related products; and other manufacturing and repair and installation of machinery and equipment registered monthly decreases of -2.1 percent and -0.9 percent, respectively, from their monthly increments in December 2022.

Furthermore, four industry divisions registered 0.0 percent monthly rate in their PPI in January 2023. (Tables C and 1)

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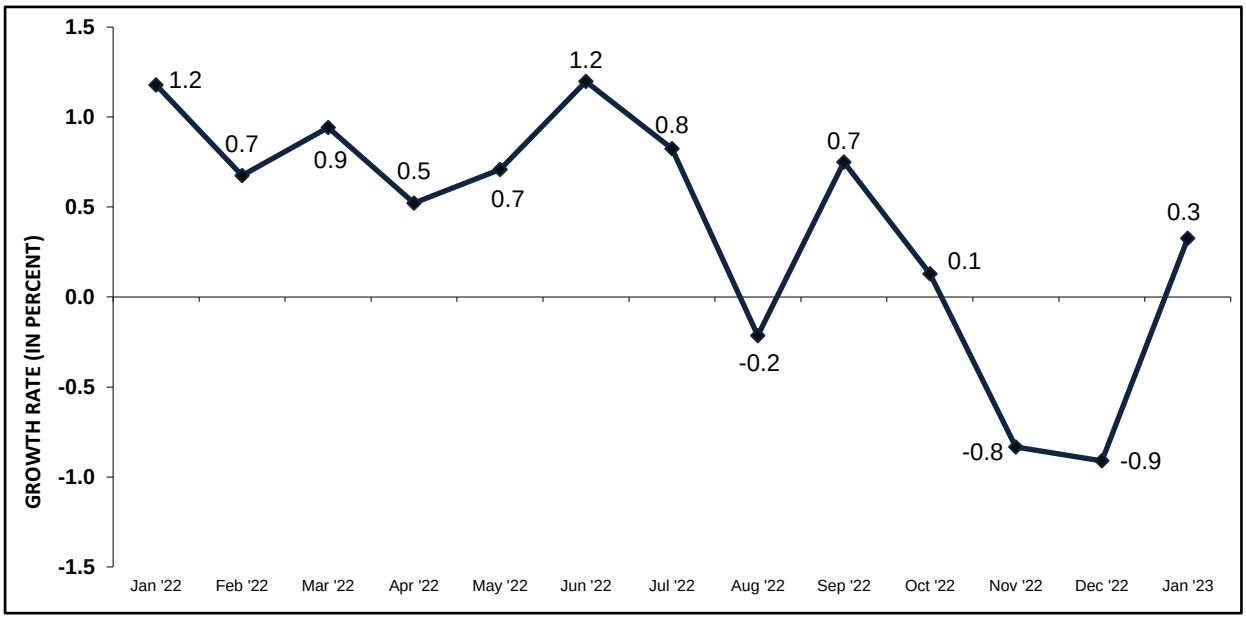
Figure 3. Month-on-Month Change in PPI for Total Manufacturing
January 2022 - January 2023p
(2018 = 100)



p - preliminary
Source: Philippine Statistics Authority

4. Processing and preserving of fish, crustaceans and mollusks 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 with a monthly growth rate of 0.4 percent in January 2023 from a monthly decline of -0.02 percent in the previous month. In January 2022, the PPI for the manufacture of food products grew faster with a monthly increment of 1.5 percent. (Figure 4, and Tables 1 and 2)

The monthly increase in the PPI for food manufacturing during the period was brought about by four of the eight industry groups. This was led by the processing and preserving of fish, crustaceans and mollusks, which posted a monthly growth rate of 2.1 percent, from a -3.4 percent monthly drop in December 2022. This industry group contributed 51.6 percent to the month-on-month upturn of the PPI for the manufacture of food products.

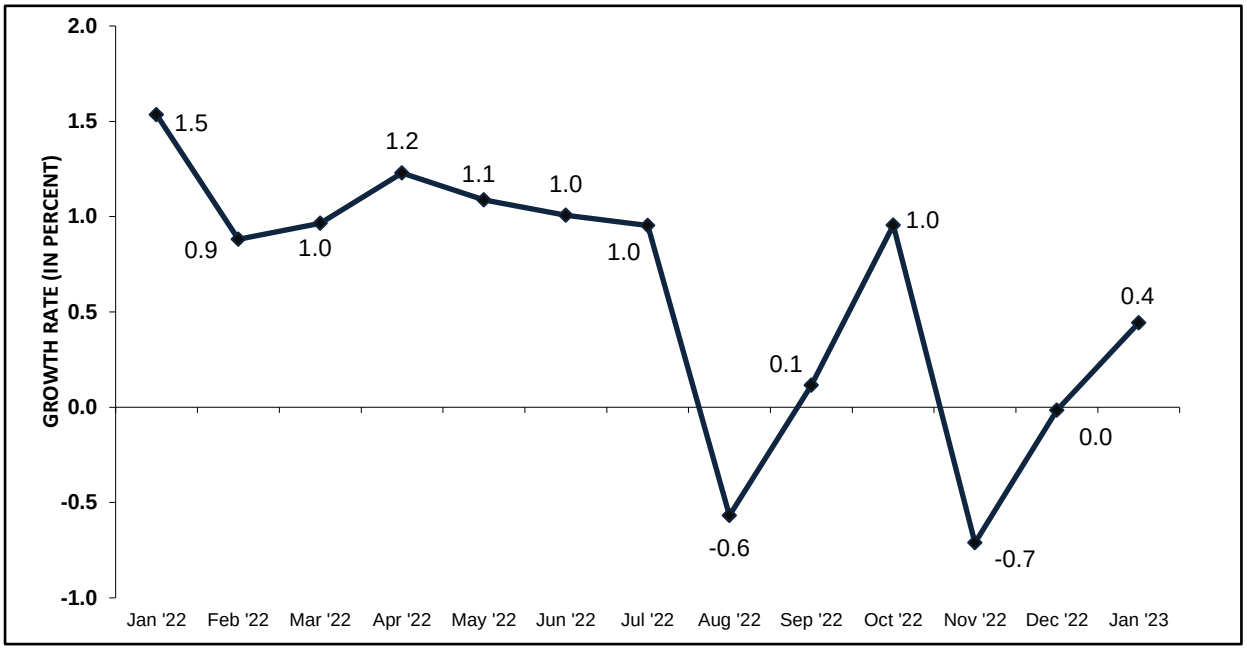
Other main contributors were manufacture of prepared animal feeds with 2.6 percent monthly uptick in January 2023, from a monthly decrement of -2.3 percent in December 2022, and manufacture of other food products, which includes bakery products, sugar, condiments, among others, with monthly growth rate of 0.2 percent during the period, from -0.1 percent monthly decline in the previous month.

On the other hand, slowdowns were recorded in the PPI of the processing and preserving of fruits and vegetables; and manufacture of dairy products, both with month-on-month increase of 0.1 percent in January 2023. Meanwhile, the index of the manufacture of vegetable and animal oils and fats dropped by -0.1 percent during

the period from a monthly upturn in December 2022.

Lastly, manufacture of grain mill products, starches and starch products posted a faster monthly decline in January 2023 with -0.5 percent from -0.3 percent in the previous month. (Table 2)

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



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Source: Philippine Statistics Authority

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Table B. Year-on-Year Growth Rates of PPI in Percent by Industry Division: December 2022[r] and January 2023[p] (2018=100)

INDUSTRY DIVISION	December 2022[r]	January 2023[p]
With Negative Annual Growth Rate from Positive Annual Growth Rate in December 2022		
1. Manufacture of transport equipment	4.2[r]	-0.8
With Slower Annual Growth Rates		
2. Manufacture of food products	7.7[r]	6.5
3. Manufacture of chemical and chemical products	6.9[r]	2.6
4. Manufacture of coke and refined petroleum products	8.3[r]	7.6
5. Manufacture of rubber and plastic products	5.2[r]	3.6
6. Manufacture of beverages	4.7	4.2
7. Manufacture of basic metals	2.3[r]	1.7
8. Other manufacturing and repair and installation of machinery and equipment	3.1[r]	1.4
9. Manufacture of wood, bamboo, cane, rattan articles and related products	2.3[r]	0.7
10. Manufacture of paper and paper products	6.9[r]	6.5
11. Manufacture of leather and related products, including footwear	4.6	3.4
12. Manufacture of wearing apparel	2.5	2.2
13. Manufacture of textiles	2.9	2.6
With Higher Annual Growth Rates		
14. Manufacture of fabricated metal products, except machinery and equipment	3.5[r]	6.5
15. Manufacture of machinery and equipment except electrical	1.8	3.5
16. Manufacture of computer, electronic and optical products	2.4[r]	4.1
17. Manufacture of tobacco products	2.5	3.5
18. Manufacture of other non-metallic mineral products	3.3[r]	4.2
19. Manufacture of furniture	1.9[r]	2.5
20. Manufacture of electrical equipment	0.7	1.1
21. Printing and reproduction of recorded media	0.8	1.2
With Constant Annual Growth Rate		
22. Manufacture of basic pharmaceutical products and pharmaceutical preparations	1.2	1.2

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

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Table C. Month-on-Month Growth Rates of PPI in Percent by Industry Division: December 2022[r] and January 2023[p] (2018=100)

INDUSTRY DIVISION	December 2022[r]	January 2023[p]
With Higher Growth Rates in January 2023		
1. Manufacture of computer, electronic and optical products	-2.7[r]	1.7
2. Manufacture of coke and refined petroleum products	-2.6[r]	0.1
3. Manufacture of fabricated metal products, except machinery and equipment	-1.3[r]	4.7
4. Manufacture of food products	b/[r]	0.4
5. Manufacture of electrical equipment	-1.6	0.4
6. Manufacture of basic metals	0.3[r]	1.0
7. Manufacture of other non-metallic mineral products	0.4[r]	0.6
8. Manufacture of tobacco products	a/	0.6
9. Manufacture of leather and related products, including footwear	0.0	0.9
With Slower Growth Rates in January 2023		
10. Manufacture of paper and paper products	1.4	0.7
11. Manufacture of machinery and equipment except electrical	0.9	0.6
12. Manufacture of furniture	0.6[r]	0.5
With Negative Growth Rates in January 2023		
13. Manufacture of transport equipment	-1.3[r]	-4.0
14. Manufacture of chemical and chemical products	-0.3[r]	-2.4
15. Manufacture of wearing apparel	-0.9	-0.3
16. Manufacture of rubber and plastic products	-0.1[r]	-0.1
With Negative Monthly Growth Rates from Positive Monthly Growth Rates in December 2022		
17. Manufacture of wood, bamboo, cane, rattan articles and related products	0.5[r]	-2.1
18. Other manufacturing and repair and installation of machinery and equipment	0.2[r]	-0.9
With Zero Growth Rates in January 2023		
19. Manufacture of beverages	0.0	0.0
20. Manufacture of textiles	0.0	0.0
21. Printing and reproduction of recorded media	-0.3	0.0
22. Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.1	0.0

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

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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

$$\mathrm{PPI}_{ijm} = \frac{\mathrm{H}_{ijm}}{\mathrm{H}_{ij0}} \text{ x } 100$$

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:

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

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

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

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

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

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

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

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*