



# PRESS RELEASE

## PRODUCER PRICE INDEX (2018=100) September 2022

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Table A. Year-on-Year and Month-on-Month Growth Rates of Producer Price Index for Total Manufacturing (2018=100): September 2021, August 2022<sup>r</sup>, and September 2022<sup>p</sup>

Category	September 2021	August 2022 <sup>r</sup>	September 2022 <sup>p</sup>
Producer Price Index (2018=100)	92.3	98.3	99.1
Year-on-Year Growth (%)	0.1	7.1	7.4
Month-on-Month Growth (%)	0.6	-0.3	0.8

p - preliminary, r - revised

Source: Philippine Statistics Authority

## Year-on-Year

The Producer Price Index (PPI) for manufacturing continued to exhibit an upward trend at an annual increase of 7.4 percent in September 2022. This growth rate is faster than the annual increment of 7.1 percent posted in the previous month. In September 2021, the PPI slightly rose at an annual rate of 0.1 percent. (Tables A and 1)

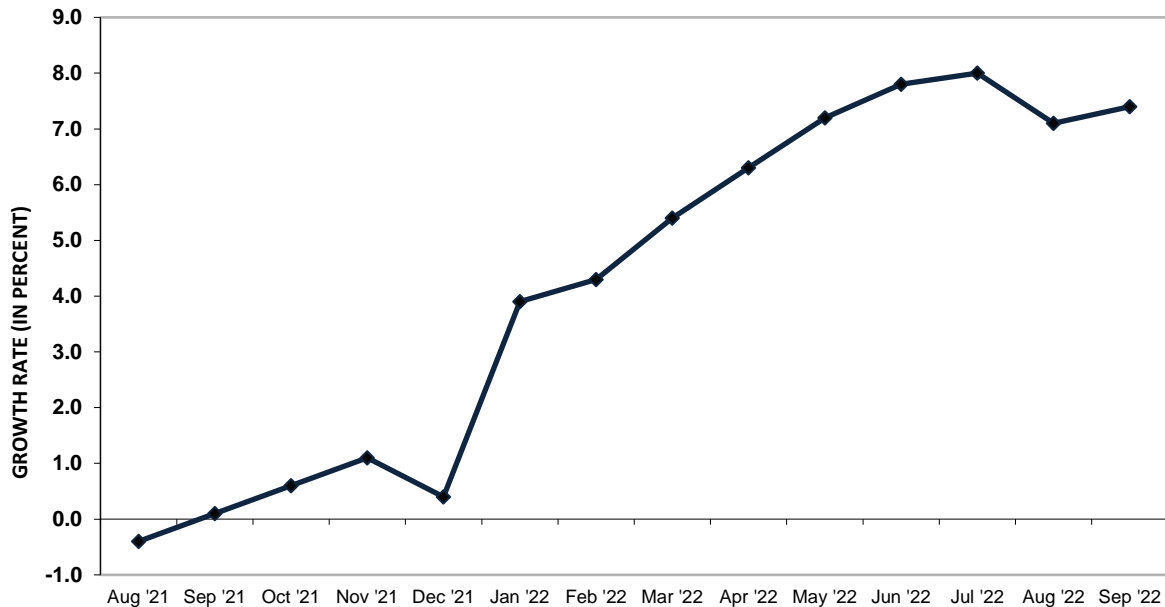
The upturn in the PPI in September 2022 can be attributed to the annual expansions in the indices of 19 industry divisions led by **manufacture of coke and refined petroleum products**, which recorded an annual growth rate of 15.2 percent.

On the other hand, there were three industry divisions that exhibited annual decrements, namely: **manufacture of machinery and equipment except electrical, printing and reproduction of recorded media, and manufacture of wood, bamboo, cane, rattan articles and**



**related products** with annual growth rates of -2.0 percent, -0.6 percent, and -0.6 percent, respectively.

Figure 1. Year-on-Year Change in PPI for Total Manufacturing  
August 2021 - September 2022<sup>p</sup>  
(2018 = 100)



p - preliminary  
Source: Philippine Statistics Authority

## Month-on-Month

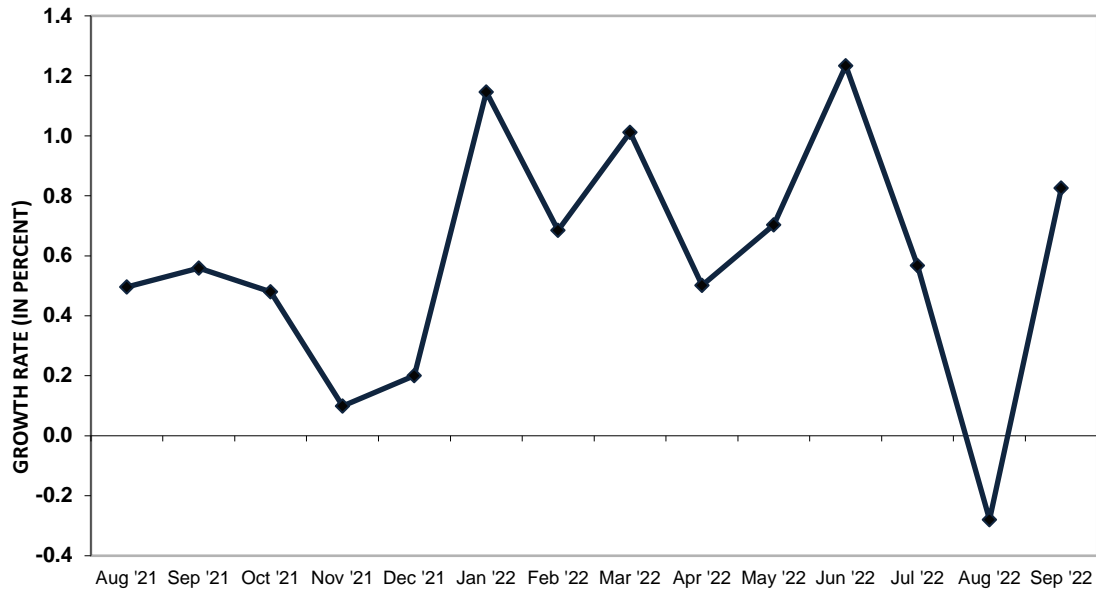
Month-on-month, the PPI for manufacturing recovered in September 2022 posting a monthly growth rate of 0.8 percent from a -0.3 percent monthly drop in August 2022. In September 2021, the PPI recorded a monthly increment of 0.6 percent. (Tables A and 1)

Fifteen among the 22 industry divisions registered positive monthly growth rates in August 2022, which was led by the **manufacture of computer, electronic and optical products** with a monthly increase of 3.2 percent.

On the other hand, the PPI of six industry divisions exhibited monthly downturns with **manufacture of chemical and chemical products** and **manufacture of textiles** posting the largest monthly decreases of -0.3 percent each. Meanwhile, the monthly growth rate of **manufacture**

of leather and related products, including footwear is at zero percent.  
(Tables A-2 and 1)

Figure 2. Month-on-Month Change in PPI for Total Manufacturing  
August 2021 - September 2022<sup>p</sup>  
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

Table A-1. Year-on-Year Growth Rates of PPI in Percent  
by Industry Division: August 2022 and September 2022<sup>p</sup>  
(2018=100)

INDUSTRY DIVISION	August 2022	September 2022 <sup>p</sup>
<b>With Positive Growth Rates in September 2022</b>		
1. Manufacture of food products	8.8 <sup>r</sup>	8.8
2. Manufacture of computer, electronic and optical products	6.9 <sup>r</sup>	10.2
3. Manufacture of coke and refined petroleum products	15.5 <sup>r</sup>	15.2
4. Manufacture of beverages	5.8 <sup>r</sup>	5.9
5. Manufacture of transport equipment	4.9 <sup>r</sup>	4.4
6. Manufacture of other non-metallic mineral products	8.4	8.1
7. Manufacture of chemical and chemical products	7.2 <sup>r</sup>	6.6
8. Manufacture of basic metals	5.1 <sup>r</sup>	2.8
9. Manufacture of rubber and plastic products	5.0 <sup>r</sup>	4.8
10. Manufacture of fabricated metal products, except machinery and equipment	3.6 <sup>r</sup>	3.6
11. Manufacture of paper and paper products	4.0	4.4
12. Manufacture of electrical equipment	2.7 <sup>r</sup>	2.8
13. Other manufacturing and repair and installation of machinery and equipment	0.8	2.6
14. Manufacture of tobacco products	3.6 <sup>r</sup>	3.0
15. Manufacture of textiles	5.0 <sup>r</sup>	4.2
16. Manufacture of furniture	1.9 <sup>r</sup>	1.8
17. Manufacture of wearing apparel	1.4 <sup>r</sup>	0.7
18. Manufacture of basic pharmaceutical products and pharmaceutical preparations	1.1	1.1
19. Manufacture of leather and related products, including footwear	0.8	0.8
<b>With Negative Growth Rates in September 2022</b>		
20. Manufacture of machinery and equipment except electrical	-0.3	-2.0
21. Printing and reproduction of recorded media	-1.4	-0.6
22. Manufacture of wood, bamboo, cane, rattan articles and related products	0.7	-0.6

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

Table A-2. Month-on-Month Growth Rates of PPI in Percent  
by Industry Division: August 2022 and September 2022<sup>p</sup>  
(2018=100)

INDUSTRY DIVISION	August 2022	September 2022 <sup>p</sup>
<b>With Positive Growth Rates in September 2022</b>		
1. Manufacture of computer, electronic and optical products	b/	3.2
2. Manufacture of coke and refined petroleum products	-0.7 <sup>r</sup>	1.3
3. Manufacture of basic metals	-1.2 <sup>r</sup>	0.6
4. Other manufacturing and repair and installation of machinery and equipment	-1.0 <sup>r</sup>	1.8
5. Manufacture of transport equipment	-0.2 <sup>r</sup>	0.2
6. Manufacture of food products	-0.5	0.1
7. Manufacture of other non-metallic mineral products	-0.2 <sup>r</sup>	0.3
8. Printing and reproduction of recorded media	-0.5	0.8
9. Manufacture of electrical equipment	a/ <sup>r</sup>	0.5
10. Manufacture of wearing apparel	0.4 <sup>r</sup>	0.7
11. Manufacture of rubber and plastic products	-0.3 <sup>r</sup>	0.2
12. Manufacture of wood, bamboo, cane, rattan articles and related products	a/	0.6
13. Manufacture of furniture	0.3 <sup>r</sup>	0.3
14. Manufacture of beverages	0.3 <sup>r</sup>	a/
15. Manufacture of basic pharmaceutical products and pharmaceutical preparations	-0.1	0.2
<b>With Zero Growth Rates in September 2022</b>		
16. Manufacture of leather and related products, including footwear	0.0	0.0
<b>With Negative Growth Rates in September 2022</b>		
17. Manufacture of chemical and chemical products	-0.4 <sup>r</sup>	-0.3
18. Manufacture of fabricated metal products, except machinery and equipment	0.2 <sup>r</sup>	-0.2
19. Manufacture of tobacco products	-0.8 <sup>r</sup>	-0.2
20. Manufacture of textiles	0.1 <sup>r</sup>	-0.3
21. Manufacture of machinery and equipment except electrical	0.5	-0.1
22. Manufacture of paper and paper products	0.2	b/

p - preliminary, r - revised

a/ - less than 0.05 percent increase; b/ - less than 0.05 percent decrease

Source: Philippine Statistics Authority

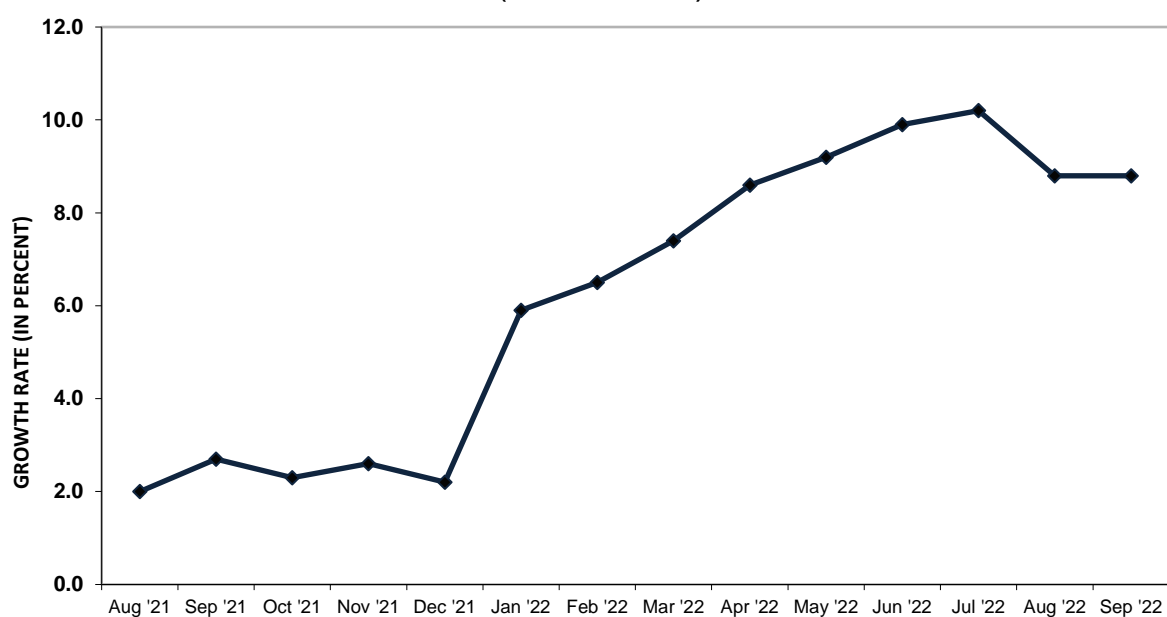
## Manufacture of food products

The PPI for manufacture of food products posted the same annual growth rate of 8.8 percent in September 2022 and in August 2022.

The increase in September 2022 PPI was attributed by the annual increments in the PPI of seven industry groups under the manufacture of food products. Moreover, double-digit upturns were registered in the three industry groups, namely: **manufacture of grain mill products, starches and starch products (17.8%)**, **manufacture of prepared animal feeds (15.6%)**, and **processing and preserving of fish, crustaceans and mollusks (13.8%)**. (Tables 1 and 2)

On a month-on-month basis, the PPI for the manufacture of food products exhibited an upward trend with a monthly growth rate of 0.1 percent in September 2022. In August 2022, it decreased by -0.5 percent. Five of the eight industry groups contributed to the increase of the PPI for the manufacture of food products. This was led by the **processing and preserving of fish, crustaceans and mollusks** posting a monthly growth rate of 2.9 percent. (Tables 1 and 2)

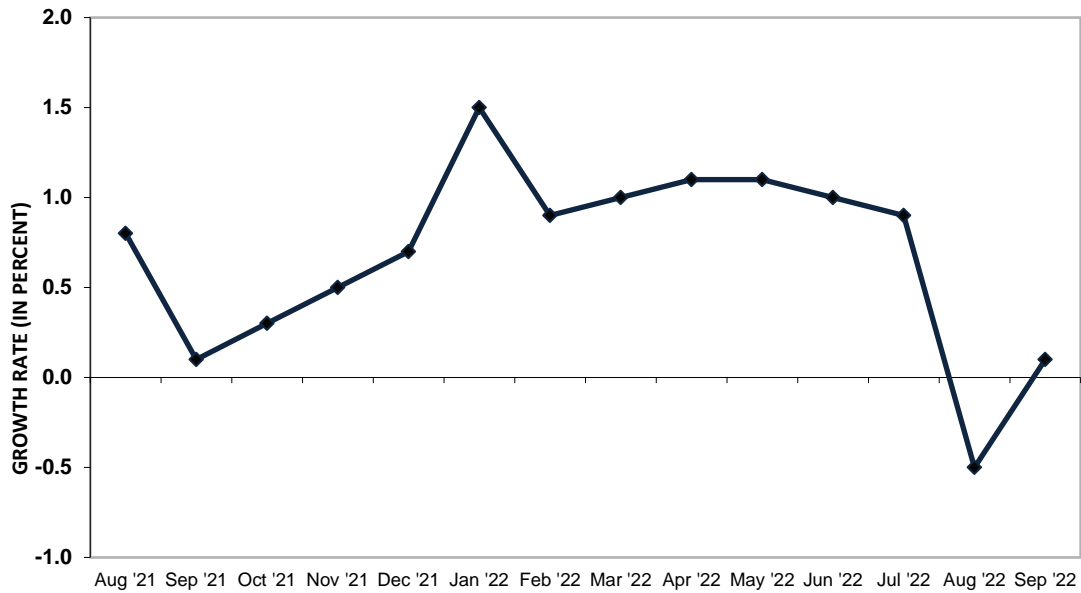
Figure 3. Year-on-Year Change in PPI for Food Manufacturing  
August 2021 - September 2022<sup>p</sup>  
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

Figure 4. Month-on-Month Change in PPI for Food Manufacturing  
August 2021 - September 2022<sup>p</sup>  
(2018 = 100)



p - preliminary

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 2022 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 2019 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.

<b>2009 PSIC CODE</b>	<b>INDUSTRY DESCRIPTION</b>
C10	Manufacture of food products*
C11	Manufacture of beverages
C12	Manufacture of tobacco products
C13	Manufacture of textiles
C14	Manufacture of wearing apparel

2009 PSIC CODE	INDUSTRY DESCRIPTION
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*
C27	Manufacture of electrical equipment*
C28	Manufacture of machinery and equipment except electrical*

<b>2009 PSIC CODE</b>	<b>INDUSTRY DESCRIPTION</b>
C29, C30	Manufacture of transport equipment*
C31	Manufacture of furniture
C32, C33	Other manufacturing

*\*Industry divisions categorized further into industry groups*