



PRESS RELEASE

PRODUCER PRICE INDEX (2018=100) March 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):
March 2021, February 2022^r, and March 2022^p

Category	March 2021	February 2022 ^r	March 2022 ^p
Producer Price Index (2018=100)	90.8	94.6	95.3
Year-on-Year Growth (%)	-3.3	4.2	5.0
Month-on-Month Growth (%)	-0.04	0.6	0.7

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

Year-on-Year

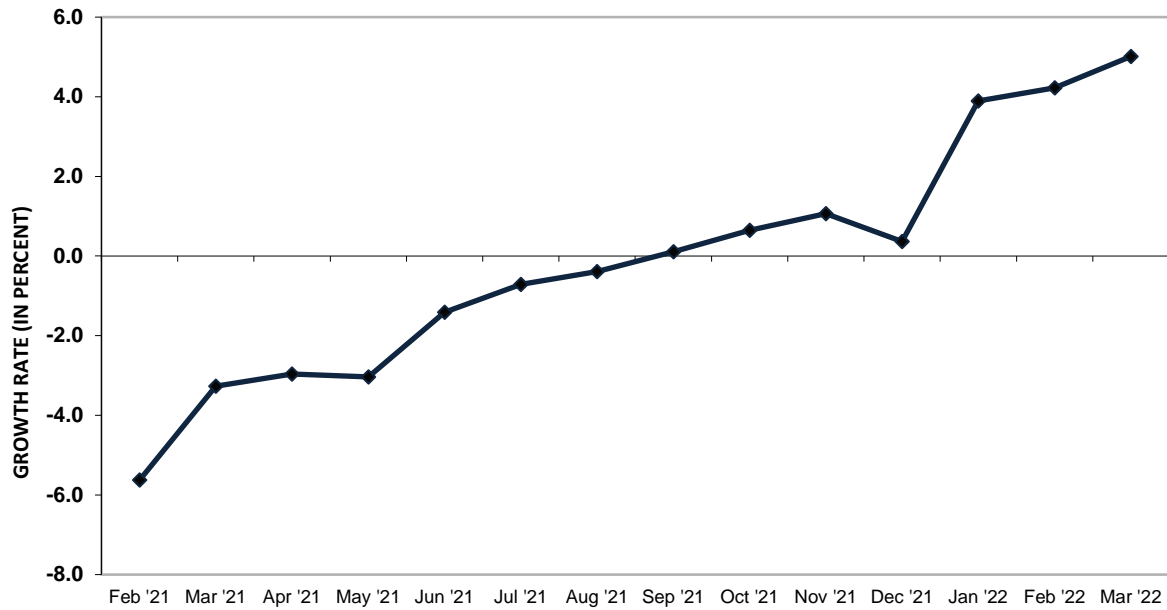
The Producer Price Index (PPI) for manufacturing remained at an upward trend posting a faster annual rate of 5.0 percent in March 2022 compared with the increase of 4.2 percent last February 2022. In March 2021, the PPI posted a downturn with an annual rate of -3.3 percent. (Table A)

The upturn in the PPI in March 2022 can be attributed to the annual expansions in the indices of 18 industry divisions led by **manufacture of coke and refined petroleum products** which posted an annual increment of 17.9 percent.



On the other hand, **manufacture of wood, bamboo, cane, rattan articles and related products**, with an annual decline of -6.6 percent, led the four industry divisions that recorded decreases in their annual growth rates. (Tables A-1 and 1)

Figure 1. Year-on-Year Change in PPI for Total Manufacturing
February 2021 - March 2022^p
(2018 = 100)



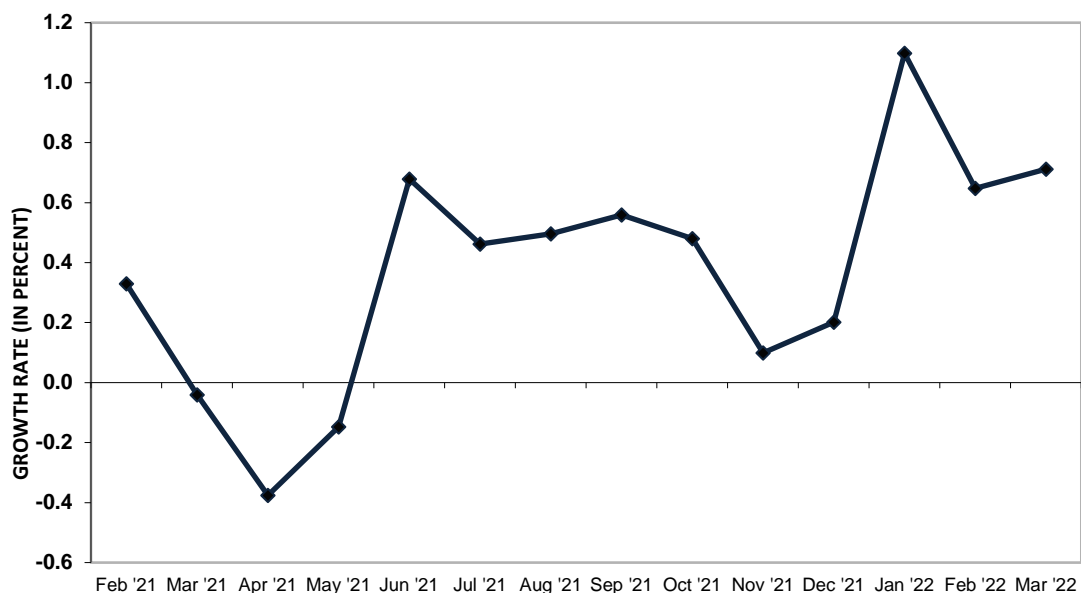
p - preliminary
Source: Philippine Statistics Authority

Month-on-Month

Month-on-month, the PPI for manufacturing continued to increase exhibiting a monthly growth rate of 0.7 percent in March 2022. This upturn was slightly faster compared to the 0.6 percent increment in February 2022. In March 2021, the PPI posted a monthly decrease of -0.04 percent. (Table A)

Sixteen (16) industry divisions recorded positive monthly growth rates in March 2022 led by **manufacture of coke and refined petroleum products** with a monthly increment of 2.9 percent. On the contrary, the PPI of four industry divisions recorded monthly decrements, with **other manufacturing and repair and installation of machinery and equipment** posting the highest monthly drop at -0.5 percent. **Printing and reproduction of recorded media**, and **manufacture of leather and related products, including footwear** had zero monthly growth rates. (Tables A-2 and 1)

Figure 2. Month-on-Month Change in PPI for Total Manufacturing
February 2021 - March 2022^p
(2018 = 100)



p - preliminary

Source: Philippine Statistics Authority

Table A-1. Year-on-Year Growth Rates of PPI in Percent
by Industry Division: February 2022 and March 2022^p
(2018=100)

INDUSTRY DIVISION	February 2022	March 2022 ^p
With Positive Growth Rates in March 2022		
1. Manufacture of coke and refined petroleum products	15.2 ^r	17.9
2. Manufacture of food products	6.4 ^r	7.1
3. Manufacture of basic metals	11.0 ^r	11.4
4. Manufacture of chemical and chemical products	7.6 ^r	9.6
5. Manufacture of transport equipment	1.5 ^r	2.5
6. Manufacture of beverages	3.2 ^r	3.2
7. Manufacture of rubber and plastic products	5.9 ^r	5.6
8. Manufacture of other non-metallic mineral products	3.6 ^r	4.1
9. Manufacture of fabricated metal products, except machinery and equipment	2.9 ^r	2.6
10. Manufacture of electrical equipment	3.7 ^r	3.2
11. Manufacture of paper and paper products	2.6 ^r	2.3
12. Manufacture of wearing apparel	1.9 ^r	4.4
13. Manufacture of textiles	4.7 ^r	4.4
14. Manufacture of furniture	1.8	2.7
15. Manufacture of tobacco products	1.5 ^r	1.6
16. Manufacture of basic pharmaceutical products and pharmaceutical preparations	0.8 ^r	2.5
17. Other manufacturing and repair and installation of machinery and equipment	-2.2 ^r	0.2
18. Manufacture of leather and related products, including footwear	1.8 ^r	1.4
With Negative Growth Rates in March 2022		
1. Manufacture of computer, electronic, and optical products	-2.9 ^r	-2.4
2. Manufacture of wood, bamboo, cane, rattan articles, and related products	-6.2 ^r	-6.6
3. Printing and reproduction of recorded media	-2.4	-1.3
4. Manufacture of machinery and equipment except electrical	-0.6 ^r	-0.5

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

Table A-2. Month-on-Month Growth Rates of PPI in Percent
by Industry Division: February 2022 and March 2022^p
(2018=100)

INDUSTRY DIVISION	February 2022	March 2022 ^p
With Positive Growth Rates in March 2022		
1. Manufacture of coke and refined petroleum products	1.1 ^r	2.9
2. Manufacture of food products	0.9 ^r	0.8
3. Manufacture of transport equipment	0.8 ^r	0.8
4. Manufacture of basic metals	0.9 ^r	1.2
5. Manufacture of chemical and chemical products	0.2 ^r	1.1
6. Manufacture of computer, electronic, and optical products	0.5 ^r	0.2
7. Manufacture of rubber and plastic products	0.1 ^r	0.4
8. Manufacture of wearing apparel	0.2 ^r	1.0
9. Manufacture of fabricated metal products, except machinery and equipment	0.6 ^r	0.2
10. Manufacture of beverages	0.3 ^r	0.1
11. Manufacture of basic pharmaceutical products and pharmaceutical preparations	1.5 ^r	0.8
12. Manufacture of furniture	b/	0.4
13. Manufacture of electrical equipment	0.1 ^r	0.1
14. Manufacture of tobacco products	0.1 ^r	0.1
15. Manufacture of machinery and equipment except electrical	1.5 ^r	0.1
16. Manufacture of textiles	0.1 ^r	a/
With Zero Growth Rates in March 2022		
1. Printing and reproduction of recorded media	0.4	0.0
2. Manufacture of leather and related products, including footwear	0.3 ^r	0.0
With Negative Growth Rates in March 2022		
1. Other manufacturing and repair and installation of machinery and equipment	0.4 ^r	-0.5
2. Manufacture of wood, bamboo, cane, rattan articles, and related products	0.1 ^r	-0.5
3. Manufacture of other non-metallic mineral products	1.0 ^r	-0.1
4. Manufacture of paper and paper products	-0.1 ^r	b/

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 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 link factor has been used to adjust weight effects to measure the correct price change.

- **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*

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

**Industry divisions categorized further into industry groups*