

PRESS RELEASE

PRODUCER PRICE INDEX (2018=100) March 2021

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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^p, February 2021^r, and March 2020^r

Category	March 2021 ^p	February 2021 ^r	March 2020 ^r
Producer Price Index (2018=100)	90.9	91.0	93.8
Year-on-Year Growth (%)	-3.1	-5.5	-5.9
Month-on-Month Growth (%)	-0.04	0.05	-2.5

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

Year-on-Year

The Producer Price Index (PPI) for manufacturing was still at a downtrend with an annual rate of -3.1 percent in March 2021. This decrease was slower than the annual decline of -5.5 percent in February 2021. In March 2020, the PPI also registered an annual downturn rate of -5.9 percent. (Table A)

The contraction in the PPI in March 2021 can be attributed to the annual decreases in the indices of 15 industry divisions led by **manufacture of computer**, **electronic**, **and optical products** which posted an annual decrement of -17.2 percent.

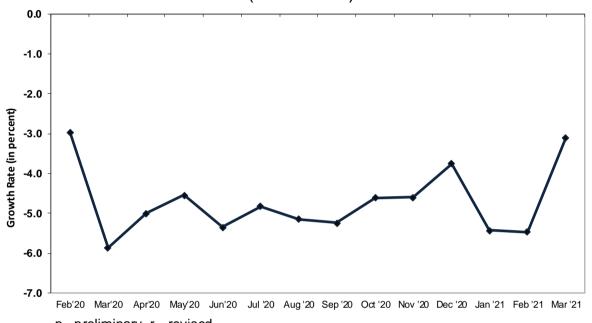
On the other hand, manufacture of coke and refined petroleum products, with an annual increase of 3.0 percent, led the six industry





divisions that recorded positive annual growths while **printing and reproduction of recorded media** registered a zero annual growth rate. (*Tables A-1 and 1*)

Figure 1. Year-on-Year Change in PPI for Total Manufacturing February 2020^r - March 2021^p (2018 = 100)



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

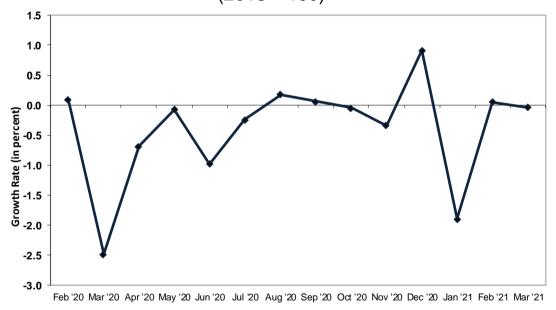
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Month-on-Month

Month-on-month, the PPI for manufacturing slightly fell by -0.04 percent in March 2021, following a slight increase of 0.05 percent in the previous month. In March 2020, the PPI decreased by -2.5 percent. (*Table A*)

Nine industry divisions recorded negative monthly growth rates in March 2021 with manufacture of basic pharmaceutical products and pharmaceutical preparations posting the highest monthly decrement of -1.7 percent. On the other hand, the PPI of 11 industry divisions posted monthly increments, with manufacture of machinery and equipment except electrical posting the highest monthly increase of 1.6 percent. Monthly growth rates of the rest of the industry divisions remained the same at zero percent. (Tables A-2 and 1)

Figure 2. Month-on-Month Change in PPI for Total Manufacturing February 2020^r - March 2021^p (2018 = 100)



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

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Table A-1. Year-on-Year Growth Rates of PPI in Percent by Industry Division: February 2021 and March 2021^p (2018=100)

INDUSTRYDIVISION	March 2021 ^p	February 2021
With Positive Growth Rates in March 2021		
1. Manufacture of food products	1.6	1.9 ^r
Manufacture of coke and refined petroleum products	3.0	-27.3 ^r
3. Manufacture of basic metals	2.4	0.7 ^r
4. Manufacture of beverages	1.5	2.8 ^r
5. Manufacture of transport equipment	0.6	-0.6 ^r
6. Manufacture of rubber and plastic products	1.7	0.5 ^r
With Zero Growth Rates in March 2021		
1. Printing and reproduction of recorded media	0.0	-0.5
With Negative Growth Rates in March 2021		
 Manufacture of computer, electronic, and optical products 	-17.2	-14.9 ^r
2. Manufacture of paper and paper products	-5.1	-5.1 ^r
3. Manufacture of chemical and chemical products	-1.5	0.2 ^r
4. Manufacture of other non-metallic mineral products	-2.1	-2.4 ^r
5. Other manufacturing and repair and installation of machinery and equipment	-4.8	-2.6 ^r
6. Manufacture of machinery and equipment except electrical	-2.7	-4.6 ^r
7. Manufacture of wearing apparel	-5.5	-5.8 ^r
8. Manufacture of basic pharmaceutical products and pharmaceutical preparations	-3.3	-0.2 ^r
9. Manufacture of electrical equipment	-1.3	-1.4 ^r
10. Manufacture of wood, bamboo, cane, rattan articles, and related products	-3.4	-3.2 ^r
11. Manufacture of tobacco products	-1.7	-1.7
12. Manufacture of furniture	-3.8	-4.6 ^r
13. Manufacture of fabricated metal products, except machinery and equipment	-0.5	-0.8 ^r
14. Manufacture of leather and related products, including footwear	-1.1	-2.6 ^r
15. Manufacture of textiles	-0.8	-0.9

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

Table A-2. Month-on-Month Growth Rates of PPI in Percent by Industry Division: February 2021 and March 2021^p (2018=100)

INDUSTRYDIVISION	March 2021 ^p	February 2021
With Positive Growth Rates in March 2021		
1. Manufacture of rubber and plastic products	1.2	0.5 ^r
2. Manufacture of machinery and equipment	1.6	-0.6 ^r
except electrical		
Manufacture of food products	0.1	-0.2 ^r
4. Manufacture of basic metals	0.2	0.2 ^r
5. Manufacture of fabricated metal products,	0.5	0.6 ^r
except machinery and equipment 6. Manufacture of other non-metallic mineral		
products	0.1	1.1 ^r
7. Manufacture of electrical equipment	0.1	0.4 ^r
8. Manufacture of leather and related products,		
including footwear	0.5	0.1 ^r
9. Manufacture of transport equipment	a/	0.8 ^r
10. Manufacture of beverages	a/	-0.1 ^r
11. Manufacture of textiles	0.2	0.0
With Zero Growth Rates in March 2021		
Manufacture of tobacco products	0.0	0.0
2. Printing and reproduction of recorded media	0.0	0.0
With Negative Growth Rates in March 2021		
Manufacture of chemical and chemical	-0.5	0.3 ^r
products		
Manufacture of computer, electronic, and antical products.	-0.2	0.2 ^r
optical products 3. Manufacture of basic pharmaceutical		
products and pharmaceutical preparations	-1.7	-1.7 ^r
4. Manufacture of coke and refined petroleum		
products	-0.3	-1.2 ^r
5. Manufacture of paper and paper products	-0.9	1.1 ^r
6. Manufacture of wood, bamboo, cane, rattan	1.2	-2.8 ^r
articles, and related products	-1.2	-2.0
7. Other manufacturing and repair and	-0.6	-0.2 ^r
installation of machinery and equipment		
8. Manufacture of wearing apparel	-0.9	0.8 ^r
9. Manufacture of furniture	-0.2	0.2 ^r

p – preliminary, r - revised



a/ – less than 0.05 percent increase Source: Philippine Statistics Authority



Attachments:

- 1. Table 1. Producer Price Index (2018=100) Year-on-Year and Month-on-Month Growth Rates for Manufacturing Sector, January 2020^r March 2021^P
- 2. Table 2. Distribution of Samples and Responding Establishments by Industry Division: PPS, February 2021^P, February 2021^P, and March 2021^P
- 3. Technical Notes

TECHNICAL NOTES

Introduction

Starting January 2021 reference period, the Producer Price Index (PPI) for Manufacturing uses 2018 as base year, from 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 2021 PPI, the base year is 2018 and the weights of the industry divisions and industry groups were computed based on the final results of the 2018 CPBI 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

$$\label{eq:ppi_ijm} \begin{split} \text{PPI}_{ijm} &= \text{PPI}_{ij(m-1)} \ x \ \frac{n_{ij}}{\sum_{h=1}^{n_{ij}} \frac{1}{p_{hijm}/p_{hij(m-1)}}} \end{split}$$

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

= producer price of commodity h for industry p_{hiim} group i in industry division i at current month m

= producer price of commodity h for industry $p_{hij(m-1)}$ group i in industry division i for the previous month m-1

= total number of representative commodities for nii industry group i in industry division i

2) Computation of Index for Industry Division Level

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

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

Computation of Growth Rates

<u>Year-on-year</u> 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 2021 PPS. These are presented in the table below.

2009 PSIC CODE	INDUSTRYDESCRIPTION
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*

2009 PSIC CODE	INDUSTRY DESCRIPTION	
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*	
C29, C30	Manufacture of transport equipment*	

2009 PSIC CODE	INDUSTRYDESCRIPTION	
C31	Manufacture of furniture	
C32, C33	Other manufacturing	

^{*} Industry divisions categorized further into industry groups