



# PRESS RELEASE

## PRODUCER PRICE INDEX December 2020

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Table A. Year-on-Year and Month-on-Month Growth Rates  
of Producer Price Index for Total Manufacturing (2000=100):  
December 2020<sup>p</sup>, November 2020<sup>r</sup>, and December 2019

Category	December 2020 <sup>p</sup>	November 2020 <sup>r</sup>	December 2019
Producer Price Index (2000=100)	129.8	128.8	132.9
Year-on-Year Growth (%)	-2.4	-3.2	0.6
Month-on-Month Growth (%)	0.7	-0.6	-0.2

p - preliminary, r - revised

Source: Philippine Statistics Authority

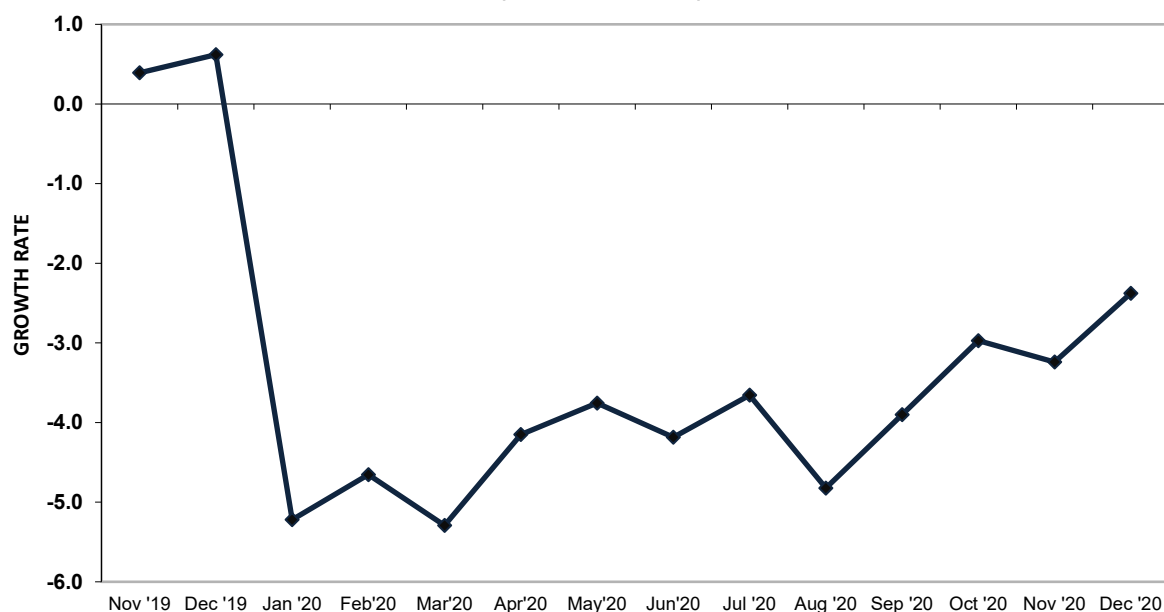
### Year-on-Year

The Producer Price Index for manufacturing remained at downtrend with an annual rate of -2.4 percent in December 2020. This decrease was slightly slower than the decline of -3.2 percent in November 2020. On the contrary, the PPI in December 2019 increased at an annual rate of 0.6 percent.

The decline in the PPI in December 2020 can be attributed to the negative growth rates of the indices of 14 industry groups led by **paper and paper products**, and **petroleum products** which posted annual decrements of -10.2 percent and -6.8 percent, respectively. In contrast, **furniture and fixtures**, which increased by 19.5 percent, led the six industry groups that recorded annual positive growth rates. (*Tables A-1 and 1*)



Figure 1. Year-on-Year Change in PPI for Total Manufacturing  
November 2019 - December 2020<sup>p</sup>  
(2000 = 100)



p - preliminary

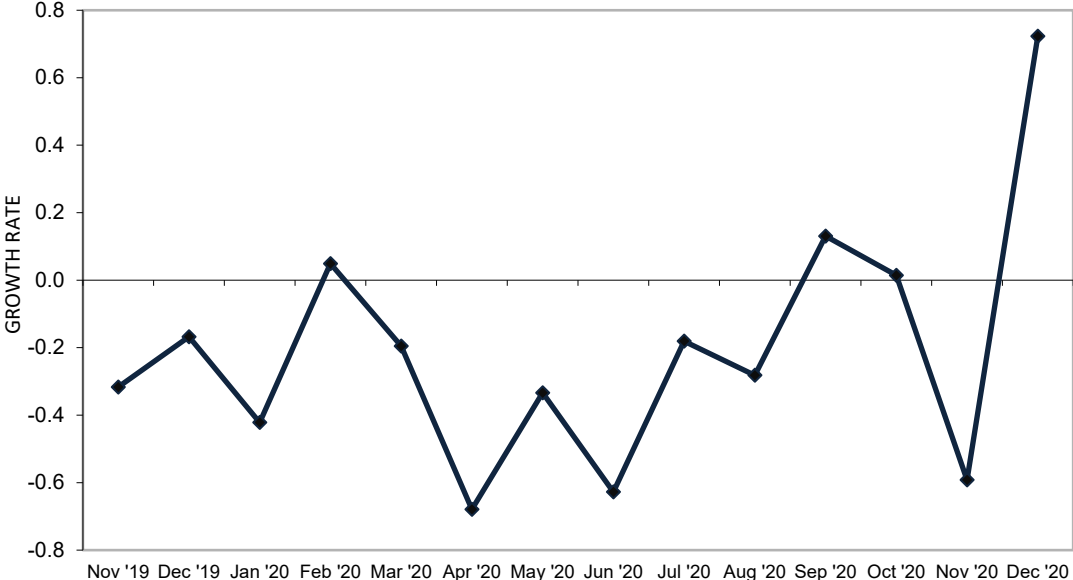
Source: Philippine Statistics Authority

## Month-on-Month

Month-on-month, the PPI for manufacturing rose by 0.7 percent in December 2020, following a decrease of -0.6 percent in November 2020. Meanwhile, the PPI posted a -0.2 percent monthly decrease last December 2019. (*Table A*)

Twelve (12) industry groups recorded positive monthly growth rates in December 2020 with **petroleum products** posting the highest monthly increment of 6.8 percent. On the other hand, PPI for six industry groups posted monthly decrements with **footwear and wearing apparel** posting the highest monthly decrement of -0.4 percent, while the rest of the industry groups had the same zero monthly growth rate as in November 2020. (*Tables A-2 and 1*)

Figure 2. Month-on-Month Change in PPI for Total Manufacturing  
November 2019 - December 2020<sup>P</sup>  
(2000 = 100)



p - preliminary  
Source: Philippine Statistics Authority

Table A-1. Year-on-Year Growth Rates in Percent of PPI  
by Industry Group: November and December 2020  
(2000=100)

INDUSTRY GROUP	December 2020 <sup>p</sup>	November 2020
<b>With Positive Growth Rates in December 2020</b>		
Food manufacturing	1.5	1.2 <sup>r</sup>
Beverages	5.2	5.2
Tobacco products	4.0	3.9
Furniture and fixtures	19.5	18.2 <sup>r</sup>
Printing	1.3	1.3
Fabricated metal products	0.1	0.7 <sup>r</sup>
<b>With Negative Growth Rates in December 2020</b>		
Transport equipment	-4.9	-6.6 <sup>r</sup>
Petroleum products	-6.8	-13.0 <sup>r</sup>
Machinery except electrical	-3.5	-4.3 <sup>r</sup>
Paper and paper products	-10.2	-10.3 <sup>r</sup>
Electrical machinery	-1.1	-2.4 <sup>r</sup>
Chemical products	-2.8	-3.4 <sup>r</sup>
Rubber and plastic products	-3.3	-3.1 <sup>r</sup>
Basic metals	-1.9	-2.8 <sup>r</sup>
Non-metallic mineral products	-1.4	-1.7 <sup>r</sup>
Wood and wood products	-5.3	-4.5 <sup>r</sup>
Footwear and wearing apparel	-2.9	-1.0 <sup>r</sup>
Miscellaneous manufactures	-2.3	-2.6 <sup>r</sup>
Leather products	-6.2	0.2
Textiles	-0.4	-0.5 <sup>r</sup>

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

Table A-2. Month-on-Month Growth Rates in Percent of PPI  
by Industry Group: November and December 2020  
(2000=100)

INDUSTRY GROUP	December 2020 <sup>p</sup>	November 2020
<b>With Positive Growth Rates in December 2020</b>		
Petroleum products	6.8	-3.4 <sup>r</sup>
Machinery except electrical	2.0	-2.6 <sup>r</sup>
Food manufacturing	0.5	0.3 <sup>r</sup>
Electrical machinery	0.5	-0.8 <sup>r</sup>
Transport equipment	0.4	-1.0 <sup>r</sup>
Chemical products	0.8	0.3 <sup>r</sup>
Basic metals	0.8	1.0 <sup>r</sup>
Non-metallic mineral products	0.2	0.1 <sup>r</sup>
Wood and wood products	0.3	a/ <sup>r</sup>
Miscellaneous manufactures	0.1	0.1 <sup>r</sup>
Leather products	0.3	b/
Beverages	a/	0.0
<b>With Zero Growth Rates in December 2020</b>		
Tobacco products	0.0	0.0
Printing	0.0	0.0
<b>With Negative Growth Rates in December 2020</b>		
Footwear and wearing apparel	-0.4	b/ <sup>r</sup>
Rubber and plastic products	b/	0.4 <sup>r</sup>
Paper and paper products	-0.1	0.5 <sup>r</sup>
Fabricated metal products	-0.1	-0.6 <sup>r</sup>
Furniture and fixtures	-0.1	-0.4 <sup>r</sup>
Textiles	-0.1	0.3 <sup>r</sup>

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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*Attachments:*

1. *Table 1. Producer Price Index (2000=100) Year-on-Year and Month-on-Month Growth Rates for Manufacturing Sector, January 2019 – December 2020<sup>P</sup>*
2. *Table 2. Distribution of Samples and Responding Establishments by Major Industry Group: PPS, November 2020 and December 2020<sup>P</sup>*
3. *Technical Notes*

# **TECHNICAL NOTES**

## **Introduction**

The Philippine Statistics Authority generates various price indices, one of which is the Producer Price Index (PPI). The PPI 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.

The PPI is used as a deflator of the Monthly Integrated Survey of Selected Industries (MISSI) to derive indicators for the Volume of Production Index (VoPI) and Volume of Net Sales Index (VoNSI).

## **Method of Index Computation**

PPI utilizes the Paasche-type method of index computation. 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). The weights are updated as soon as new results of the ASPBI or CPBI are available and these are applied at the beginning of each survey year.

For the 2020 PPI, the weights of the industry groups and industry classes were computed based on the final results of the 2017 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 Class Level (4-digit PSIC)

a. Initial Index

$$PPI_{ijm} = \frac{N}{\sum_{h=1}^N \frac{1}{p_{hm}/p_{ho}}} \times 100$$

where:

- $PPI_{ijm}$  = PPI for the  $i^{\text{th}}$  industry class (4-digit) of the  $j^{\text{th}}$  industry group (3-digit) at the current month  $m$
- $p_{hm}$  = producer price of commodity  $h$  at the current month  $m$
- $p_{ho}$  = average monthly producer price of commodity  $h$  at base year
- $N$  = total number of representative commodities for the  $i^{\text{th}}$  industry class

b. Monthly Index

$$PPI_{ijm} = PPI_{ijm-1} \times \frac{N}{\sum_{h=1}^N \frac{1}{p_{hm}/p_{hm-1}}}$$

where:

- $PPI_{ijm}$  = PPI for the  $i^{\text{th}}$  industry class (4-digit) of the  $j^{\text{th}}$  industry group (3-digit) at the current month  $m$
- $PPI_{ijm-1}$  = PPI for the  $i^{\text{th}}$  industry class of the  $j^{\text{th}}$  industry group for the previous month
- $p_{hm}$  = producer price of commodity  $h$  at the current month  $m$
- $p_{hm-1}$  = producer price of commodity  $h$  for the previous month
- $N$  = total number of representative commodities for the  $i^{\text{th}}$  industry class



## 2) Computation of Index for Industry Group Level (3-digit PSIC)

$$PP_{jm} = \frac{1}{\sum_{i=1}^p \left( W_{ij} \times \frac{1}{PPI_{ijm}} \right)}$$

where:

$PPI_{jm}$  = PPI for the  $j^{\text{th}}$  industry group (3-digit) at the current month  $m$

$PPI_{ijm}$  = PPI for the  $i^{\text{th}}$  industry class (4-digit) of the  $j^{\text{th}}$  industry group at the current month  $m$

$W_{ij}$  = weight of the  $i^{\text{th}}$  industry class of the  $j^{\text{th}}$  industry group

$p$  = number of industry classes

## 3) Computation of Index for Total Manufacturing (1-digit PSIC)

$$PP_m = \frac{1}{\sum_{j=1}^q \left( W_j \times \frac{1}{PPI_{jm}} \right)}$$

where:

$PP_m$  = PPI for total manufacturing at the current month  $m$

$PPI_{jm}$  = PPI for the  $j^{\text{th}}$  industry group (3-digit) at the current month  $m$

$W_j$  = weight of the  $j^{\text{th}}$  industry group

Note:

Starting with the January 2017 PPI, 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 classes of the 2009 PSIC were grouped to form the 20 industry groupings of the 2020 PPS. These are presented in the table below.

<b>2009 PSIC CODE</b>	<b>INDUSTRY DESCRIPTION</b>
C10	Food manufacturing *
C11	Beverages
C12	Tobacco products
C13	Textiles*
C14, C152	Footwear and wearing apparel
C151	Leather products
C16	Wood and wood products*
C17	Paper and paper products

<b>2009 PSIC CODE</b>	<b>INDUSTRY DESCRIPTION</b>
C18	Printing
C19	Petroleum products*
C20, C21	Chemical products*
C22	Rubber and plastic products*
C23	Non-metallic mineral products*
C24	Basic Metals*
C25	Fabricated metal products
C262, C275, C28, C263, C268	Machinery except electrical*
C261, C264, C27, C29301	Electrical machinery*
C29 except C29301, C30	Transport equipment
C31	Furniture and fixtures
C265, C266, C267, C32	Miscellaneous manufactures

\* - Industry groups categorized into industry classes