PRESS RELEASE

PRODUCER PRICE INDEX
April 2020

Table A Year-on-Year and Month-on-Month Growth Rates of Producer Price Index for Total Manufacturing

April 2020, March 2020 and April 2019

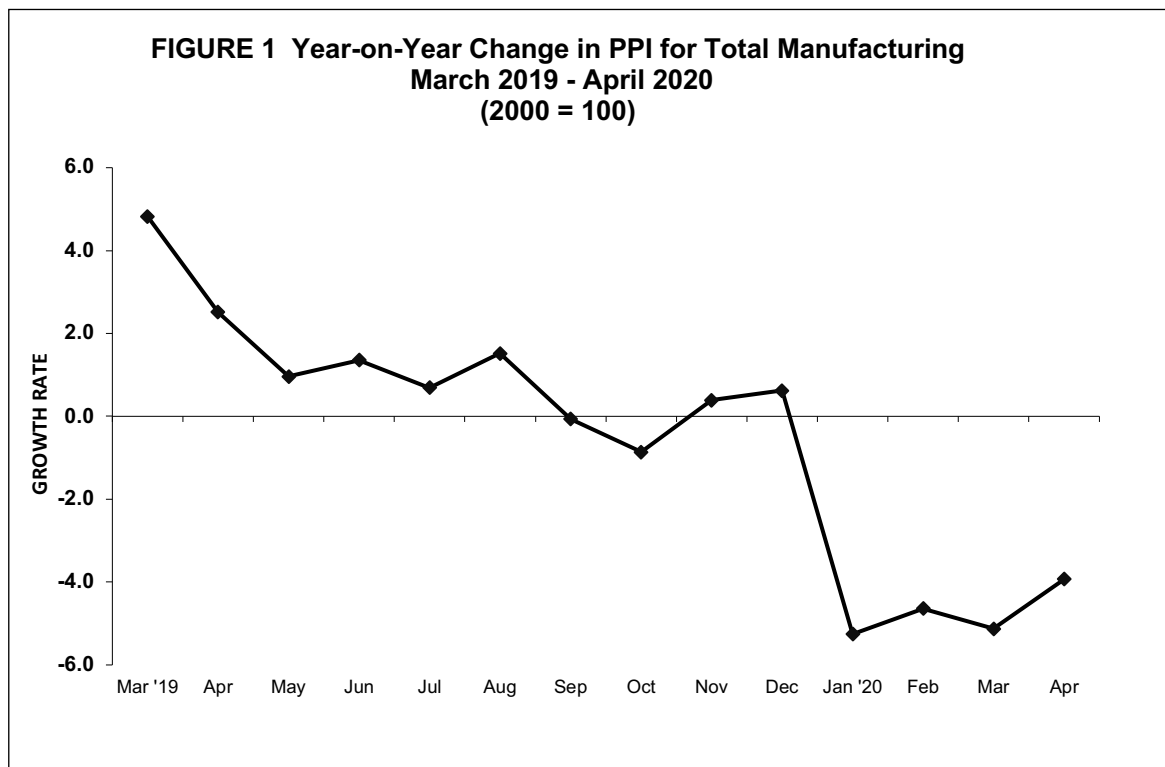| Category	April 2020	March 2020	April 2019
Producer Price Index (2000=100)	**131.6**	**132.4ʳ**	**137.0**
Year-on-Year Growth (%)	**-3.9**	**-5.1ʳ**	**2.5**
Month-on-Month Growth (%)	**-0.6**	**-0.03ʳ**	**-1.9**

r - revised

Year-on-Year

The Producer Price Index (PPI, 2000=100) for manufacturing remained at downtrend with an annual rate of -3.9 percent in April 2020. In the previous month, it dropped at a faster rate of 5.1 percent. On the contrary, the PPI in April 2019 increased at an annual rate of 2.5 percent.

The decline in PPI in April 2020 can be attributed to the contractions in the indices of 15 industry groups, four of which posted double-digit annual decrements as follows:

- **petroleum products** (-20.4%),
- **leather products** (-15.6%),
- **fabricated metal products** (-11.6%), and
- **footwear and wearing apparel** (-10.9%).

On the other hand, **furniture and fixtures**, which rose by 20.0 percent, led the five industry groups that posted annual increments. *Refer to Tables 1 and A-1.*
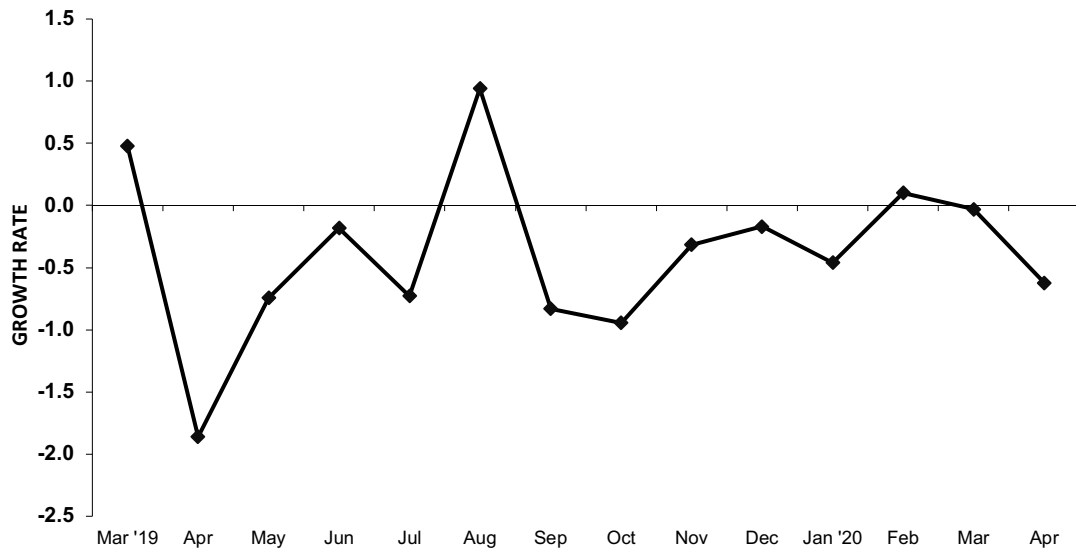
FIGURE 1 Year-on-Year Change in PPI for Total Manufacturing
March 2019 - April 2020
(2000 = 100)

Month-on-Month

On a month-on-month movement, the PPI slightly decreased at a monthly rate of 0.6 percent in April 2020, following a slower drop of 0.03 percent in March 2020. In April last year, PPI posted a sharper decline at a monthly rate of 1.9 percent.

Eleven industry groups posted negative monthly growth rates in April 2020 with **petroleum products** posting the highest monthly decrement of 11.4 percent. Furthermore, PPI for five industry groups posted monthly increments while the rest had zero monthly growth rates. *(Tables 1 and A-2)*

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FIGURE 2 Month-on-Month Change in PPI for Total Manufacturing
March 2019 - April 2020
(2000 = 100)

GROWTH RATE

1.5	
1.0	
0.5	
0.0	
-0.5	
-1.0	
-1.5	
-2.0	
-2.5	

Mar '19   Apr   May   Jun   Jul   Aug   Sep   Oct   Nov   Dec   Jan '20   Feb   Mar   Apr

TABLE A-1   Year-on-Year Growth Rate (%) of Producer Price Index
by Industry Group
March 2020 and April 2020
(2000=100)

INDUSTRY GROUP	April 2020	March 2020
Tobacco Products	4.8	4.8^r
Furniture & Fixtures	20.0	20.4^r
Beverages	1.9	2.9^r
Food Manufacturing	0.3	-0.1^r
Printing	1.8	1.8
Petroleum Products	-20.4	-10.2^r
Transport Equipment	-4.2	-12.0^r
Electrical Machinery	-2.9	-4.2^r
Basic Metals	-6.2	-6.9^r
Chemical Products	-4.7	-5.0^r
Fabricated Metal Products	-11.6	-12.0^r
Footwear & Wearing Apparel	-10.9	-10.4^r
Machinery Except Electrical	-2.1	-2.5^r
Paper & Paper Products	-5.5	-5.2^r
Non - Metallic Mineral Products	-2.0	-3.4^r
Rubber and Plastic Products	-2.0	-2.3^r
Wood & Wood Products	-7.6	-12.1^r
Leather Products	-15.6	-14.5^r
Miscellaneous Manufactures	-0.8	-1.6^r
Textiles	-0.6	-6.8^r

r - revised

Note:

1) Industry groups are ranked according to their contributions to the overall growth rate

TABLE A-2 Month-on-Month Growth Rate (%) of Producer Price Index
by Industry Group
March 2020 and April 2020
(2000=100)

INDUSTRY GROUP	April 2020	March 2020
Food Manufacturing	0.2	0.2^r
Transport Equipment	0.3	0.2^r
Non - Metallic Mineral Products	0.4	-0.2^r
Machinery Except Electrical	0.1	b/^{r}
Fabricated Metal Products	0.2	b/^{r}
Leather Products	0.0	0.0^r
Tobacco Products	0.0	a/^{r}
Printing	0.0	0.0
Textiles	0.0	-1.0^r
Petroleum Products	-11.4	-5.6^r
Electrical Machinery	-1.0	0.7^r
Basic Metals	-0.9	-0.8^r
Chemical Products	-0.4	0.7^r
Paper & Paper Products	-0.7	-0.9^r
Beverages	-0.1	0.1^r
Rubber and Plastic Products	-0.2	-0.2^r
Furniture & Fixtures	-0.5	0.1^r
Wood & Wood Products	-0.2	-0.2^r
Footwear & Wearing Apparel	-0.1	b/^{r}
Miscellaneous Manufactures	b/	0.2^r

r - revised
a/ - Less than 0.05 percent increase
b/ - Less than 0.05 percent decrease

Note:
1) Industry groups are ranked according to their contribution to the overall growth rate

CLAIRE DENNIS S. MAPA, Ph.D.
Undersecretary
National Statistician and Civil Registrar General

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

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

   where:

   PPI_{ijm} = PPI for the ith industry class (4-digit) of the jth 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 ith industry class

b. Monthly Index

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

where:

PPI_{ijm}	=	PPI for the ith industry class (4-digit) of the jth industry group (3-digit) at the current month m
PPI_{ijm-1}	=	PPI for the ith industry class of the jth 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 ith industry class

Same formula for industry groups without sub-group

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

$$PPI_{jm} = \frac{1}{\sum\limits_{i=1}^{p}\left(W_{ij} \times \dfrac{1}{PPI_{ijm}}\right)} :$$

where:

PPI_{jm}	=	PPI for the jth industry group (3-digit) at the current month m
PPI_{ijm}	=	PPI for the ith industry class (4-digit) of the jth industry group at the current month m
W_{ij}	=	Weight of the ith industry class of the jth industry group
p	=	number of industry classes

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

$$PPI_{m} = \frac{1}{\sum\limits_{i=1}^{q}\left(W_{j} \times \dfrac{1}{PPI_{jm}}\right)}$$

where:

PPI_{m}	=	PPI for total manufacturing at the current month m
PPI_{jm}	=	PPI for the jth industry group (3-digit) at the current month m
W_{j}	=	Weight of the jth 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**

  <u>Year-on-year</u> growth rates are computed by dividing the current month index by the index in the same month of the previous year less 1.

  <u>Month-on-month</u> growth rates are computed by dividing the current month 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 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.

2009 PSIC CODE	INDUSTRY DESCRIPTION
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
C18	Printing
C19	Petroleum products*
C20, C21	Chemical products*
C22	Rubber and plastic products*

2009 PSIC CODE	INDUSTRY DESCRIPTION
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