



PRESS RELEASE

MONTHLY INTEGRATED SURVEY OF SELECTED INDUSTRIES FEBRUARY 2020

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**Table A Year-on-Year Growth Rates for Production Index, Net Sales Index and
Producer Price Index
February-January 2020 and February 2019
(In Percent)**

TOTAL MANUFACTURING	FEBRUARY 2020	JANUARY 2020	FEBRUARY 2019
Production Index (2000=100)			
Value (VaPI)	-1.8	-5.2 ^r	-6.2
Volume (VoPI)	3.0	0.1 ^r	-9.3
Net Sales Index (2000=100)			
Value (VaNSI)	3.1	3.2 ^r	3.7
Volume (VoNSI)	8.2	9.0 ^r	0.3
Producer Price Index (2000=100)	-4.7 ^r	-5.3 ^r	3.4

r- revised

1. Production

- **Value of Production Index decreases at a slower pace**

Based on the preliminary results of the Monthly Integrated Survey of Selected Industries (MISSI), Value of Production Index (VaPI) for Manufacturing sector dropped at an annual rate of 1.8 percent in February 2020. This decline was slower than the recorded decreases in the previous month at annual rate of 5.2 percent and in February of the previous year at 6.2 percent. (Table A)

Eleven of the 20 major industry groups pulled down the VaPI with the following major industry groups largely contributing to the decline: **petroleum products** (-35.9%), **tobacco products** (-26.1%), **leather products** (-26.1%), **miscellaneous manufactures** (-24.4%),

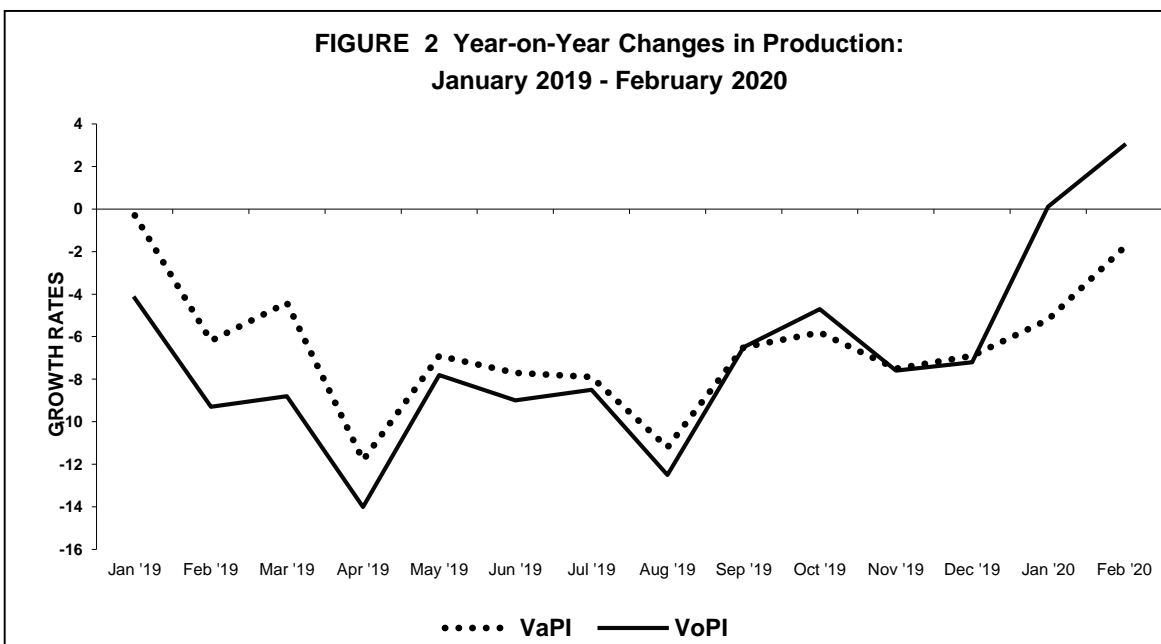
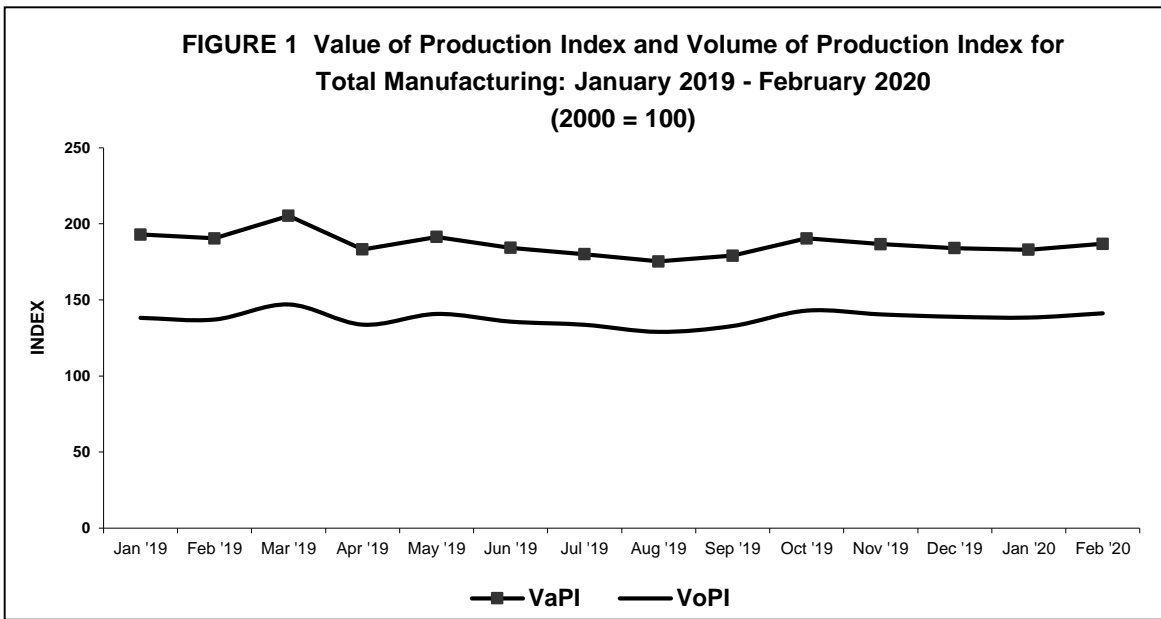


basic metals (-14.9%), **transport equipment** (-12.1%), and **paper and paper products** (-10.6%). (Tables 1 and 1-A)

- **Volume of Production Index rebounds from previous year's level**

The Volume of Production Index (VoPI) made a turnaround as it grew by 3.0 percent in February 2020, from -9.3 percent annual growth in the same month a year ago. In the previous month, VoPI grew by 0.1 percent annually. (Table A)

Ten major industry groups exhibited increases with **printing** (38.4%), **fabricated metal products** (30.3%), **machinery except electrical** (28.0%), **chemical products** (23.8%), **beverages** (16.9%), and **wood and wood products** (11.3%) recording two-digit annual growths. (Tables 1-B and 2)



2. Net Sales

- **Value of Net Sales Index sustains growth**

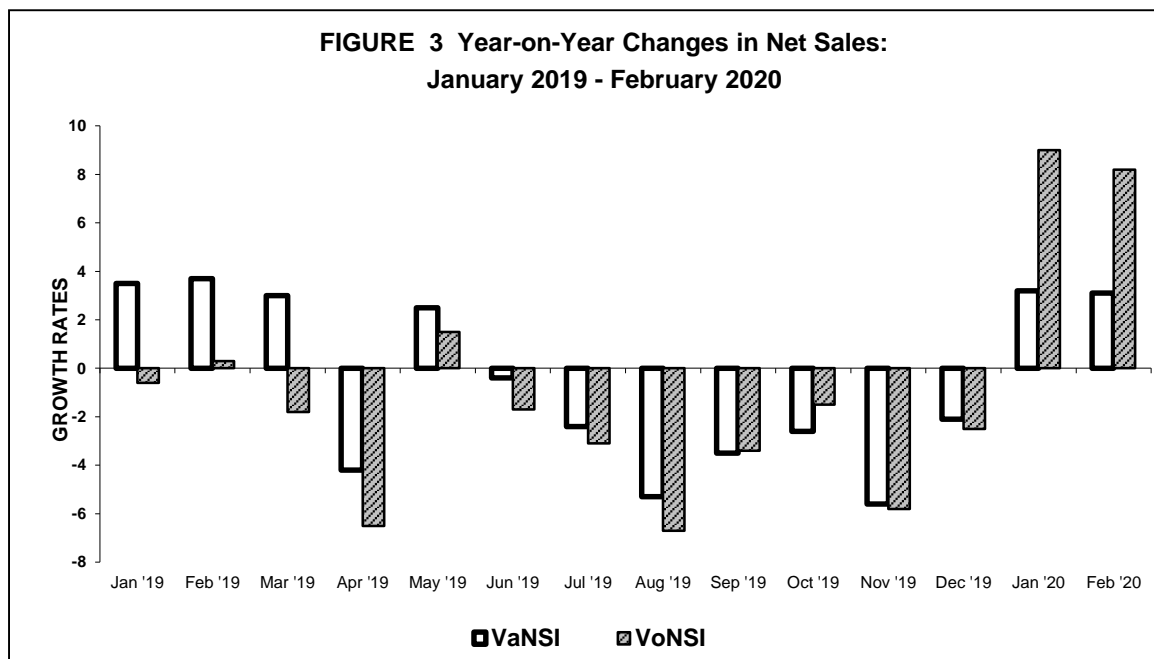
The Value of Net Sales Index (VaNSI) reflected a year-on-year increase of 3.1 percent in February 2020, slightly slower than its annual growth in the previous month of 3.2 percent. In February 2019, VaNSI grew at a faster pace of 3.7 percent. (Table A)

The uptrend in VaNSI was brought about by the increments in 11 major industry groups with two-digit increases noted in the following: **tobacco products** (30.6%), **printing** (30.2%), **beverages** (21.7%), **machinery except electrical** (20.3%), and **chemical products** (17.2%). (Tables 2-A and 3)

- **Volume of Net Sales Index picks up**

Year-on-year, the Volume of Net Sales Index (VoNSI) showed an uptick of 8.2 percent in February 2020, lower than the growth in the previous month of 9.0 percent. During the same month of the previous year, VoNSI increased at a slower pace of 0.3 percent. (Table A)

Fourteen of the major industry groups contributed to the positive growth of VoNSI, eight of which had two-digit annual growth rates as follows: **chemical products** (29.8%), **printing** (27.9%), **machinery except electrical** (25.4%), **tobacco products** (24.7%), **fabricated metal products** (19.9%), **beverages** (18.5%), **transport equipment** (12.6%), and **footwear and wearing apparel** (11.5%). (Tables 2-B and 4)



- **Average Capacity Utilization Rate is highest for petroleum products**

Average capacity utilization rate for total manufacturing in February 2020 was posted at 84.6 percent. Twelve of the 20 major industries had at least 80 percent capacity utilization rates during the month. These were:

- petroleum products (90.0%)
- basic metals (88.8%)
- machinery except electrical (86.7%)
- non-metallic mineral products (86.2%)
- food manufacturing (85.5%)
- chemical products (85.3%)
- electrical machinery (84.9%)
- printing (84.1%)
- paper and paper products (83.9%)
- rubber and plastic products (83.2%)
- wood and wood products (82.3%)
- textiles (80.4%)

(Table 6)

- **More than a quarter of total manufacturing establishments operate at full capacity**

The proportion of establishments that operated at full capacity (90% to 100%) was more than a quarter (27.9%) of the total number of establishments for manufacturing. More than half (54.4%) operated at 70 to 89 percent capacity while almost one-fifth (17.7%) operated below 70 percent capacity. (Table B)

Table B Distribution of Key Manufacturing Establishments by Capacity Utilization for Total Manufacturing: February 2020

Capacity Utilization	Number of Establishments	Percent Share
Below 50%	33	3.8
50% - 59%	36	4.2
60% - 69%	85	9.7
70% - 79%	185	21.2
80% - 89%	290	33.2
90% - 100%	243	27.9



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

**TABLE 1-A Year-on-Year Growth Rate (%) of Value of Production Index
by Major Industry Group
January 2020 and February 2020
(2000 =100)**

MAJOR INDUSTRY GROUP	February 2020	January 2020
Gainers		
Machinery except electrical	22.8	18.8 ^r
Beverages	20.0	0.8 ^r
Chemical products	11.8	5.1 ^r
Food manufacturing	2.9	1.4 ^r
Printing	40.9	41.7
Fabricated metal products	17.8	25.2 ^r
Rubber and plastic products	0.7	-5.3 ^r
Non-metallic mineral products	0.2	-2.5 ^r
Wood and wood products	0.4	-48.7 ^r
Losers		
Petroleum products	-35.9	-40.9
Electrical machinery	-8.9	-10.9 ^r
Basic metals	-14.9	-3.0
Transport equipment	-12.1	-17.8 ^r
Tobacco products	-26.1	-12.1
Miscellaneous manufactures	-24.4	-25.4 ^r
Paper and paper products	-10.6	-12.9 ^r
Textiles	-9.4	-16.3 ^r
Footwear and wearing apparel	-4.5	-2.1 ^r
Leather products	-26.1	-30.1 ^r
Furniture and fixtures	-6.4	13.7 ^r

r- revised

Note: Major Industry groups are ranked according to their contribution to the overall annual growth rate.

**TABLE 1-B Year-on-Year Growth Rate (%) of Volume of Production Index
by Major Industry Group
January 2020 and February 2020
(2000 = 100)**

MAJOR INDUSTRY GROUP	February 2020	January 2020
Gainers		
Machinery except electrical	28.0	26.6 ^r
Chemical products	23.8	15.0 ^r
Beverages	16.9	-2.7 ^r
Food manufacturing	3.3	2.7 ^r
Printing	38.4	39.2 ^r
Fabricated metal products	30.3	45.3 ^r
Footwear and wearing apparel	3.5	9.2 ^r
Non-metallic mineral products	3.6	-0.7 ^r
Rubber and plastic products	3.6	-2.5 ^r
Wood and wood products	11.3	-42.5 ^r
Losers		
Petroleum products	-35.6	-40.1 ^r
Electrical machinery	-5.7	-5.6 ^r
Tobacco products	-29.3	-18.3
Basic metals	-12.3	-0.2 ^r
Miscellaneous manufactures	-23.1	-24.6 ^r
Furniture and fixtures	-22.1	-4.3 ^r
Paper and paper products	-7.1	-9.7 ^r
Textiles	-4.6	-11.6 ^r
Transport equipment	-0.9	-8.7 ^r
Leather products	-13.3	-19.6 ^r

r- revised

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

**TABLE 2-A Year-on-Year Growth Rate (%) of Value of Net Sales Index
by Major Industry Group
January 2020 and February 2020
(2000 =100)**

MAJOR INDUSTRY GROUP	February 2020	January 2020
Gainers		
Machinery except electrical	20.3	0.4 ^r
Chemical products	17.2	11.2
Beverages	21.7	14.3
Tobacco products	30.6	20.7
Petroleum products	4.6	1.9
Food manufacturing	2.4	2.0 ^r
Printing	30.2	26.5
Fabricated metal products	8.4	6.9 ^r
Miscellaneous manufactures	5.1	-4.9 ^r
Footwear and wearing apparel	2.8	11.6 ^r
Rubber and plastic products	4.7	0.9 ^r
Losers		
Electrical machinery	-11.1	0.3 ^r
Basic metals	-16.7	-1.6 ^r
Wood and wood products	-25.7	-16.0 ^r
Paper and paper products	-3.8	-5.8 ^r
Furniture and fixtures	-7.0	11.8 ^r
Textiles	-2.9	-17.3 ^r
Leather products	-19.1	-34.1 ^r
Non-metallic mineral products	-1.1	-3.1 ^r
Transport equipment	-0.2	1.4 ^r

r- revised

Note: Major Industry groups are ranked according to their contribution to the overall annual growth rate.

**TABLE 2-B Year-on-Year Growth Rate (%) of Volume of Net Sales Index
by Industry Group
January 2020 and February 2020
(2000 = 100)**

MAJOR INDUSTRY GROUP	February 2020	January 2020
Gainers		
Chemical products	29.8	21.7 ^r
Machinery except electrical	25.4	7.0 ^r
Beverages	18.5	10.4 ^r
Transport equipment	12.6	12.6 ^r
Petroleum products	5.0	3.5 ^r
Tobacco products	24.7	12.3
Food manufacturing	2.7	3.3 ^r
Footwear and wearing apparel	11.5	24.4 ^r
Printing	27.9	24.2 ^r
Fabricated metal products	19.9	24.1 ^r
Miscellaneous manufactures	6.9	-3.8 ^r
Rubber and plastic products	7.7	3.9 ^r
Non-metallic mineral products	2.2	-1.3 ^r
Textiles	2.3	-12.7 ^r
Losers		
Electrical machinery	-8.0	6.3 ^r
Basic metals	-14.2	1.2 ^r
Furniture and fixtures	-22.6	-5.9 ^r
Wood and wood products	-17.6	-5.9
Leather products	5.5	-24.2 ^r
Paper and paper products	1/	-2.3 ^r

r - revised

Note: Major Industry groups are ranked according to their contribution to the overall annual growth rate.

1/ - Less than 0.05 percent decrease

Technical Notes

I. Introduction

The Monthly Integrated Survey of Selected Industries (MISSI) is one of the designated statistical activities undertaken by the Philippine Statistics Authority with the objective of providing flash indicators on the performance of growth-oriented industries in the manufacturing sector. The survey gathers monthly data on employment, compensation, production, net sales, inventories and capacity utilization from manufacturing establishments.

The indicators generated from the 2020 MISSI at the 3/4-digit 2009 Philippine Standard Industrial Classification (PSIC) level are Value of Production Index (VaPI), Volume of Production Index (VoPI), Value of Net Sales Index (VaNSI), Volume of Net Sales Index (VoNSI) and capacity utilization of industries. The VoPI and VoNSI, however, are derived indicators using the 2020 Producer Price Index (PPI) as deflator.

II. Method of Index Computation

The MISSI utilizes the Laspeyres-type method of index computation where the weights are based on the value of production from the Census of Philippine Business and Industry (CPBI).

For the 2020 MISSI index series with base year of 2000, the weights of the major industries and sub-industries are based from the results of the 2000 CPBI for manufacturing establishments with average total employment of 20 and over. The weights are computed from the value of products sold plus change in inventories.

The formula in the computation of indices and growth rates are as follows:

1. Value of Production Index (VaPI)

a. Computation of Index for Industry Class Level (3/4-digit PSIC)

- i. For the First Month of the Base Year

$$\text{VaPI}_{ijm} = \frac{V_{ijm}}{V_{ij0}} \times 100$$

where:

- | | | |
|---------------------|---|--|
| VaPI_{ijm} | = | VaPI for the i^{th} industry class (3/4-digit) of the j^{th} industry group (2/3-digit) at the current month m |
| V_{ijm} | = | total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group at the current month m |
| V_{ij0} | = | average monthly value of production at base year 0 |

ii. For Succeeding Months

$$VaPI_{ijm} = \frac{V_{ijm}}{V_{ij(m-1)}} \times VaPI_{ij(m-1)} \times 100$$

where:

- $VaPI_{ijm}$ = VaPI for the i^{th} industry class (3/4-digit) of the j^{th} industry group (2/3-digit) at the current month m
- $VaPI_{ij(m-1)}$ = VaPI for the i^{th} industry class of the j^{th} industry group for the previous month $m-1$
- V_{ijm} = total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group at the current month m
- $V_{ij(m-1)}$ = total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group for the previous month $m-1$

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

$$VaPI_{jm} = \sum_{i=1}^n W_{ij} \times VaPI_{ijm}$$

where:

- $VaPI_{jm}$ = VaPI for j^{th} industry group (2/3-digit PSIC) at current month m
- $VaPI_{ijm}$ = VaPI for the i^{th} industry class (3/4-digit) of the j^{th} industry group at the current month m
- W_{ij} = Weight for the i^{th} industry class of the j^{th} industry group
- n = Number of industry class in the j^{th} industry group

Same formula for industry groups without Sub-sector

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

$$VaPI_m = \sum_{j=1}^p W_j \times VaPI_{jm}$$

where:

- $VaPI_m$ = VaPI for the current month m
- $VaPI_{jm}$ = VaPI for j^{th} industry group (2/3-digit) at current month m
- W_j = Weight for the j^{th} industry group
- p = Number of industry groups = 20

2. Value of Net Sales Index (VanSI)

The same methodology is used to compute the Value of Net Sales Index (VanSI)

3. Volume of Production Index (VoPI)

a. Computation of Index for Industry Class Level (3/4-digit PSIC)

$$\text{VoPI}_{ijm} = \frac{\text{VaPI}_{ijm}}{\text{PPI}_{ijm}} \times 100$$

where:

VoPI_{ijm} = VoPI for the i^{th} industry class (3/4-digit) of the j^{th} industry group (2/3-digit) at the current month m

VaPI_{ijm} = VaPI for the i^{th} industry class of the j^{th} industry group at the current month m

PPI_{ijm} = PPI for the i^{th} industry class of the j^{th} industry group at the current month m

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

$$\text{VoPI}_{jm} = \frac{\text{VaPI}_{jm}}{\text{PPI}_{jm}} \times 100$$

where:

VoPI_{jm} = VoPI for the j^{th} industry group (2/3-digit) at the current month m

VaPI_{jm} = VaPI for the j^{th} industry group at the current month m

PPI_{jm} = PPI for the j^{th} industry group at the current month m

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

$$\text{VoPI}_m = \frac{\text{VaPI}_m}{\text{PPI}_m} \times 100$$

where:

VoPI_m = VoPI for total manufacturing at the current month m

VaPI_m = VaPI for total manufacturing at the current month m

PPI_m = PPI for total manufacturing at the current month m

4. Volume of Net Sales Index (VoNSI)

The same methodology is used to compute the Volume of Net Sales Index (VoNSI)

5. Computation of Growth Rates

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

III. Imputation and Revision

Imputation is done for sample establishments that are in operation during the reference period but no response during the release date. Results are revised accordingly when the actual data are received and these revisions are reflected in the next release.

IV. Industry Coverage

The 2020 MISSI utilizes the 2009 PSIC to classify major industries and sub-industries. Twenty major industries of the 2009 PSIC were formed to comprise the industry coverage of the 2020 MISSI. 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*
C23	Non-metallic mineral products*
C24	Basic metals*
C25,C3311	Fabricated metal products
C262,C275,C28, C263,C268,C3312,C332	Machinery except electrical*
C261,C264,C27, C29301,C3314,C332	Electrical machinery*
C29 except C29301, C30,C3315	Transport equipment
C31	Furniture and fixtures
C265,C266,C267,C32, C3313,C3319	Miscellaneous manufactures

* - Major industry groups categorized into industry classes