



# PRESS RELEASE

**PRODUCTION INDEX AND NET SALES INDEX  
(Monthly Integrated Survey of Selected Industries)  
January 2022  
(2018=100)**

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Table A. Year-on-Year Growth Rates (%) of Production Index, Net Sales Index, and Producer Price Index for Total Manufacturing (2018=100): January 2021, December 2021<sup>r</sup>, and January 2022<sup>p</sup> (in percent)

<b>TOTAL MANUFACTURING</b>	<b>JANUARY 2021</b>	<b>DECEMBER 2021<sup>r</sup></b>	<b>JANUARY 2022<sup>p</sup></b>
<b>Production Index (2018=100)</b>			
Value (VaPI)	<b>-19.5</b>	<b>22.1</b>	<b>21.3</b>
Volume (VoPI)	<b>-14.5</b>	<b>21.3</b>	<b>16.5</b>
<b>Net Sales Index (2018=100)</b>			
Value (VaNSI)	<b>-16.9</b>	<b>21.5</b>	<b>14.2</b>
Volume (VoNSI)	<b>-11.7</b>	<b>20.8</b>	<b>9.8</b>
<b>Producer Price Index (2018=100)</b>	<b>-5.8</b>	<b>0.6</b>	<b>4.1</b>

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



## PRODUCTION

### Value of Production maintained a double-digit growth

The Value of Production Index (VaPI) for manufacturing posted a year-on-year increase of 21.3 percent in January 2022, from a slightly faster annual growth rate of 22.1 percent in the previous month. In contrast, the annual growth rate for VaPI in January 2021 was recorded at -19.5 percent. (Tables A and 1)

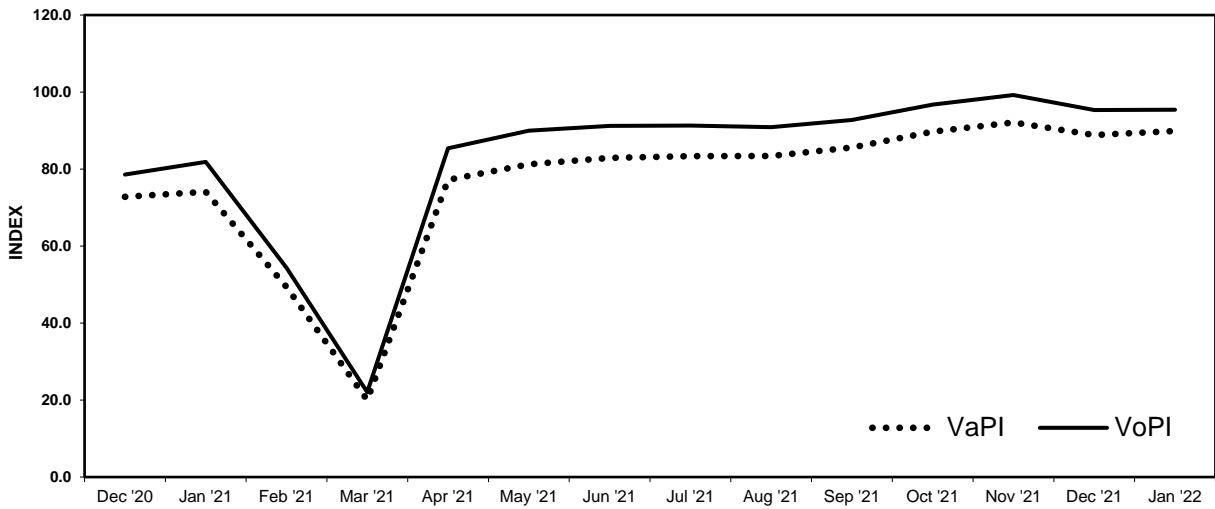
The growth in VaPI for January 2022 was contributed by the upturns in 19 of the 22 industry divisions. Among these, the top contributor was **manufacture of tobacco** with **88.1** percent annual growth rate. On the other hand, the remaining three industry divisions recorded decreases with **manufacture of wearing apparel** registering the fastest annual decline of -22.4 percent. (Tables B.1 and 1)

### Volume of Production Index likewise accelerated

The Volume of Production Index (VoPI) continued to accelerate, but at a slower annual rate of 16.5 percent in January 2022 compared with the 21.3 percent annual increase registered in the previous month. In January 2021, VoPI dropped at an annual rate of -14.5 percent. (Tables A and 2)

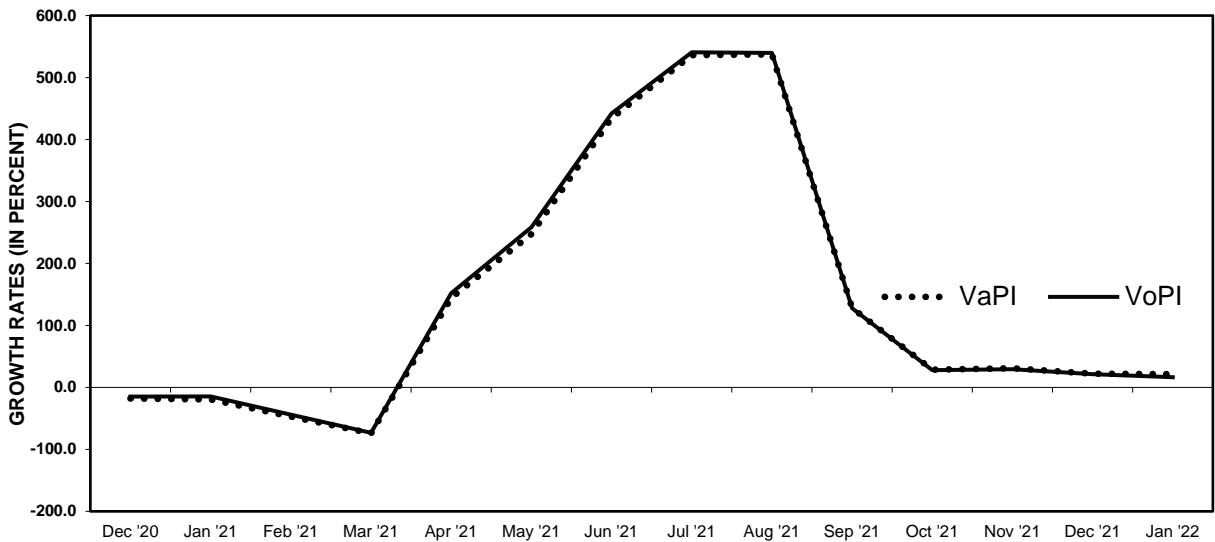
The expansion in VoPI was brought about by the positive growth rates of 16 industry divisions. Of these, **manufacture of tobacco products**; and **manufacture of wood, bamboo, cane, rattan articles and related products** were the major contributing factors with growth rates of 88.4 and 86.8 percent, respectively. On the contrary, the remaining six industry divisions recorded downturns which was led by **manufacture of wearing apparel** with -24.2 percent annual rate. (Tables B.2 and 2)

Figure 1. Value and Volume of Production Index for Total Manufacturing December 2020 - January 2022<sup>p</sup> (2018 = 100)



p – preliminary  
Source: Philippine Statistics Authority

Figure 2. Year-on-Year Growth Rates of Value and Volume of Production Index for Total Manufacturing (in percent) December 2020 - January 2022<sup>p</sup> (2018 = 100)



p – preliminary  
Source: Philippine Statistics Authority

TABLE B.1. Year-on-Year Growth Rate (%) of Value of Production Index  
by Industry Division: December 2021<sup>r</sup> and January 2022<sup>p</sup>  
(2018 =100)

INDUSTRY DIVISION	December 2021 <sup>r</sup>	January 2022 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	75.1	67.1
Manufacture of food products	33.1 <sup>r</sup>	17.7
Manufacture of basic metals	15.6 <sup>r</sup>	51.0
Manufacture of computer, electronic, and optical products	12.0 <sup>r</sup>	13.2
Manufacture of tobacco products	-13.8	88.1
Manufacture of beverages	-11.8	10.8
Manufacture of other non-metallic mineral products	35.9 <sup>r</sup>	20.5
Manufacture of wood, bamboo, cane, rattan articles and related products	82.9 <sup>r</sup>	71.2
Other manufacturing and repair and installation of machinery and equipment	20.7 <sup>r</sup>	20.2
Manufacture of machinery and equipment except electrical	43.2 <sup>r</sup>	17.5
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-29.7 <sup>r</sup>	42.6
Manufacture of paper and paper products	-4.0 <sup>r</sup>	11.3
Manufacture of chemical and chemical products	38.3 <sup>r</sup>	5.4
Manufacture of fabricated metal products, except machinery and equipment	31.9 <sup>r</sup>	4.3
Manufacture of textiles	19.9 <sup>r</sup>	26.7
Manufacture of rubber and plastic products	-9.8 <sup>r</sup>	4.3
Printing and reproduction of recorded media	-1.8 <sup>r</sup>	7.9
Manufacture of furniture	-3.0	10.9
Manufacture of electrical equipment	64.0 <sup>r</sup>	4.0
<b>Losers</b>		
Manufacture of wearing apparel	0.2 <sup>r</sup>	-22.4
Manufacture of transport equipment	-10.3 <sup>r</sup>	-0.7
Manufacture of leather and related products, including footwear	2.2 <sup>r</sup>	-5.2

p - preliminary, r- revised

Source: Philippine Statistics Authority

TABLE B.2. Year-on-Year Growth Rate (%) of Volume of Production Index by Industry Division: December 2021<sup>r</sup> and January 2022<sup>p</sup> (2018 = 100)

INDUSTRY DIVISION	December 2021 <sup>r</sup>	January 2022 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	47.6	44.6
Manufacture of computer, electronic, and optical products	28.8 <sup>r</sup>	15.0
Manufacture of food products	30.3 <sup>r</sup>	11.6
Manufacture of basic metals	6.8 <sup>r</sup>	36.1
Manufacture of tobacco products	-14.5	88.4
Manufacture of wood, bamboo, cane, rattan articles and related products	110.3 <sup>r</sup>	86.8
Manufacture of other non-metallic mineral products	35.6 <sup>r</sup>	16.3
Manufacture of beverages	-14.6	6.9
Other manufacturing and repair and installation of machinery and equipment	23.1 <sup>r</sup>	20.9
Manufacture of machinery and equipment except electrical	49.5 <sup>r</sup>	20.0
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-30.0 <sup>r</sup>	47.8
Manufacture of fabricated metal products, except machinery and equipment	33.7 <sup>r</sup>	4.5
Manufacture of paper and paper products	-5.7 <sup>r</sup>	7.5
Manufacture of textiles	14.0 <sup>r</sup>	20.5
Printing and reproduction of recorded media	-0.5 <sup>r</sup>	9.3
Manufacture of furniture	-2.4	7.5
<b>Losers</b>		
Manufacture of wearing apparel	-0.4 <sup>r</sup>	-24.2
Manufacture of chemical and chemical products	31.5 <sup>r</sup>	-2.3
Manufacture of rubber and plastic products	-14.7 <sup>r</sup>	-2.0
Manufacture of transport equipment	-11.5 <sup>r</sup>	-0.5
Manufacture of leather and related products, including footwear	0.5 <sup>r</sup>	-6.3
Manufacture of electrical equipment	55.4 <sup>r</sup>	<u>1/</u>

p - preliminary, r- revised

Note: 1/- Less than 0.05 percent decrease

Source: Philippine Statistics Authority

## NET SALES

### Value of Net Sales Index grew at a slower pace

The Value of Net Sales Index (VaNSI) registered an annual increment of 14.2 percent in January 2022. This annual rate was slower than the 21.5 percent expansion in the previous month. In January 2021, VaNSI was at a downward trend with an annual rate of -16.9 percent. (Tables A and 3)

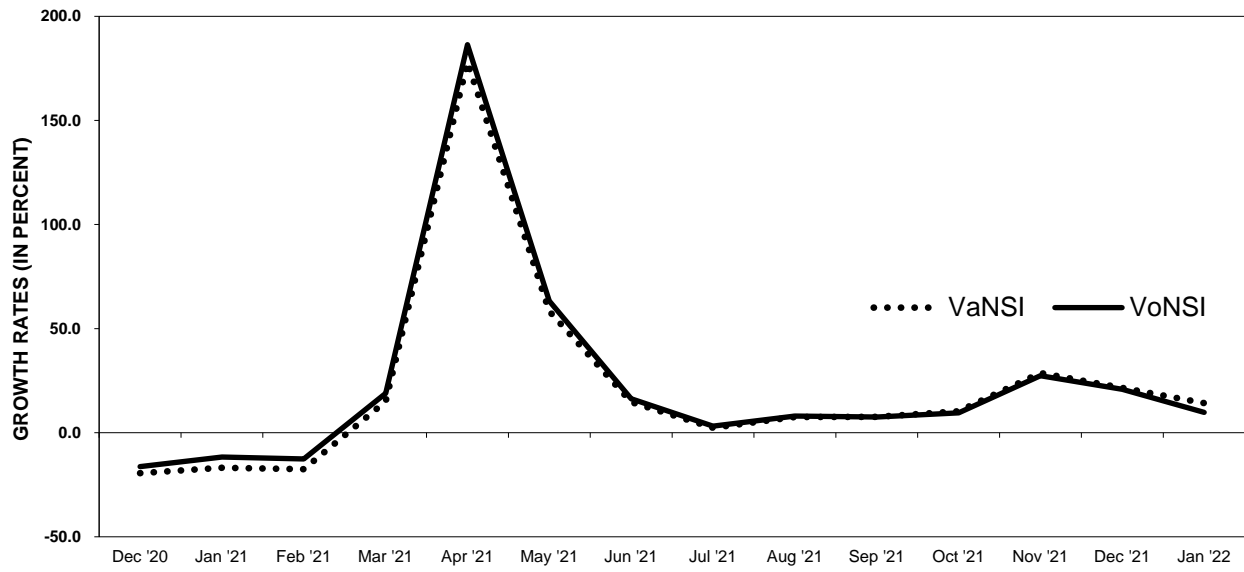
Of the 22 industry divisions, 17 reported positive growth rates led by **manufacture of basic pharmaceutical products and pharmaceutical preparations** which registered an annual increase of 87.9 percent. Meanwhile, five industry divisions showed contractions in January 2022 with **manufacture of wood, bamboo, cane, rattan articles and related products** registering the lowest annual rate of -47.5 percent. (Tables C.1 and 3)

### Volume of Net Sales Index also increased

The Volume of Net Sales Index (VoNSI) recorded a year-on-year rate of 9.8 percent in January 2022, from a double-digit growth of 20.8 percent in the previous month. In January 2021, VoNSI dropped by -11.7 percent. (Tables A and 4)

The increase in VoNSI was brought about by the positive growth rates of 16 industry divisions led by **manufacture of basic pharmaceutical products and pharmaceutical preparations** with 94.8 percent annual growth rate. In contrast, six industry divisions exhibited decreases during the period which was led by **manufacture of wood, bamboo, cane, rattan articles, and related products** at -42.7 percent. (Tables C.2 and 4)

Figure 3. Year-on-Year Changes in Net Sales (in percent):  
December 2020 – January 2022<sup>p</sup> (2018 = 100)



p – preliminary

Source: Philippine Statistics Authority

TABLE C.1. Year-on-Year Growth Rate (%) of Value of Net Sales Index  
by Industry Division: December 2021<sup>r</sup> and January 2022<sup>p</sup>  
(2018 =100)

INDUSTRY DIVISION	December 2021	January 2022 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	62.9	76.7
Manufacture of computer, electronic, and optical products	46.6 <sup>r</sup>	15.1
Manufacture of transport equipment	3.8 <sup>r</sup>	15.1
Manufacture of beverages	-12.0	18.7
Manufacture of food products	17.2 <sup>r</sup>	7.0
Manufacture of other non-metallic mineral products	44.9 <sup>r</sup>	20.9
Manufacture of chemical and chemical products	11.9 <sup>r</sup>	12.5
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-21.3 <sup>r</sup>	87.9
Other manufacturing and repair and installation of machinery and equipment	8.4	29.0
Manufacture of tobacco products	8.3	33.0
Manufacture of basic metals	9.6 <sup>r</sup>	5.7
Printing and reproduction of recorded media	15.8 <sup>r</sup>	22.4
Manufacture of machinery and equipment except electrical	20.8 <sup>r</sup>	18.3
Manufacture of furniture	-6.1 <sup>r</sup>	21.1
Manufacture of textiles	12.9 <sup>r</sup>	19.3
Manufacture of electrical equipment	15.5 <sup>r</sup>	5.9
Manufacture of leather and related products, including footwear	-6.5 <sup>r</sup>	5.9
<b>Losers</b>		
Manufacture of fabricated metal products, except machinery and equipment	27.6 <sup>r</sup>	-40.6
Manufacture of wood, bamboo, cane, rattan articles and related products	15.6 <sup>r</sup>	-47.5
Manufacture of paper and paper products	6.9 <sup>r</sup>	-13.5
Manufacture of wearing apparel	-8.6 <sup>r</sup>	-14.5
Manufacture of rubber and plastic products	-3.9 <sup>r</sup>	-1.1

p - preliminary, r- revised

Source: Philippine Statistics Authority



TABLE C.2. Year-on-Year Growth Rate (%) of Volume of Net Sales  
Index by Industry Division: December 2021<sup>r</sup> and January 2022<sup>p</sup>  
(2018 = 100)

INDUSTRY DIVISION	December 2021 <sup>r</sup>	January 2022 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	37.4	52.8
Manufacture of beverages	-14.8	14.6
Manufacture of computer, electronic, and optical products	68.6 <sup>r</sup>	16.9
Manufacture of transport equipment	2.4 <sup>r</sup>	15.3
Manufacture of other non-metallic mineral products	44.6 <sup>r</sup>	16.7
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-21.6 <sup>r</sup>	94.8
Other manufacturing and repair and installation of machinery and equipment	10.6 <sup>r</sup>	29.7
Manufacture of tobacco products	7.4	33.2
Printing and reproduction of recorded media	17.4 <sup>r</sup>	24.1
Manufacture of machinery and equipment except electrical	26.1 <sup>r</sup>	20.7
Manufacture of food products	14.7 <sup>r</sup>	1.5
Manufacture of chemical and chemical products	6.3 <sup>r</sup>	4.3
Manufacture of furniture	-5.5	17.3
Manufacture of textiles	7.3 <sup>r</sup>	13.5
Manufacture of electrical equipment	9.4 <sup>r</sup>	1.9
Manufacture of leather and related products, including footwear	-8.1 <sup>r</sup>	4.7
<b>Losers</b>		
Manufacture of fabricated metal products, except machinery and equipment	29.3 <sup>r</sup>	-40.5
Manufacture of wood, bamboo, cane, rattan articles and related products	32.9 <sup>r</sup>	-42.7
Manufacture of paper and paper products	5.1 <sup>r</sup>	-16.4
Manufacture of basic metals	1.2 <sup>r</sup>	-4.7
Manufacture of rubber and plastic products	-9.1 <sup>r</sup>	-7.1
Manufacture of wearing apparel	-9.1 <sup>r</sup>	-16.4

p - preliminary, r- revised

Source: Philippine Statistics Authority

## **CAPACITY UTILIZATION**

### **Average capacity utilization rate for manufacturing slightly increased**

Based on responding establishments, the average capacity utilization rate for manufacturing sector in January 2022 was reported at 67.9 percent, from 67.4 percent in the previous month.

There were 20 out of 22 industry divisions with more than 50 percent average capacity utilization rate, led by **manufacture of other non-metallic mineral products** (84.2%), **manufacture of basic pharmaceutical products and pharmaceutical preparations** (79.0%), and **manufacture of furniture** (78.8%). (Table 6)

### **Responding establishments that operated at full capacity was 17.8 percent**

The proportion of establishments that operated at full capacity (90% to 100%) was 17.8 percent of the total number of responding establishments. Meanwhile, 34.3 percent operated at 70 to 89 percent capacity, while 47.9 percent operated below 70 percent capacity. (Table D)

Table D. Distribution of Responding Establishments  
by Capacity Utilization for Total Manufacturing: January 2022<sup>p</sup>

<b>Capacity Utilization</b>	<b>Number of Responding Establishments</b>	<b>Percent Share to Responding Establishments</b>
TOTAL	449	100.0
Below 50%	95	21.2
50% - 59%	65	14.5
60% - 69%	55	12.2
70% - 79%	81	18.0
80% - 89%	73	16.3
90% - 100%	80	17.8

p – preliminary

Notes:

- 1) Details may not sum to totals due to rounding.
- 2) Results are based on the responses of establishments which were in operation during the reference month.
- 3) There were three (3) establishments which responded but were not included in the tabulation as they temporarily or permanently ceased their business operations.

Source: Philippine Statistics Authority

**DENNIS S. MAPA, Ph.D.**

Undersecretary

National Statistician and Civil Registrar General

# 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 MISSI are Value of Production Index (VaPI), Volume of Production Index (VoPI), Value of Net Sales Index (VaNSI), Volume of Net Sales Index (VoNSI) and Average Capacity Utilization Rate of the manufacturing sector.

### Rebasing

Starting with the January 2021 reference month, production and sales indices from the MISSI are rebased to 2018, from 2000 base period.

The major changes in the rebasing are (1) the industry structure or classification and (2) the weights which measure the relevance of the industries. The industry classification for the 2018-based series follows the 2009 Philippine Standard Industry Classification (PSIC), while the 2000-based series adopted the 1994 PSIC. For the rebased series, the weights at the base year were computed based on the final results of the 2018 Census of Philippine Business and Industry (CPBI). The results of the Annual Survey of Philippine Business and Industry will be used to update the weights annually until the next rebasing.

Another changes are on the methodology of index computation and on the estimation of average capacity utilization rate which are discussed in the next section.

## II. Method of Index Computation

The VaPI and VaNSI utilize the Paasche-type method of index computation where the basic data of weight computation are the value of production and sales, respectively. The sources of these data are the

CPBI for the base year and the Annual Survey of Philippine Business and Industry (ASPBI) for the succeeding years until the next rebasing.

## 1. Weights Computation

The weight of the industry group is the percent share of the industry to the total value of production for the industry division. The sum of the weights of all industry groups within an industry division is equal to 1.

The weight of the industry division is the percent share of the industry to the total value of production for the manufacturing sector. The sum of the weights of all industry divisions is equal to 1.

The same methodology is used in the computation of the weights for sales, but instead of value of production, data on sales is used.

## 2. Index Computation

The formula in the computation of indices are as follows:

### 1. Value of Production Index (VaPI)

#### a. Computation of Index for Industry Group Level

##### i. Monthly Index at the base year

$$VaPI_{ijm} = \frac{V_{ijm}}{V_{ij0}} \times 100$$

where:

$VaPI_{ijm}$  = VaPI for industry group j in industry division i at current month m

$V_{ijm}$  = total value of production for all sample establishments of industry group j in industry division i at current month m of the base year

$V_{ij0}$  = average monthly value of production at the base year

## ii. Monthly Index after the base year

$$\text{VaPI}_{ijm} = \frac{V_{ijm}}{V_{ij(m-1)}} \times \text{VaPI}_{ij(m-1)}$$

where:

- $\text{VaPI}_{ijm}$  = VaPI for industry group j in industry division i at current month m
- $\text{VaPI}_{ij(m-1)}$  = VaPI for industry group j in industry division i for the previous month m-1
- $V_{ijm}$  = total value of production for all sample establishments of industry group j in industry division i at current month m
- $V_{ij(m-1)}$  = total value of production for all sample establishments of industry group j in industry division i for the previous month m-1

## b. Computation of Index for Industry Division Level

$$\text{VaPI}_{im} = \frac{1}{\sum_{j=1}^{p_i} \left( W_{ij} \times \frac{1}{\text{VaPI}_{ijm}} \right)}$$

where:

- $\text{VaPI}_{im}$  = VaPI for industry division i at current month m
- $\text{VaPI}_{ijm}$  = VaPI 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 uses the same computation of index as that for industry group level.

### c. Computation of Index for Total Manufacturing

$$VaPI_m = \frac{1}{\sum_{i=1}^{22} \left( W_i \times \frac{1}{VaPI_{im}} \right)}$$

where:

$VaPI_m$  = VaPI for the current month m

$VaPI_{im}$  = VaPI for industry division i at current month m

$W_i$  = weight for industry division i

## 2. Value of Net Sales Index (VaNSI)

The same methodology as the VaPI is used to compute the Value of Net Sales Index (VaNSI).

## 3. Volume of Production Index (VoPI)

### a. Computation for Index for Industry Group Level

$$VoPI_{ijm} = \frac{VaPI_{ijm}}{PPI_{ijm}}$$

where:

$VoPI_{ijm}$  = VoPI for industry group j in industry division i at current month m

$VaPI_{ijm}$  = VaPI for industry group j in industry division i at current month m

$PPI_{ijm}$  = PPI for industry group j in industry division i at current month m

## **b. Computation of Index for Industry Division Level**

$$VoPI_{im} = \frac{VaPI_{im}}{PPI_{im}}$$

where:

$VoPI_{im}$  = VoPI for industry division i at current month m

$VaPI_{im}$  = VaPI for industry division i at current month m

$PPI_{im}$  = PPI for industry division i at current month m

## **c. Computation of Index for Total Manufacturing**

$$VoPI_m = \frac{VaPI_m}{PPI_m}$$

where:

$VoPI_m$  = VoPI for total manufacturing at current month m

$VaPI_m$  = VaPI for total manufacturing at current month m

$PPI_m$  = PPI for total manufacturing at current month m

## **4. Volume of Net Sales Index (VoNSI)**

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

## **5. Average Capacity Utilization Rate**

Capacity Utilization Rate is the ratio of total output to the maximum rated capacity of the establishment. The formulas in obtaining the Average Capacity Utilization Rate (AveCU) are the following:



### a. Computation of AveCU for Industry Group Level

$$AveCU_{ijm} = \frac{\sum_{c=1}^k (X_c \times f_{cijm})}{n_{rijm} + n_{tijm}}$$

where:

$AveCU_{ijm}$  = average capacity utilization rate for industry group j in industry division i at current month m

$X_c$  = midpoint of capacity utilization rate at interval c

$f_{cijm}$  = frequency of responding samples at interval c for industry group j in industry division i at current month m

$n_{rijm}$  = total number of responding (good) establishments for industry group j in industry division i at current month m

$n_{tijm}$  = total number of temporarily closed/closed establishments for industry group j in industry division i at current month m

k = total number of capacity utilization intervals

### b. Computation of AveCU for Industry Division Level

$$AveCU_{im} = \sum_{j=1}^{p_i} (W_{ij} \times AveCU_{ijm})$$

where:

$AveCU_{im}$  = average capacity utilization rate for industry division i at current month m

$W_{ij}$  = weight for industry group j in industry division i

$AveCU_{ijm}$  = average capacity utilization rate for industry group j in industry division i at current month m

$p_i$  = number of industry groups in industry division i

### c. Computation of AveCU for Total Manufacturing

$$AveCU_m = \sum_{i=1}^{22} (W_i \times AveCU_{im})$$

where:

AveCU<sub>m</sub> = average capacity utilization rate for total manufacturing at current month m

W<sub>i</sub> = weight for industry division i

AveCU<sub>im</sub> = average capacity utilization rate for industry division i at current month m

Note:

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

### III. 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.

### IV. 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.

### V. Industry Coverage

The MISSI utilizes the 2009 PSIC to classify industry divisions and industry groups. Twenty-two industry divisions of the 2009 PSIC were formed to comprise the industry coverage of the MISSI.

The table below presents the industry coverage of MISSI by 2009 PSIC code.

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*
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*
C31	Manufacture of furniture
C32,C33	Other manufacturing

*\*Industry divisions categorized further into industry groups*