

# PRESS RELEASE

**PRODUCTION INDEX AND NET SALES INDEX  
(Monthly Integrated Survey of Selected Industries)  
October 2021  
(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): October 2020, September 2021<sup>r</sup>, and October 2021<sup>p</sup> (in Percent)

TOTAL MANUFACTURING	OCTOBER 2020	SEPTEMBER 2021 <sup>r</sup>	OCTOBER 2021 <sup>p</sup>
<b>Production Index (2018=100)</b>			
Value (VaPI)	-28.9	122.5	24.8
Volume (VoPI)	-25.4	123.1	24.7
<b>Net Sales Index (2018=100)</b>			
Value (VaNSI)	-22.1	7.1	13.9
Volume (VoNSI)	-18.3	7.4	13.8
<b>Producer Price Index (2018=100)</b>	-4.6	-0.3	0.1

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

## PRODUCTION

### Value of Production registered slower increment

The Value of Production Index (VaPI) for manufacturing continued to increase but at a slower rate of 24.8 percent in October 2021 compared with its three-digit annual rate of 122.5 percent in the previous month. In contrast, the annual growth rate for VaPI in October 2020 was recorded at -28.9 percent. (Tables A and 1)

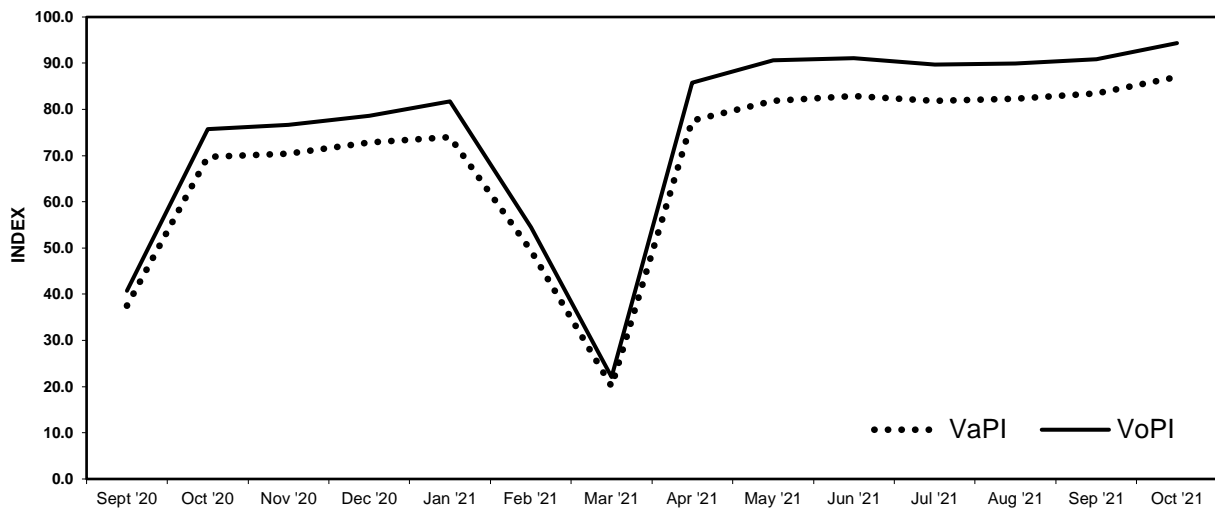
The growth in VaPI for October 2021 was contributed by the increases in 14 of the 22 industry divisions. Among these, the top contributor was **manufacture of fabricated metal products except machinery and equipment** with **176.4** percent annual growth rate. On the other hand, the remaining eight industry divisions recorded decreases with **manufacture of tobacco products** registering the fastest annual decline of -58.2 percent. (Tables 1-A and 1)

### Volume of Production Index also slowed down

Similar to VaPI, the Volume of Production Index (VoPI) posted a positive annual rate of 24.7 percent in October 2021. This is much slower than the 123.1 percent increase registered in the previous month. In October 2020, VoPI dropped at an annual rate of -25.4 percent. (Tables A and 2)

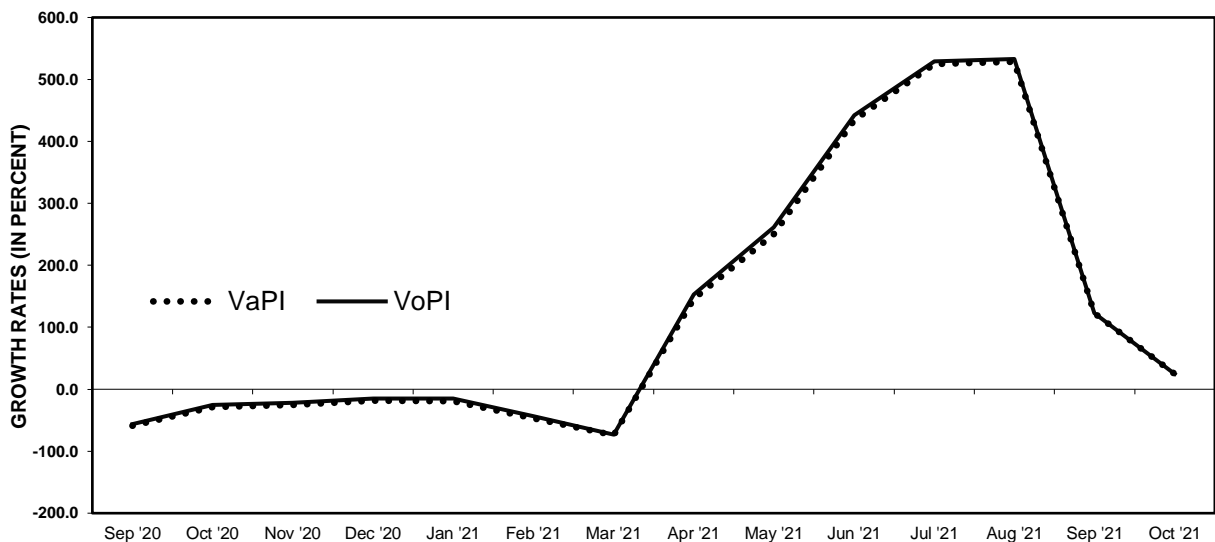
The increase in VoPI was brought about by the positive growth rates of 14 industry divisions. Of these, **manufacture of fabricated metal products** was the major contributing factor with 176.6 percent growth. On the contrary, the remaining eight industry divisions recorded decreases which was led by **manufacture of tobacco products** with -58.6 percent annual rate. (Tables 1-B and 2)

Figure 1. Value and Volume of Production Index for Total Manufacturing  
September 2020 - October 2021<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)  
September 2020 - October 2021<sup>p</sup> (2018 = 100)



p – preliminary  
Source: Philippine Statistics Authority

## NET SALES

### Value of Net Sales Index attained a two-digit growth

The Value of Net Sales Index (VaNSI) accelerated at a faster rate of 13.9 percent in October 2021 compared with the 7.1 percent annual growth rate in the previous month. In October 2020, VaNSI dropped at an annual rate of -22.1 percent. (Tables A and 3)

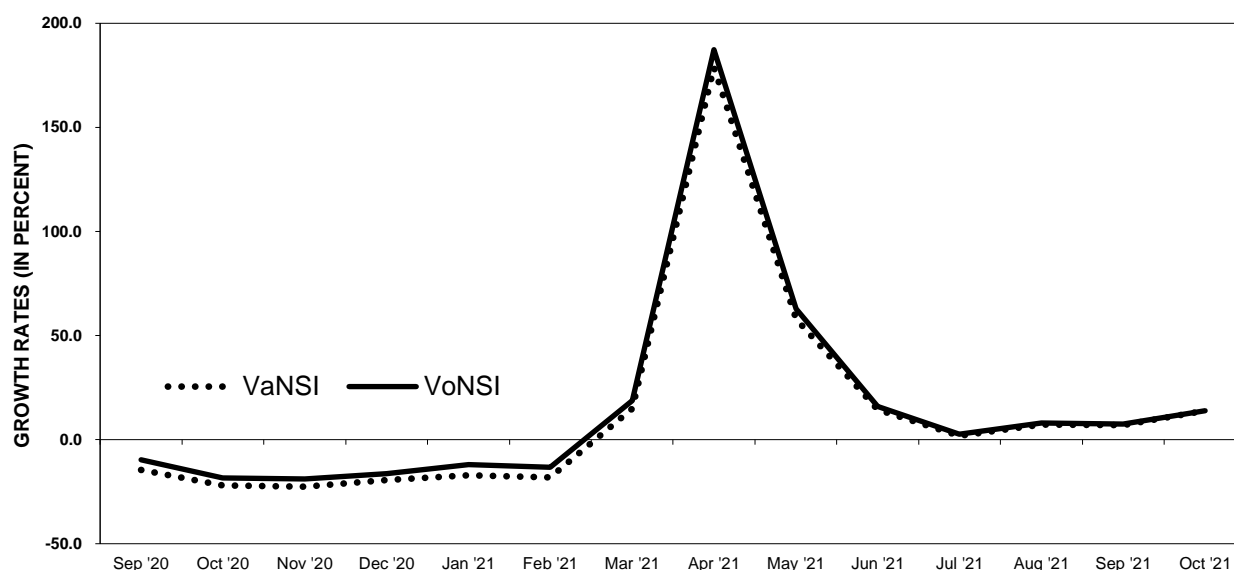
Of the 22 industry divisions, 12 reported positive growths led by **manufacture of coke and refined petroleum products** which registered an annual increase of 85.9 percent. Meanwhile, 10 industry divisions showed downturns in October 2021 with **printing and reproduction of recorded media** registering the lowest rate of -24.5 percent. (Tables 2-A and 3)

### Volume of Net Sales Index likewise expanded

The Volume of Net Sales Index (VoNSI) also recorded a faster year-on-year increase of 13.8 percent in October 2021, from a 7.4 percent increase in the previous month. In October 2020, VoNSI dropped by -18.3 percent. (Tables A and 4)

The increase in VoNSI was brought about by the positive growth rates of nine industry divisions. Of these, **manufacture of coke and refined petroleum products** contributed the highest with 55.4 percent growth. In contrast, the other 13 industry divisions exhibited decreases during the period, with **manufacture of wearing apparel** as the lowest with -23.6 percent rate. (Tables 2-B and 4)

Figure 3. Year-on-Year Changes in Net Sales (in percent):  
September 2020 – October 2021<sup>p</sup> (2018 = 100)



p – preliminary

Source: Philippine Statistics Authority

## CAPACITY UTILIZATION

### Average capacity utilization rate for manufacturing slightly increased

Based on responding establishments, the average capacity utilization rate for the manufacturing sector in October 2021 was slightly higher at 67.0 percent, from 66.6 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** (81.1%), followed by **manufacture of electrical equipment** (77.3%), and **manufacture of furniture** (76.5%). (Table 6)

### Less than one-fourth of the responding establishments operated at full capacity

The proportion of establishments that operated at full capacity (90% to 100%) was 20.5 percent of the total number of responding establishments. Meanwhile, 37.4 percent operated at 70 to 89 percent capacity, while 42.1 percent operated below 70 percent capacity. (Table B)

Table B. Distribution of Responding Establishments  
by Capacity Utilization for Total Manufacturing: October 2021<sup>p</sup>

<b>Capacity Utilization</b>	<b>Number of Responding Establishments</b>	<b>Percent Share to Responding Establishments</b>
TOTAL	511	100.0
Below 50%	74	14.5
50% - 59%	74	14.5
60% - 69%	67	13.1
70% - 79%	76	14.9
80% - 89%	115	22.5
90% - 100%	105	20.5

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 30 establishments which responded but were not included in the tabulation as they temporarily or permanently ceased their business operations.

Source: Philippine Statistics Authority

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

INDUSTRY DIVISION	September 2021 <sup>r</sup>	October 2021 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	890.1	167.4
Manufacture of fabricated metal products, except machinery and equipment	165.7	176.4
Manufacture of food products	16.3	19.0
Manufacture of computer, electronic, and optical products	10.5	17.5
Manufacture of other non-metallic mineral products	29.6	51.0
Manufacture of basic metals	19.1	21.7
Manufacture of electrical equipment	41.9	37.9
Manufacture of machinery and equipment except electrical	8.8	16.8
Manufacture of paper and paper products	3.9	9.0
Other manufacturing and repair and installation of machinery and equipment	-4.7	4.1
Manufacture of textiles	8.3	14.2
Manufacture of leather and related products, including footwear	2.8	2.9
Manufacture of furniture	35.7	0.2
Manufacture of wood, bamboo, cane, rattan articles and related products	16.6	0.1
<b>Losers</b>		
Manufacture of transport equipment	-7.2	-16.2
Manufacture of beverages	-6.3	-14.0
Manufacture of tobacco products	-56.1	-58.2
Manufacture of chemical and chemical products	5.4	-6.8
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-23.1	-23.4
Manufacture of rubber and plastic products	-3.3	-2.3
Printing and reproduction of recorded media	-21.7	-11.3
Manufacture of wearing apparel	-1.8	-4.7

p - preliminary, r- revised

Source: Philippine Statistics Authority

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

INDUSTRY DIVISION	September 2021 <sup>r</sup>	October 2021 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	739.3	123.7
Manufacture of computer, electronic, and optical products	31.6	40.5
Manufacture of fabricated metal products, except machinery and equipment	166.1	176.6
Manufacture of food products	13.2	16.0
Manufacture of other non-metallic mineral products	32.1	52.5
Manufacture of electrical equipment	34.8	30.8
Manufacture of basic metals	12.5	10.9
Manufacture of machinery and equipment except electrical	11.6	18.6
Manufacture of paper and paper products	2.3	7.5
Manufacture of wood, bamboo, cane, rattan articles and related products	31.4	13.5
Other manufacturing and repair and installation of machinery and equipment	-3.5	4.4
Manufacture of textiles	3.5	9.4
Manufacture of leather and related products, including footwear	1.9	1.1
Manufacture of furniture	36.6	0.5
<b>Losers</b>		
Manufacture of transport equipment	-8.5	-16.9
Manufacture of beverages	-8.1	-16.1
Manufacture of tobacco products	-56.3	-58.6
Manufacture of chemical and chemical products	-0.9	-12.7
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-22.4	-24.3
Manufacture of rubber and plastic products	-8.3	-7.4
Printing and reproduction of recorded media	-20.6	-10.0
Manufacture of wearing apparel	-1.2	-4.2

p - preliminary, r- revised

Source: Philippine Statistics Authority



TABLE 2-A. Year-on-Year Growth Rate (%) of Value of Net Sales Index  
by Industry Division: September 2021<sup>r</sup> and October 2021<sup>p</sup>  
(2018 =100)

INDUSTRY DIVISION	September 2021 <sup>r</sup>	October 2021 <sup>p</sup>
<b>Gainers</b>		
Manufacture of coke and refined petroleum products	60.7	85.9
Manufacture of computer, electronic, and optical products	-6.6	26.7
Manufacture of food products	16.2	18.1
Manufacture of basic metals	20.6	32.7
Manufacture of other non-metallic mineral products	53.5	44.7
Manufacture of fabricated metal products, except machinery and equipment	40.5	46.9
Manufacture of rubber and plastic products	7.3	3.6
Manufacture of chemical and chemical products	8.2	1.1
Manufacture of textiles	24.9	13.3
Other manufacturing and repair and installation of machinery and equipment	-7.4	2.4
Manufacture of electrical equipment	5.7	1.2
Manufacture of machinery and equipment except electrical	-15.2	0.7
<b>Losers</b>		
Manufacture of beverages	-11.8	-16.0
Manufacture of transport equipment	-3.7	-10.1
Manufacture of paper and paper products	-7.1	-17.5
Manufacture of wearing apparel	-20.1	-24.0
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-18.2	-17.7
Manufacture of wood, bamboo, cane, rattan articles and related products	-19.3	-21.1
Printing and reproduction of recorded media	-34.2	-24.5
Manufacture of leather and related products, including footwear	7.6	-18.3
Manufacture of furniture	15.9	-4.3
Manufacture of tobacco products	7.3	-0.8

p - preliminary, r- revised

Source: Philippine Statistics Authority

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

INDUSTRY DIVISION	September 2021 <sup>r</sup>	October 2021 <sup>p</sup>
<b>Gainers</b>		
Manufacture of computer, electronic, and optical products	11.3	51.5
Manufacture of coke and refined petroleum products	36.2	55.4
Manufacture of food products	13.1	15.2
Manufacture of other non-metallic mineral products	56.4	46.1
Manufacture of basic metals	14.0	20.9
Manufacture of fabricated metal products, except machinery and equipment	40.8	47.0
Manufacture of machinery and equipment except electrical	-13.0	2.2
Other manufacturing and repair and installation of machinery and equipment	-6.2	2.7
Manufacture of textiles	19.4	8.6
<b>Losers</b>		
Manufacture of beverages	-13.5	-18.1
Manufacture of transport equipment	-5.1	-10.7
Manufacture of paper and paper products	-8.4	-18.7
Manufacture of chemical and chemical products	1.8	-5.3
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-17.4	-18.6
Manufacture of wearing apparel	-19.6	-23.6
Manufacture of leather and related products, including footwear	6.6	-19.8
Printing and reproduction of recorded media	-33.2	-23.4
Manufacture of electrical equipment	0.5	-4.0
Manufacture of wood, bamboo, cane, rattan articles and related products	-9.1	-10.5
Manufacture of rubber and plastic products	1.7	-1.8
Manufacture of tobacco products	6.7	-1.6
Manufacture of furniture	16.7	-4.1

p - preliminary, r- revised

Source: Philippine Statistics Authority

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

*Attachments:*

1. *Table 1. Value of Production Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – October 2021<sup>P</sup>*
2. *Table 2. Volume of Production Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – October 2021<sup>P</sup>*
3. *Table 3. Value of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – October 2021<sup>P</sup>*
4. *Table 4. Volume of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – October 2021<sup>P</sup>*
5. *Table 5. Producer Price Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – October 2021<sup>P</sup>*
6. *Table 6. Average Capacity Utilization Rate by Industry Division: MISSI, January 2020 – October 2021<sup>P</sup>*
7. *Table 7. Distribution of Samples and Responding Establishments by Industry Division: MISSI, September 2021<sup>r</sup> and October 2021<sup>P</sup>*
8. *Table 8. Distribution of Samples and Responding Establishments by Industry Division: PPS, September 2021<sup>r</sup> and October 2021<sup>P</sup>*
9. *Technical Notes*

## **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

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

where:

- $VaPI_{ijm}$  = VaPI for industry group j in industry division i at current month m
- $VaPI_{ij(m-1)}$  = 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

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

where:

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

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

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:

$AveCU_m$  = average capacity utilization rate for total manufacturing at current month  $m$

$W_i$  = weight for industry division  $i$

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

### 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*

2009 PSIC CODE	INDUSTRY DESCRIPTION
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

