



PRESS RELEASE

PRODUCTION INDEX AND NET SALES INDEX (Monthly Integrated Survey of Selected Industries) February 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): February 2021^p, January 2021^r, and February 2020^r (in Percent)

TOTAL MANUFACTURING	FEBRUARY 2021 ^p	JANUARY 2021 ^r	FEBRUARY 2020 ^r
Production Index (2018=100)			
Value (VaPI)	-46.5	-16.7	-2.6
Volume (VoPI)	-43.6	-12.0	0.4
Net Sales Index (2018=100)			
Value (VaNSI)	-16.9	-15.9	-2.4
Volume (VoNSI)	-12.3	-11.2	0.6
Producer Price Index (2018=100)	-5.3	-5.3	-3.0

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

CSG

PRODUCTION

Value of Production registered two-digit decrement

The Value of Production Index (VaPI) for manufacturing posted a downturn in February 2021 with an annual rate of -46.5 percent, from its previous month's annual drop of -16.7 percent. The February 2021 figure was the fastest decline since October 2020. In February 2020, the annual decrease of VaPI was recorded at -2.6 percent. (*Tables A and 1*)

The decline in VaPI for manufacturing sector in this period was due to the negative annual growth rates in the indices of 20 out of 22 industry divisions. Of these, **manufacture of coke and refined petroleum products** was the major contributing factor with -89.3 percent decline. (*Tables 1-A and 1*)

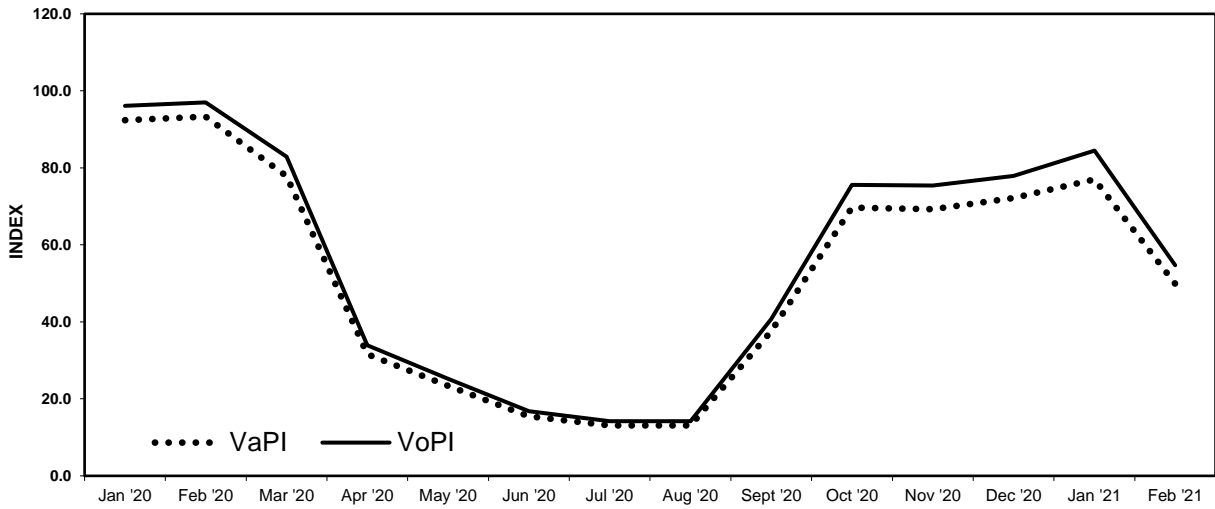
Volume of Production Index dropped

The Volume of Production Index (VoPI), likewise, continued to drop at an annual rate of -43.6 percent in February 2021. This decline was faster than the -12.0 percent decrease registered in the previous month. In contrast, the annual rate for VoPI in February 2020 increased by 0.4 percent. (*Tables A and 2*)

The downturn in VoPI was brought about by the contractions in the indices of 19 industry divisions. Among these, the top contributor was **manufacture of coke and refined petroleum products** (-85.4%). (*Tables 1-B and 2*)

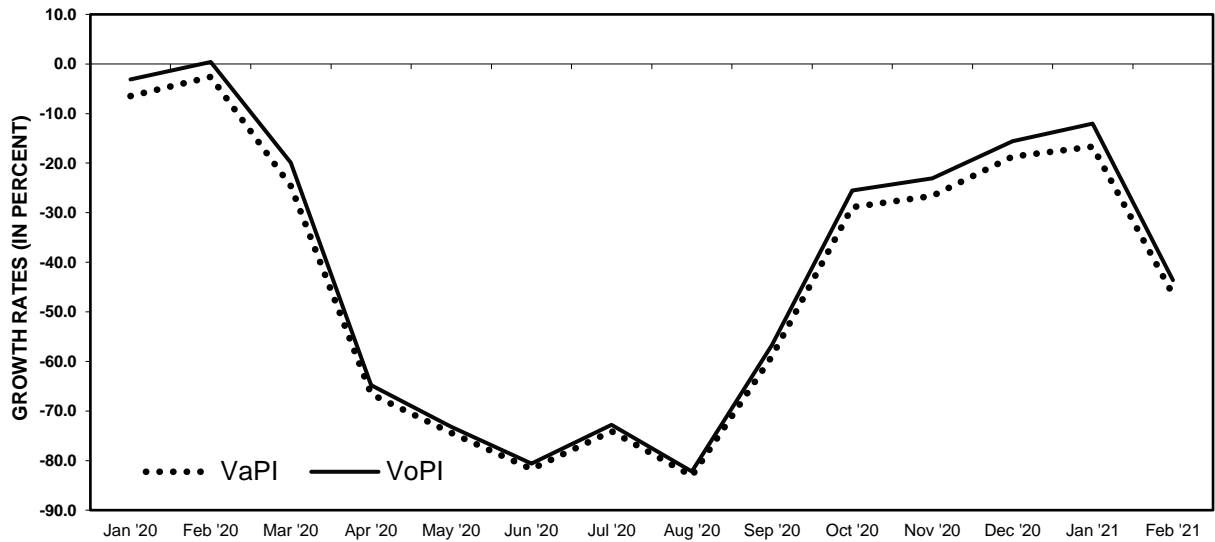
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Figure 1. Value and Volume of Production Index for Total Manufacturing
January 2020^r - February 2021^p (2018 = 100)



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

Figure 2. Year-on-Year Growth Rates of Value and Volume of Production Index for Total Manufacturing (in percent)
January 2020^r - February 2021^p (2018 = 100)



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

COF

NET SALES

Value of Net Sales Index further declined

The Value of Net Sales Index (VaNSI) reflected an annual decline of -16.9 percent in February 2021. This decline was faster than the reported decreases in the previous month at -15.9 percent and in February 2020 at -2.4 percent. The decline in February 2021 was the 21st consecutive month of decrease for VaNSI. *(Tables A and 3)*

Contributory to the faster decline of VaNSI for manufacturing sector in February 2021 were the reductions in the indices of 17 out of the 22 industry divisions. The top three in terms of rate of annual decrease were **manufacture of machinery and equipment except electrical (-53.7%)**, **other manufacturing and repair and installation of machinery and equipment (-36.5%)**, and **manufacture of tobacco products (-36.3%)**. *(Tables 2-A and 3)*

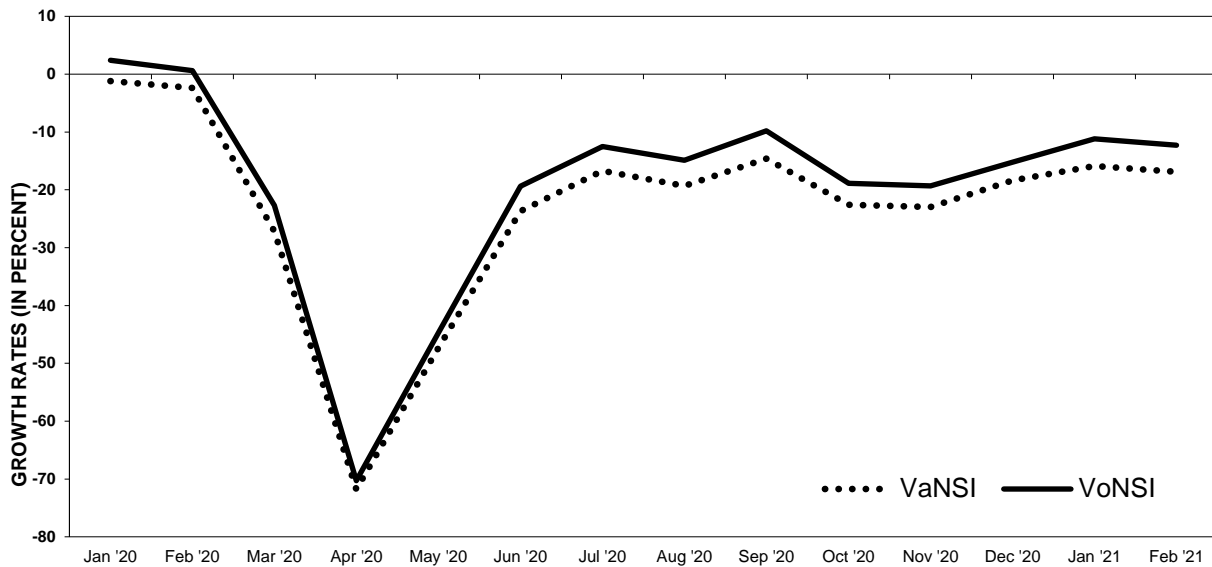
Volume of Net Sales Index also at a downtrend

The Volume of Net Sales Index (VoNSI) in February 2021, likewise, contracted at a faster rate of -12.3 percent compared with its -11.2 percent decrease in January 2021. In February 2020, a slight annual increase of 0.6 percent was observed. *(Tables A and 4)*

Out of the 22 industry divisions of manufacturing, 16 industry divisions posted negative growth rates in VoNSI. The top three in terms of rate of annual decline were **manufacture of machinery and equipment except electrical (-51.6%)**, **manufacture of tobacco products (-35.2%)**, and **other manufacturing and repair and installation of machinery and equipment (-35.0%)**. *(Tables 2-B and 4)*

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Figure 3. Year-on-Year Changes in Net Sales (in percent):
January 2020^r - February 2021^p (2018 = 100)



p – preliminary, r- revised

Source: Philippine Statistics Authority

CAPACITY UTILIZATION

Average capacity utilization rate for manufacturing slightly decreased

Based on responding establishments, the average capacity utilization rate for the manufacturing sector in February 2021 was posted at 53.8 percent from 56.7 percent in the previous month.

Fifteen (15) of the 22 industry divisions had at least 50 percent average capacity utilization rate, which were led by **manufacture of furniture** (72.7%), **other manufacturing and repair and installation of machinery and equipment** (65.0%), and **manufacture of computer, electronic, and optical products** (63.8%). (Table 6)

More than half of responding establishments operated below seventy percent capacity

The proportion of establishments that operated below 70 percent capacity was more than half (62.5%) of the total number of responding establishments. One-fourth operated at 70 to 89 percent capacity and only 12.5 percent operated at full capacity (90% to 100%). (Table B)

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Table B. Distribution of Responding Establishments by Capacity Utilization for Total Manufacturing: February 2021^P

Capacity Utilization	Number of Responding Establishments	Percent Share to Responding Establishments
TOTAL	384	100.0
Below 50%	139	36.2
50% - 59%	52	13.5
60% - 69%	49	12.8
70% - 79%	50	13.0
80% - 89%	46	12.0
90% - 100%	48	12.5

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

Source: Philippine Statistics Authority

COF

TABLE 1-A. Year-on-Year Growth Rate (%) of Value of Production Index
by Industry Division: February 2021^p and January 2021^r
(2018 =100)

INDUSTRY DIVISION	February 2021 ^p	January 2021 ^r
Gainers		
Manufacture of fabricated metal products, except machinery and equipment	17.5	-1.2 ^r
Manufacture of electrical equipment	9.3	17.0 ^r
Losers		
Manufacture of coke and refined petroleum products	-89.3	-53.0 ^r
Manufacture of computer, electronic, and optical products	-16.9	-17.8 ^r
Manufacture of food products	-6.5	-2.0 ^r
Manufacture of machinery and equipment except electrical	-50.8	-49.5 ^r
Manufacture of transport equipment	-9.2	6.8 ^r
Manufacture of beverages	-13.5	-8.7 ^r
Manufacture of chemical and chemical products	-9.9	6.2 ^r
Manufacture of rubber and plastic products	-15.3	-7.1 ^r
Manufacture of tobacco products	-29.5	-39.3 ^r
Other manufacturing and repair and installation of machinery and equipment	-23.1	-17.7 ^r
Manufacture of wearing apparel	-29.9	-24.5 ^r
Manufacture of basic metals	-5.3	-8.8 ^r
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-18.6	-26.4
Manufacture of furniture	-33.6	-31.8 ^r
Manufacture of other non-metallic mineral products	-4.1	-12.2 ^r
Manufacture of wood, bamboo, cane, rattan articles and related products	-17.1	-53.1 ^r
Manufacture of leather and related products, including footwear	-21.2	-14.9 ^r
Manufacture of textiles	-33.2	-44.0 ^r
Printing and reproduction of recorded media	-12.8	0.6 ^r
Manufacture of paper and paper products	-2.6	1.7 ^r

p - preliminary, r- revised

Source: Philippine Statistics Authority

CSA

TABLE 1-B. Year-on-Year Growth Rate (%) of Volume of Production Index by Industry Division: February 2021^p and January 2021^r
(2018 = 100)

INDUSTRY DIVISION	February 2021 ^p	January 2021 ^r
Gainers		
Manufacture of fabricated metal products, except machinery and equipment	18.7	0.4 ^r
Manufacture of electrical equipment	11.2	18.9 ^r
Manufacture of paper and paper products	2.6	9.3 ^r
Losers		
Manufacture of coke and refined petroleum products	-85.4	-35.5 ^r
Manufacture of food products	-8.1	-4.1 ^r
Manufacture of machinery and equipment except electrical	-48.5	-47.7 ^r
Manufacture of beverages	-15.9	-11.4 ^r
Manufacture of transport equipment	-8.7	8.6 ^r
Manufacture of chemical and chemical products	-10.2	7.1 ^r
Manufacture of rubber and plastic products	-15.5	-7.4 ^r
Manufacture of basic metals	-7.5	-9.9 ^r
Manufacture of tobacco products	-28.3	-39.9 ^r
Manufacture of computer, electronic, and optical products	-2.3	-4.3 ^r
Other manufacturing and repair and installation of machinery and equipment	-21.3	-15.3 ^r
Manufacture of wearing apparel	-26.6	-22.5 ^r
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-17.4	-26.4
Manufacture of furniture	-30.3	-28.2 ^r
Manufacture of textiles	-32.6	-43.9 ^r
Manufacture of wood, bamboo, cane, rattan articles and related products	-14.2	-53.0 ^r
Manufacture of other non-metallic mineral products	-3.0	-10.5 ^r
Manufacture of leather and related products, including footwear	-18.3	-12.5 ^r
Printing and reproduction of recorded media	-12.4	1.1 ^r

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: February 2021^p and January 2021^r
(2018 =100)

INDUSTRY DIVISION	February 2021 ^p	January 2021 ^r
Gainers		
Manufacture of chemical and chemical products	21.5	16.6
Manufacture of food products	6.2	0.8
Manufacture of transport equipment	3.1	9.6
Manufacture of wood, bamboo, cane, rattan articles and related products	24.6	128.8
Printing and reproduction of recorded media	0.5	5.2
Losers		
Manufacture of computer, electronic, and optical products	-30.6	-30.5
Manufacture of coke and refined petroleum products	-35.8	-34.3
Manufacture of beverages	-25.0	-22.6
Manufacture of machinery and equipment except electrical	-53.7	-38.6
Manufacture of other non-metallic mineral products	-28.8	-30.8
Other manufacturing and repair and installation of machinery and equipment	-36.5	-34.6
Manufacture of tobacco products	-36.3	-39.0
Manufacture of electrical equipment	-9.4	3.4
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-17.8	-15.7
Manufacture of wearing apparel	-21.7	-20.2
Manufacture of fabricated metal products, except machinery and equipment	-9.7	1.9
Manufacture of rubber and plastic products	-4.5	-10.4
Manufacture of leather and related products, including footwear	-21.3	-23.6
Manufacture of textiles	-30.6	-32.2
Manufacture of furniture	-20.1	-24.7
Manufacture of basic metals	-1.2	-8.7
Manufacture of paper and paper products	-2.0	-7.1

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: February 2021^P and January 2021^r (2018 = 100)

INDUSTRY DIVISION	February 2021 ^P	January 2021 ^r
Gainers		
Manufacture of chemical and chemical products	21.0	17.6
Manufacture of food products	4.3	-1.4
Manufacture of transport equipment	3.7	11.4
Manufacture of wood, bamboo, cane, rattan articles and related products	29.1	129.3
Manufacture of paper and paper products	3.2	-0.2
Printing and reproduction of recorded media	1.0	5.7
Losers		
Manufacture of computer, electronic, and optical products	-18.5	-19.1
Manufacture of beverages	-27.0	-24.9
Manufacture of other non-metallic mineral products	-28.0	-29.5
Manufacture of machinery and equipment except electrical	-51.6	-36.5
Manufacture of coke and refined petroleum products	-12.8	-10.0
Other manufacturing and repair and installation of machinery and equipment	-35.0	-32.6
Manufacture of tobacco products	-35.2	-39.5
Manufacture of electrical equipment	-7.8	5.1
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-16.5	-15.7
Manufacture of basic metals	-3.5	-9.8
Manufacture of wearing apparel	-18.1	-18.0
Manufacture of fabricated metal products, except machinery and equipment	-8.9	3.6
Manufacture of rubber and plastic products	-4.8	-10.7
Manufacture of leather and related products, including footwear	-18.4	-21.5
Manufacture of textiles	-29.9	-32.1
Manufacture of furniture	-16.1	-20.7

p - preliminary, r- revised

Source: Philippine Statistics Authority



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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^r – February 2021^P*
2. *Table 2. Volume of Production Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector: January 2020^r – February 2021^P*
3. *Table 3. Value of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector: January 2020^r – February 2021^P*
4. *Table 4. Volume of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector: January 2020^r – February 2021^P*
5. *Table 5. Producer Price Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector: January 2020^r – February 2021^P*
6. *Table 6. Average Capacity Utilization Rate by Industry Division: MISSI, January 2020^r – February 2021^P*
7. *Table 7. Distribution of Samples and Responding Establishments by Industry Division: MISSI, January 2021^r and February 2021^P*
8. *Table 8. Distribution of Samples and Responding Establishments by Industry Division: PPS, January 2021^r and February 2021^P*
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 (ASPBI) will be used to update the weights annually until the next rebasing.

Another changes is 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 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 one (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 one (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. 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*

2009 PSIC CODE	INDUSTRY DESCRIPTION
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