

PRESS RELEASE

PRODUCTION INDEX AND NET SALES INDEX
(Monthly Integrated Survey of Selected Industries)
July 2021
(2018=100)

Date of Release: 09 September 2021, 9:00 AM

Reference No. 2021-383

Table A. Year-on-Year Growth Rates of Production Index,
Net Sales Index, and Producer Price Index for Total Manufacturing
(2018=100): July 2020, June 2021^r, and July 2021^p
(in Percent)

TOTAL MANUFACTURING	JULY 2020	JUNE 2021 ^r	JULY 2021 ^p
Production Index (2018=100)			
Value (VaPI)	-74.1	444.6	528.1
Volume (VoPI)	-72.8	459.0	537.9
Net Sales Index (2018=100)			
Value (VaNSI)	-16.1	13.1	-0.6
Volume (VoNSI)	-11.9	16.0	1.0
Producer Price Index (2018=100)	-4.8	-2.6	-1.5

p – preliminary, r- revised

Source: Philippine Statistics Authority

PRODUCTION

Value of Production exhibited an upward trend

The Value of Production Index (VaPI) for manufacturing continued to accelerate at an annual rate of 528.1 percent in July 2021, from its previous month's three-digit annual increase of 444.6 percent. The year-on-year growth rate in July 2021 was the highest annual growth rate in the 2018-based data series. In contrast, the annual growth rate for VaPI in July 2020 was recorded at -74.1 percent. (Tables A and 1)

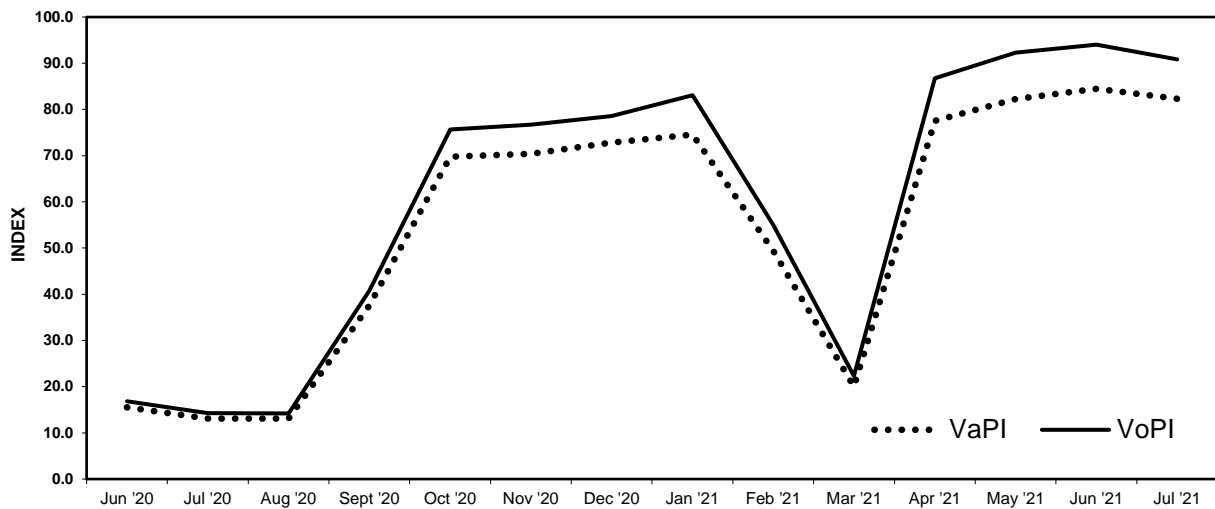
The upward trend in VaPI for manufacturing sector in July 2021 was contributed by the annual increases in 15 out of the 22 industry divisions. Among these, the top contributor was **manufacture of coke and refined petroleum products** with 4,096.1 percent annual growth rate. The remaining seven industry divisions were at a downward trend which were led by **manufacture of tobacco products** with -55.5 percent annual growth rate. (Tables 1-A and 1)

Volume of Production Index likewise accelerated

The Volume of Production Index (VoPI), likewise, posted a three-digit annual rate of 537.9 percent in July 2021. This is higher than the 459.0 percent increase registered in the previous month. In July 2020, VoPI dropped at an annual rate of -72.8 percent. (Tables A and 2)

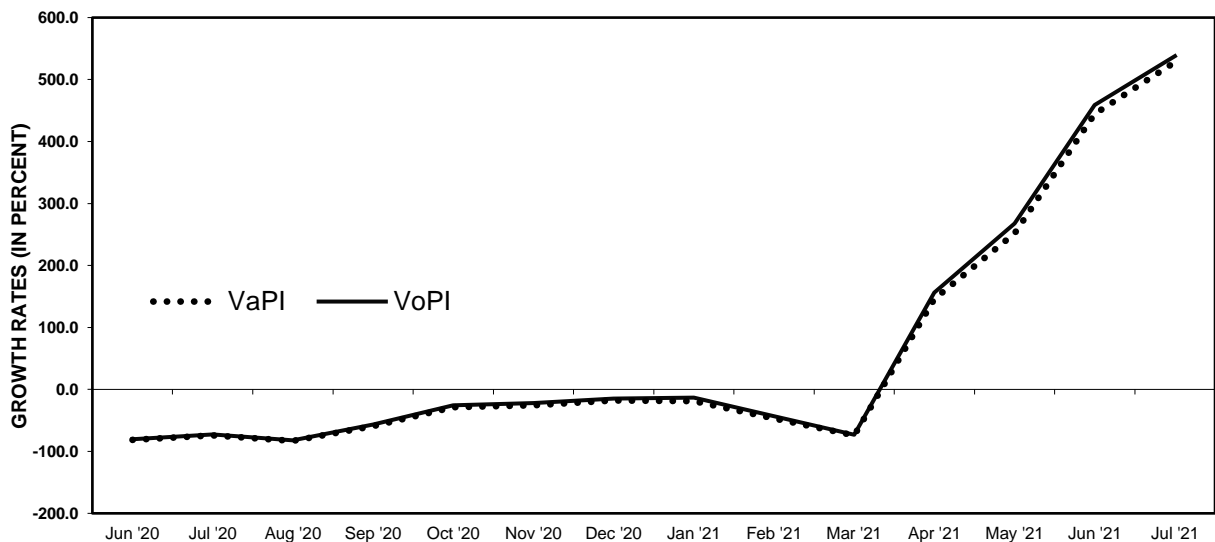
Expansion in VoPI for manufacturing sector in July 2021 was observed in 14 out of 22 industry divisions. The fastest growth rate was reported in **manufacture of coke and refined petroleum products** at 3,525.6 percent. The remaining eight industry divisions recorded decreases, with **manufacture of tobacco products** registering the fastest annual decline of -55.8 percent. (Tables 1-B and 2)

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



p – preliminary
Source: Philippine Statistics Authority

NET SALES

Value of Net Sales Index decreased at a slower rate

The Value of Net Sales Index (VaNSI) recorded a year-on-year decrement of -0.6 percent in July 2021, from a positive annual growth rate of 13.1 percent in the previous month. The annual rate in July 2021 was the first negative growth rate since March 2021. In July 2020, VaNSI also dropped at an annual rate of -16.1 percent. (Tables A and 3)

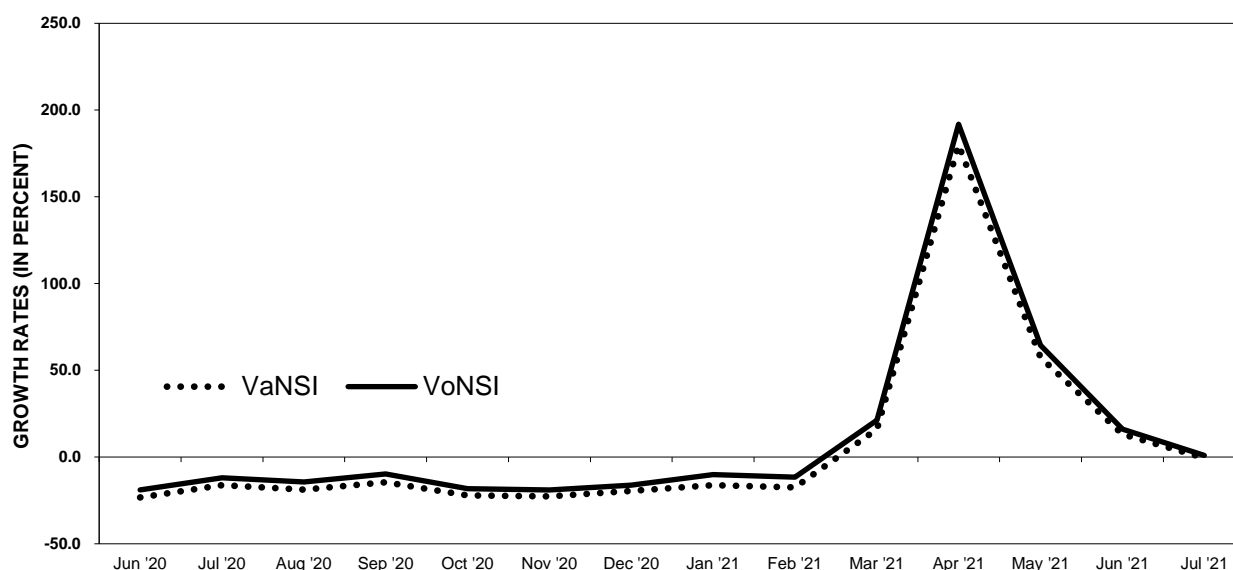
The drop in VaNSI was brought about by the contractions in the indices of 13 industry divisions. Among these, **manufacture of wearing apparel** had the biggest annual decline of -26.2 percent. Meanwhile, among industry divisions that showed increases in July 2021, the fastest growth was recorded in **manufacture of furniture** at 376.9 percent. (Tables 2-A and 3)

Volume of Net Sales Index sustained a positive growth

The Volume of Net Sales Index (VoNSI) recorded a year-on-year increase of 1.0 percent in July 2021. This annual rate was slower than the 16.0 percent increase recorded in the previous month. In July 2020, the annual growth rate for VoNSI declined by -11.9 percent. (Table A and 4)

Of the 22 industry divisions, nine reported positive growths, led by **manufacture of furniture** which had an annual increment of 475.1percent. In contrast, 13 industry divisions exhibited decreases during the period, with **manufacture of wearing apparel** recording the highest decrease at -26.8 percent. (Tables 2-B and 4)

Figure 3. Year-on-Year Changes in Net Sales (in percent):
June 2020 – July 2021^p (2018 = 100)



p – preliminary

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 July 2021 dropped to 66.7 percent from 67.7 percent in the previous month.

Nineteen (19) of the 22 industry divisions had more than 50 percent average capacity utilization rate which was led by **manufacture of other non-metallic mineral products** (81.1%), **manufacture of tobacco products** (78.3%), and **manufacture of furniture** (74.1%). (Table 6)

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

The proportion of establishments that operated at full capacity (90% to 100%) was 26.9 percent of the total number of responding establishments. Meanwhile, 34.2 percent operated at 70 to 89 percent capacity, while 38.9 percent operated below 70 percent capacity. (Table B)

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

Capacity Utilization	Number of Responding Establishments	Percent Share to Responding Establishments
TOTAL	491	100.0
Below 50%	70	14.3
50% - 59%	71	14.4
60% - 69%	50	10.2
70% - 79%	76	15.5
80% - 89%	92	18.7
90% - 100%	132	26.9

p – preliminary

Details may not sum to totals due to rounding

Notes:

- 1) Results are based on the responses of establishments which were in operation during the reference month.
- 2) There were 33 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: June 2021 and July 2021^p
(2018 =100)

INDUSTRY DIVISION	June 2021	July 2021 ^p
Gainers		
Manufacture of coke and refined petroleum products	3,231.0 ^r	4,096.1
Manufacture of computer, electronic, and optical products	26.7 ^r	24.9
Manufacture of fabricated metal products, except machinery and equipment	140.3 ^r	128.2
Manufacture of transport equipment	28.5 ^r	22.6
Manufacture of food products	16.6 ^r	11.5
Manufacture of electrical equipment	65.2 ^r	39.6
Manufacture of other non-metallic mineral products	46.5 ^r	11.0
Manufacture of rubber and plastic products	11.8 ^r	9.9
Manufacture of basic metals	8.2 ^r	5.2
Manufacture of basic pharmaceutical products and pharmaceutical preparations	17.8 ^r	22.0
Manufacture of machinery and equipment except electrical	18.8 ^r	9.3
Manufacture of wood, bamboo, cane, rattan articles and related products	64.0 ^r	22.5
Manufacture of paper and paper products	12.1 ^r	8.0
Manufacture of leather and related products, including footwear	37.9	4.6
Manufacture of textiles	-6.3 ^r	4.6
Losers		
Manufacture of tobacco products	-59.9 ^r	-55.5
Manufacture of chemical and chemical products	19.1 ^r	-9.4
Manufacture of beverages	6.5	-6.8
Other manufacturing and repair and installation of machinery and equipment	11.4 ^r	-15.2
Manufacture of furniture	13.1 ^r	-20.0
Printing and reproduction of recorded media	7.1 ^r	-9.6
Manufacture of wearing apparel	5.3 ^r	-1.6

p - preliminary, r- revised

Source: Philippine Statistics Authority

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

INDUSTRY DIVISION	June 2021	July 2021 ^p
Gainers		
Manufacture of coke and refined petroleum products	2,934.4 ^r	3,525.6
Manufacture of computer, electronic, and optical products	55.0 ^r	50.8
Manufacture of fabricated metal products, except machinery and equipment	132.9 ^r	119.8
Manufacture of transport equipment	27.6 ^r	21.7
Manufacture of food products	15.8 ^r	10.1
Manufacture of electrical equipment	63.9 ^r	35.9
Manufacture of other non-metallic mineral products	52.7 ^r	14.3
Manufacture of wood, bamboo, cane, rattan articles and related products	95.5 ^r	57.4
Manufacture of machinery and equipment except electrical	29.0 ^r	15.8
Manufacture of basic pharmaceutical products and pharmaceutical preparations	19.3 ^r	22.7
Manufacture of rubber and plastic products	7.2 ^r	4.8
Manufacture of paper and paper products	11.8 ^r	7.5
Manufacture of leather and related products, including footwear	36.3 ^r	4.4
Manufacture of textiles	-9.2 ^r	0.7
Losers		
Manufacture of tobacco products	-60.0 ^r	-55.8
Manufacture of chemical and chemical products	14.6 ^r	-13.4
Manufacture of beverages	4.8	-8.5
Other manufacturing and repair and installation of machinery and equipment	18.2 ^r	-11.4
Manufacture of basic metals	1.8 ^r	-1.2
Printing and reproduction of recorded media	5.9 ^r	-10.6
Manufacture of wearing apparel	11.2 ^r	-2.3
Manufacture of furniture	40.3 ^r	-3.5

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: June 2021^r and July 2021^p
(2018 =100)

INDUSTRY DIVISION	June 2021 ^r	July 2021 ^p
Gainers		
Manufacture of coke and refined petroleum products	14.4	35.5
Manufacture of furniture	583.5	376.9
Manufacture of other non-metallic mineral products	54.1	43.3
Manufacture of fabricated metal products, except machinery and equipment	161.7	45.9
Manufacture of basic pharmaceutical products and pharmaceutical preparations	41.9	25.2
Manufacture of basic metals	28.1	3.4
Manufacture of wood, bamboo, cane, rattan articles and related products	9.6	10.8
Manufacture of textiles	14.3	20.7
Manufacture of rubber and plastic products	0.6	1.4
Losers		
Manufacture of computer, electronic, and optical products	6.0	-6.6
Manufacture of transport equipment	24.1	-10.4
Manufacture of beverages	-5.4	-15.1
Manufacture of chemical and chemical products	7.7	-5.7
Manufacture of machinery and equipment except electrical	5.5	-13.2
Manufacture of wearing apparel	-3.2	-26.2
Manufacture of tobacco products	7.7	-16.7
Manufacture of electrical equipment	8.4	-4.2
Manufacture of paper and paper products	18.2	-5.9
Manufacture of leather and related products, including footwear	42.4	-16.0
Manufacture of food products	-1.8	-0.4
Other manufacturing and repair and installation of machinery and equipment	34.7	-4.2
Printing and reproduction of recorded media	20.3	-9.8

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: June 2021 and July 2021^p
(2018 = 100)

INDUSTRY DIVISION	June 2021	July 2021 ^p
Gainers		
Manufacture of furniture	747.6 ^r	475.1
Manufacture of computer, electronic, and optical products	29.6	12.8
Manufacture of other non-metallic mineral products	60.6 ^r	47.5
Manufacture of coke and refined petroleum products	4.2 ^r	17.1
Manufacture of fabricated metal products, except machinery and equipment	153.8 ^r	40.5
Manufacture of wood, bamboo, cane, rattan articles and related products	30.7 ^r	42.3
Manufacture of basic pharmaceutical products and pharmaceutical preparations	43.8	26.0
Manufacture of textiles	10.7 ^r	16.3
Other manufacturing and repair and installation of machinery and equipment	43.0 ^r	0.1
Losers		
Manufacture of transport equipment	23.2 ^r	-11.0
Manufacture of beverages	-7.0 ^r	-16.6
Manufacture of chemical and chemical products	3.5 ^r	-9.8
Manufacture of food products	-2.6 ^r	-1.6
Manufacture of wearing apparel	2.2 ^r	-26.8
Manufacture of tobacco products	7.4 ^r	-17.4
Manufacture of electrical equipment	7.5 ^r	-6.8
Manufacture of machinery and equipment except electrical	14.6 ^r	-8.1
Manufacture of basic metals	20.5 ^r	-3.0
Manufacture of paper and paper products	17.9 ^r	-6.3
Manufacture of leather and related products, including footwear	40.6 ^r	-16.2
Manufacture of rubber and plastic products	-3.6 ^r	-3.3
Printing and reproduction of recorded media	19.0 ^r	-10.8

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 – July 2021^P*
2. *Table 2. Volume of Production Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – July 2021^P*
3. *Table 3. Value of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – July 2021^P*
4. *Table 4. Volume of Net Sales Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – July 2021^P*
5. *Table 5. Producer Price Index (2018=100), Year-on-Year Growth Rates for Manufacturing Sector, January 2020 – July 2021^P*
6. *Table 6. Average Capacity Utilization Rate by Industry Division: MISSI, January 2020 – July 2021^P*
7. *Table 7. Distribution of Samples and Responding Establishments by Industry Division: MISSI, June 2021^I and July 2021^P*
8. *Table 8. Distribution of Samples and Responding Establishments by Industry Division: PPS, June 2021^I and July 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 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_{tijn} = 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

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

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