



PRESS RELEASE

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

Date of Release: 08 September 2022, 9:00AM

Reference No. 2022-378

Table A. Year-on-Year Growth Rates (%) of Production Index, Net Sales Index, and Producer Price Index for Total Manufacturing (2018=100): July 2021, June 2022^r, and July 2022^p (in Percent)

TOTAL MANUFACTURING	JULY 2021	JUNE 2022^r	JULY 2022^p
Production Index (2018=100)			
Value (VaPI)	529.9	8.3	10.6
Volume (VoPI)	534.4	0.7	2.5
Net Sales Index (2018=100)			
Value (VaNSI)	2.8	21.8	23.1
Volume (VoNSI)	3.5	13.3	14.1
Producer Price Index (2018=100)	-0.7	7.5	7.9

p - preliminary, r - revised

Source: Philippine Statistics Authority



PRODUCTION

Value of Production Index exhibited a double-digit increment

The Value of Production Index (VaPI) sustained its upward trend, recording a double-digit annual increment of 10.6 percent in July 2022. This increase is faster than the previous month's annual rate of 8.3 percent. In July 2021, the VaPI accelerated with an annual growth rate of 529.9 percent. (Tables A and 1)

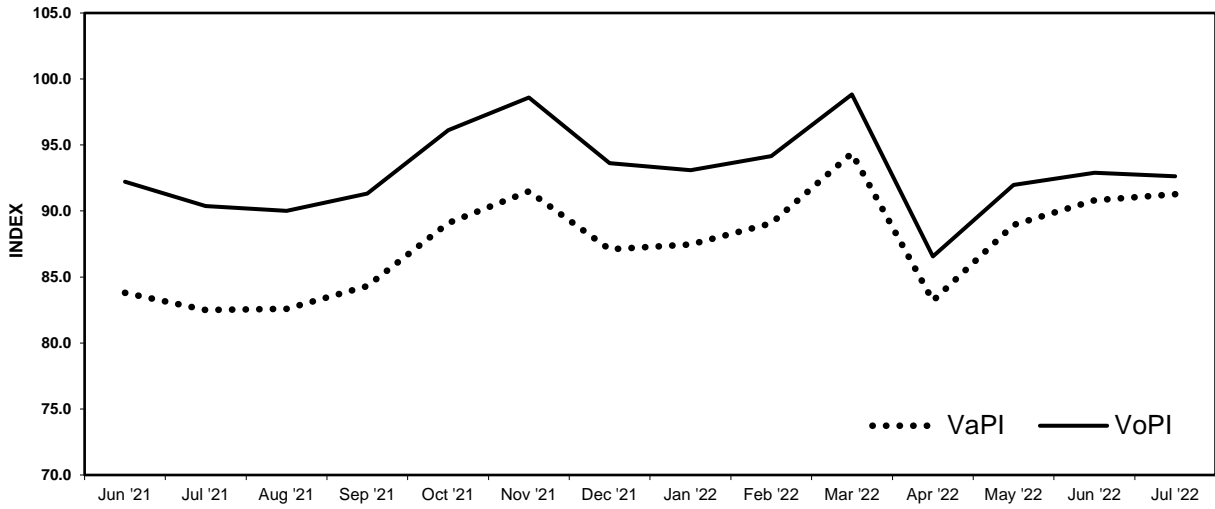
Contributory to the upturn of VaPI were the annual growths exhibited by 17 out of the 22 industry divisions. Among these, **manufacture of machinery and equipment except electrical** posted the highest annual growth rate of 32.1 percent in July 2022. On the other hand, the remaining five industry divisions posted decrements in their production with **manufacture of electrical equipment** registering the fastest annual decline of -51.2 percent. (Tables B.1 and 1)

Volume of Production Index further accelerated

The Volume of Production Index (VoPI) recorded a faster year-on-year growth rate of 2.5 percent in July 2022, from its previous month's annual rate of 0.7 percent. In July 2021, VoPI upsurged at an annual rate of 534.4 percent. (Tables A and 2)

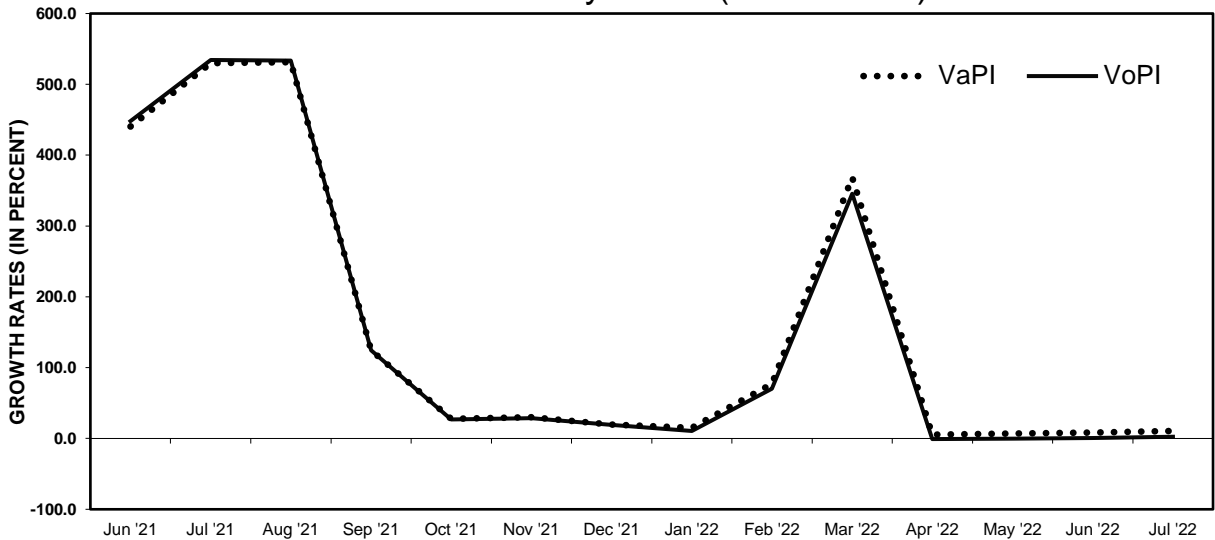
Out of the 22 industry divisions, 14 reported positive annual growths which was led by **manufacture of fabricated metal products, except machinery and equipment** with 30.3 percent annual growth rate. On the contrary, eight industry divisions posted annual decreases with **manufacture of electrical equipment** exhibiting the fastest annual drop of -52.7 percent. (Tables B.2 and 2)

Figure 1. Value and Volume of Production Index for Total Manufacturing
June 2021 - July 2022^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
June 2021 - July 2022^p (2018 = 100)



p - preliminary
Source: Philippine Statistics Authority

Table B.1. Year-on-Year Growth Rate (%) of Value of Production Index
by Industry Division: June 2022^r and July 2022^p
(2018 =100)

INDUSTRY DIVISION	June 2022 ^r	July 2022 ^p
Gainers		
Manufacture of food products	18.6	20.4
Manufacture of transport equipment	12.4	19.4
Manufacture of computer, electronic, and optical products	11.6	10.6
Manufacture of coke and refined petroleum products	5.0	16.9
Manufacture of fabricated metal products, except machinery and equipment	45.6	30.5
Manufacture of beverages	0.9	15.4
Manufacture of paper and paper products	20.6	22.7
Manufacture of machinery and equipment except electrical	55.7	32.1
Manufacture of chemical and chemical products	6.7	7.1
Manufacture of other non-metallic mineral products	16.0	7.4
Manufacture of wood, bamboo, cane, rattan articles and related products	26.6	25.4
Printing and reproduction of recorded media	-26.3	15.4
Other manufacturing and repair and installation of machinery and equipment	6.6	10.9
Manufacture of rubber and plastic products	7.5	5.6
Manufacture of textiles	30.1	23.4
Manufacture of leather and related products, including footwear	-1.1	18.7
Manufacture of wearing apparel	5.0	3.4
Losers		
Manufacture of electrical equipment	-44.9	-51.2
Manufacture of basic metals	-9.2	-9.4
Manufacture of tobacco products	1.6	-15.2
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-9.3	-17.6
Manufacture of furniture	7.1	-1.1

p - preliminary, r - revised

Source: Philippine Statistics Authority

Table B.2. Year-on-Year Growth Rate (%) of Volume of Production Index
by Industry Division: June 2022^r and July 2022^p
(2018 = 100)

INDUSTRY DIVISION	June 2022 ^r	July 2022 ^p
Gainers		
Manufacture of food products	8.4	9.7
Manufacture of transport equipment	8.6	13.5
Manufacture of fabricated metal products, except machinery and equipment	45.8	30.3
Manufacture of beverages	-3.7	9.4
Manufacture of machinery and equipment except electrical	46.6	29.1
Manufacture of paper and paper products	16.9	17.6
Manufacture of computer, electronic, and optical products	7.7	2.5
Manufacture of wood, bamboo, cane, rattan articles and related products	31.3	28.5
Printing and reproduction of recorded media	-26.4	14.9
Other manufacturing and repair and installation of machinery and equipment	5.0	8.0
Manufacture of textiles	26.6	19.9
Manufacture of leather and related products, including footwear	-1.7	17.7
Manufacture of rubber and plastic products	2.4	0.8
Manufacture of wearing apparel	-1.9	0.2
Losers		
Manufacture of basic metals	-15.4	-15.8
Manufacture of electrical equipment	-46.8	-52.7
Manufacture of tobacco products	-0.9	-18.6
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-10.8	-18.6
Manufacture of chemical and chemical products	-3.6	-2.0
Manufacture of furniture	4.3	-2.3
Manufacture of other non-metallic mineral products	8.0	-0.3
Manufacture of coke and refined petroleum products	-16.0	-0.1

p - preliminary, r - revised

Source: Philippine Statistics Authority

NET SALES

Value of Net Sales Index maintained a two-digit annual growth rate

The Value of Net Sales Index (VaNSI) maintained its double-digit annual growth rate of 23.1 percent in July 2022, from an annual rate of 21.8 percent in the previous month. In July 2021, VaNSI grew at a slower annual rate of 2.8 percent. (Tables A and 3)

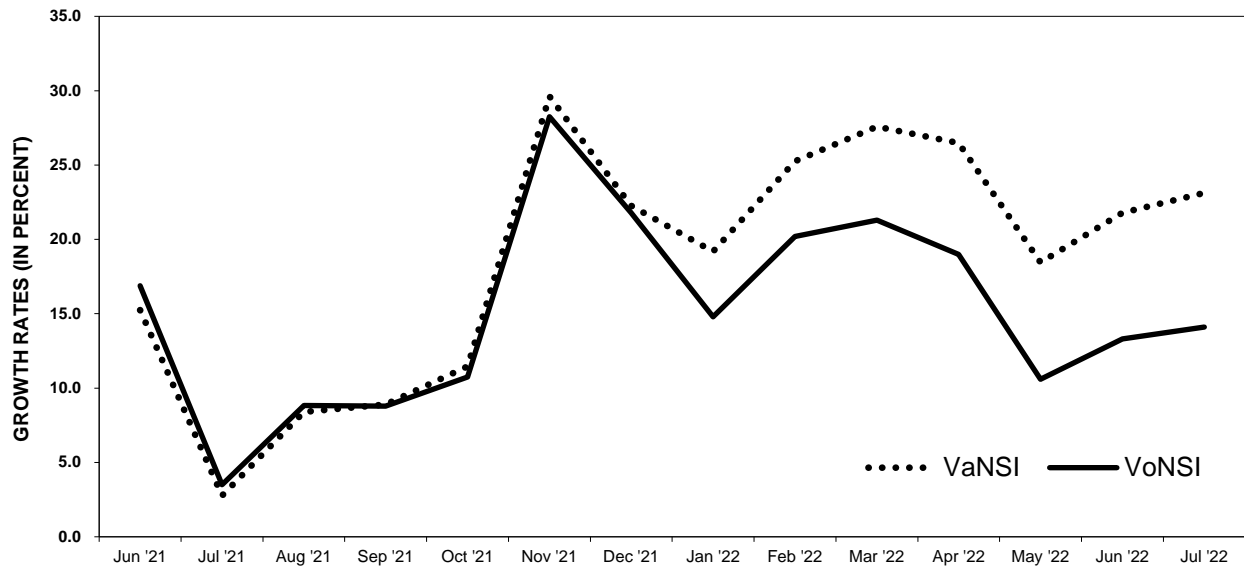
The increase in VaNSI for July 2022 was contributed by the expansions in sales of 15 of the 22 industry divisions. Among these, the fastest annual growth was noted in **manufacture of beverages** with a three-digit annual growth rate of 100.6 percent. In contrast, seven industry divisions exhibited downturns during the period with **manufacture of furniture** recording the highest annual drop of -30.4 percent. (Tables C.1 and 3)

Volume of Net Sales Index likewise grew

The Volume of Net Sales Index (VoNSI), likewise, continued to register a two-digit year-on-year increment of 14.1 percent in July 2022, faster than the June 2022 annual growth of 13.3 percent. In July 2021, VoNSI increased with an annual rate of 3.5 percent. (Tables A and 4)

The annual growth in VoNSI for July 2022 was attributed to the annual increases in sales of 12 of the 22 industry divisions. Among these, the fastest annual growth was seen in **manufacture of beverages** with 90.1 percent annual growth rate. Meanwhile, the remaining 10 industry divisions registered annual decreases in their sales with **manufacture of furniture** posting the fastest annual drop of -31.2 percent. (Tables C.2 and 4)

Figure 3. Year-on-Year Changes (%) in Net Sales:
June 2021 – July 2022^p (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: June 2022^r and July 2022^p
(2018 =100)

INDUSTRY DIVISION	June 2022 ^r	July 2022 ^p
Gainers		
Manufacture of beverages	92.6	100.6
Manufacture of coke and refined petroleum products	102.2	83.8
Manufacture of transport equipment	23.7	50.6
Manufacture of computer, electronic, and optical products	17.9	16.3
Manufacture of food products	7.4	5.1
Printing and reproduction of recorded media	32.8	58.4
Manufacture of rubber and plastic products	28.9	13.1
Manufacture of paper and paper products	11.5	14.3
Manufacture of machinery and equipment except electrical	47.9	19.3
Manufacture of other non-metallic mineral products	3.4	5.4
Manufacture of basic metals	-15.1	2.6
Manufacture of textiles	34.0	17.6
Manufacture of leather and related products, including footwear	0.3	30.6
Other manufacturing and repair and installation of machinery and equipment	-3.8	3.5
Manufacture of wearing apparel	13.7	3.9
Losers		
Manufacture of fabricated metal products, except machinery and equipment	-10.2	-14.0
Manufacture of furniture	-26.3	-30.4
Manufacture of wood, bamboo, cane, rattan articles and related products	-8.0	-18.7
Manufacture of chemical and chemical products	17.1	-3.6
Manufacture of tobacco products	0.8	-9.5
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-21.0	-13.9
Manufacture of electrical equipment	-12.0	-1.4

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: June 2022^r and July 2022^p
(2018 = 100)

INDUSTRY DIVISION	June 2022 ^r	July 2022 ^p
Gainers		
Manufacture of beverages	83.9	90.1
Manufacture of coke and refined petroleum products	61.8	57.1
Manufacture of transport equipment	19.5	43.2
Manufacture of computer, electronic, and optical products	13.8	7.7
Printing and reproduction of recorded media	32.7	57.6
Manufacture of rubber and plastic products	22.9	7.9
Manufacture of machinery and equipment except electrical	39.3	16.5
Manufacture of paper and paper products	8.1	9.6
Manufacture of textiles	30.4	14.3
Manufacture of leather and related products, including footwear	-0.3	29.5
Other manufacturing and repair and installation of machinery and equipment	-5.3	0.8
Manufacture of wearing apparel	6.3	0.8
Losers		
Manufacture of food products	-1.9	-4.2
Manufacture of fabricated metal products, except machinery and equipment	-10.1	-14.1
Manufacture of chemical and chemical products	5.8	-11.9
Manufacture of furniture	-28.3	-31.2
Manufacture of basic metals	-20.9	-4.6
Manufacture of tobacco products	-1.6	-13.2
Manufacture of wood, bamboo, cane, rattan articles and related products	-4.6	-16.7
Manufacture of basic pharmaceutical products and pharmaceutical preparations	-22.3	-14.9
Manufacture of other non-metallic mineral products	-3.8	-2.2
Manufacture of electrical equipment	-15.2	-4.4

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 July 2022 was reported at 71.3 percent, from 71.2 percent in the previous month.

There were 20 out of 22 industry divisions with more than 60 percent average capacity utilization rate, led by **manufacture of furniture** (80.7%), **manufacture of computer, electronic, and optical products** (80.2%), and **manufacture of wearing apparel** (80.0%). (Table 6)

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

The proportion of establishments that operated at full capacity (90% to 100%) was 26.2 percent of the total number of responding establishments. Meanwhile, 37.4 percent operated at 70 to 89 percent capacity, while 36.5 percent operated below 70 percent capacity. (Table D)

Table D. Distribution of Responding Establishments by Capacity Utilization for Total Manufacturing: July 2022^p

Capacity Utilization	Number of Responding Establishments	Percent Share to Responding Establishments
TOTAL	626	100.0
Below 50%	83	13.3
50% - 59%	70	11.2
60% - 69%	75	12.0
70% - 79%	108	17.3
80% - 89%	126	20.1
90% - 100%	164	26.2

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 ten (10) establishments which responded but were not included in the tabulation as they temporarily or permanently ceased their business operations.

Source: Philippine Statistics Authority

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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 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 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

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

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

Note: A linking factor is computed every time weights are changed. The linking factor is used to adjust new series for comparability with the old series.

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*