



PRESS RELEASE

PRODUCTION INDEX AND NET SALES INDEX (Monthly Integrated Survey of Selected Industries) June 2020

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Table A. Year-on-Year Growth Rates for Production Index,
Net Sales Index, and Producer Price Index
June 2020, May 2020, and June 2019
(In Percent)

TOTAL MANUFACTURING	JUNE 2020^p	MAY 2020^r	JUNE 2019
Production Index (2000=100)			
Value (VaPI)	-22.5	-31.2	-7.7
Volume (VoPI)	-19.3	-28.5	-9.0
Net Sales Index (2000=100)			
Value (VaNSI)	-24.1	-35.2	-0.4
Volume (VoNSI)	-21.1	-32.7	-1.7
Producer Price Index (2000=100)	-3.9	-3.7	1.4

p – preliminary, r- revised

Source: Philippine Statistics Authority



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PRODUCTION

Value of Production Index decelerates at a slower pace

The Value of Production Index (VaPI) for Manufacturing sector contracted at a slower rate of 22.5 percent in June 2020 compared to the 31.2 percent decrease in May 2020. VaPI dropped for the fourth month in a row this June 2020 but showing gradual recovery as it hit its second month with a slower annual decline. In June 2019, VaPI shrank at a much gradual rate of 7.7 percent. (*Table A*)

Contributory to the slower decline of VaPI in June 2020 were the improvements for **petroleum products** and **wood and wood products** with annual increases of 6.7 percent and 2.4 percent, respectively. Prior to the rebound, VaPI had negative growth for 17 consecutive months for petroleum products, and 7 months of negative growth for wood and wood products. Further tapering off the annual decline in VaPI for manufacturing were the slower annual drops in the indices of 16 of the 18 remaining industry groups. (*Tables 1-A and 1*)

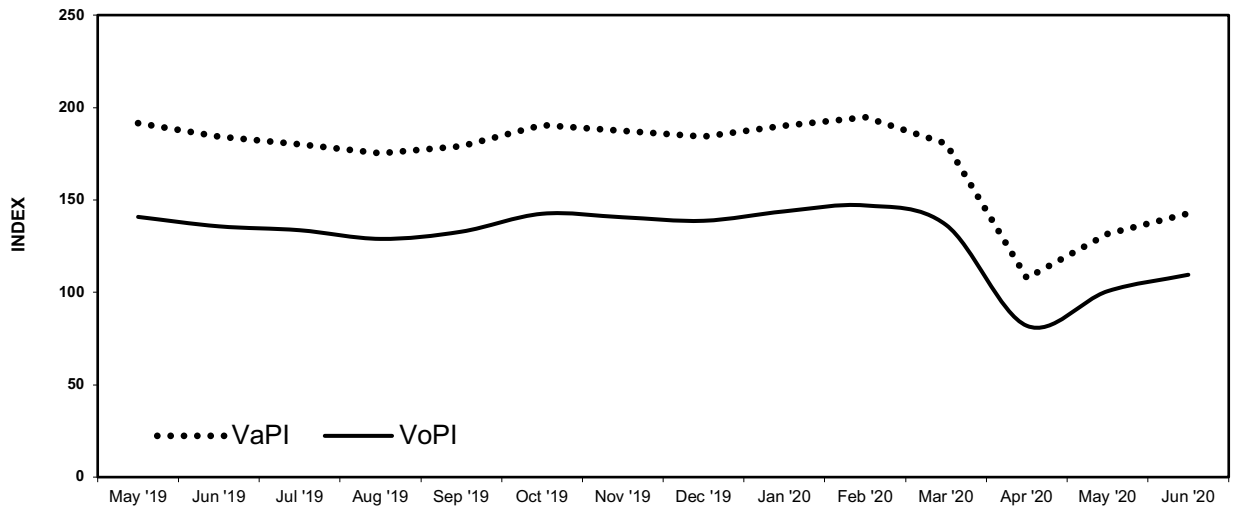
Volume of Production Index likewise drops at a slower rate

The Volume of Production Index (VoPI) in June 2020 likewise shrank by 19.3 percent year-on-year but the decline was slower compared to the previous month's drop of 28.5 percent. In May 2019, the annual decrease was observed at 9.0 percent. (*Table A*)

Of the industry groups, positive growths were seen in **petroleum products** (15.3 %), **wood and wood products** (11.6 %), and **chemical products** (0.1%) in June 2020. Before regaining this period, VoPI for wood and wood products had negative growth for five (5) consecutive months, and chemical products had negative growth for two (2) consecutive months.

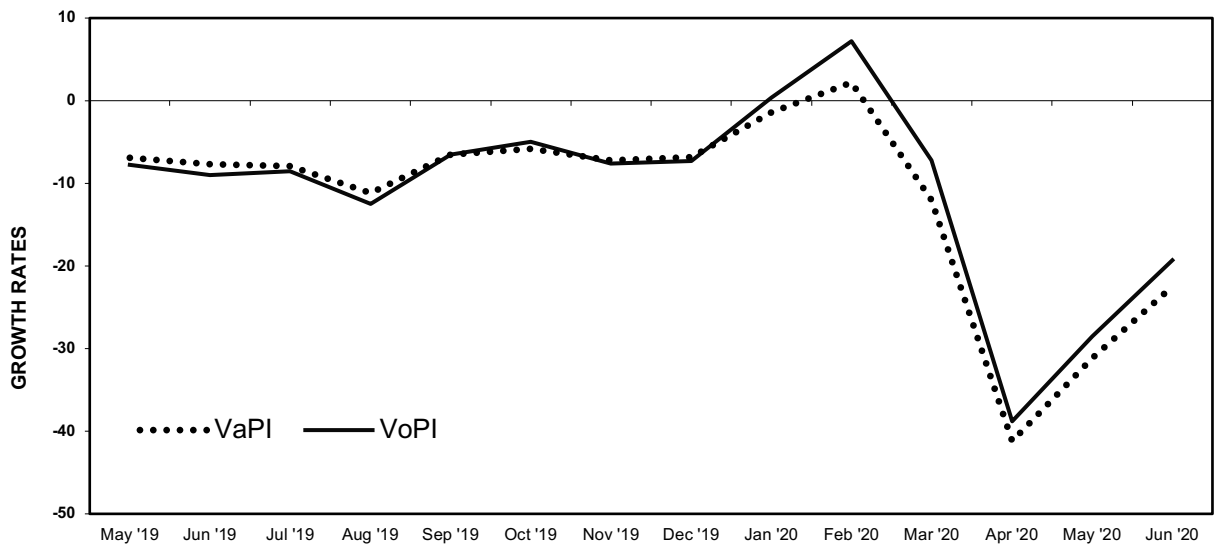
VoPI for the rest of the commodity groups were on downtrend, 15 of which had slower decline while two exhibited faster drops. (*Tables 1-B and 2*)

Figure 1. Value and Volume of Production Index for Total Manufacturing
May 2019 - June 2020^p (2000 = 100)



p - preliminary
Source: Philippine Statistics Authority

Figure 2. Year-on-Year Growth Rates of Value and Volume of
Production Index for Total Manufacturing
May 2019 - June 2020^p (2000 = 100)



p - preliminary
Source: Philippine Statistics Authority

NET SALES

Value of Net Sales Index for food manufacturing rebounds

In terms of sales for manufacturing sector, as reflected in the Value of Net Sales Index (VaNSI) for June 2020, it dropped to a slower annual rate of 24.1 percent from a decline of 35.2 percent in May 2020. The June 2020 figure was the fourth consecutive month that VaNSI had a negative growth, and the second successive month that it was declining at a slower rate. *(Table A)*

Contributing to the slower decline of VaNSI in the period was the positive annual growth in **food manufacturing** at 1.8 percent from -8.0 percent in the previous month.

The rest of the commodity groups exhibited downtrend, however, majority (17) were on a slower rate of decline. *(Tables 2-A and 3)*

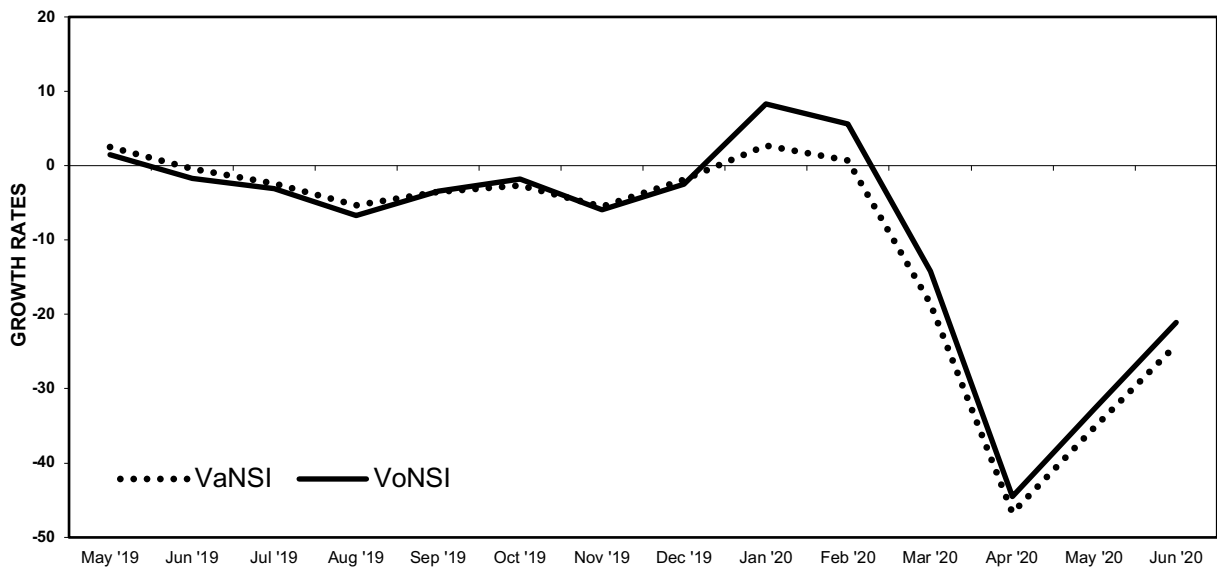
Volume of Net Sales Index remains at double-digit decline but at a slower rate

The Volume of Net Sales Index (VoNSI) posted a year-on-year decrement of 21.1 percent in June 2020 from 32.7 percent decline in the previous month. In June 2019, VoNSI dropped by 1.7 percent. *(Table A)*

The recovery observed for **food manufacturing** to an annual growth of 1.0 percent in June 2020 from -8.4 percent a month ago contributed to the slow down in the decline of the index for volume of sales for the manufacturing sector.

Contributing further to the narrower decline in VoNSI for manufacturing sector in the period were the slower reductions in the indices of 16 industry groups. *(Tables 2-B and 4)*

Figure 3. Year-on-Year Changes in Net Sales: May 2019 - June 2020^p (2000 = 100)



p - preliminary

Source: Philippine Statistics Authority

CAPACITY UTILIZATION

Average Capacity Utilization Rate for manufacturing inches up

Based on responding establishments with responses on capacity utilization, average capacity utilization rate for manufacturing sector in June 2020 inched up to 73.0 percent from 72.4 percent in the previous month.

Three of the 20 industry groups had at least 80 percent average capacity utilization rate which was led by **textiles** (81.6%), followed by **furniture and fixtures** (81.2%), and **rubber and plastic products** (80.7%). (Table 6)

One-fifth of total responding manufacturing establishments operate at full capacity

The proportion of establishments that operated at full capacity (90% to 100%) was about one-fifth (20.0%) of the total number of responding establishments with responses on capacity utilization. More than two-fifths (45.7%) operated at 70 to 89 percent capacity while more

than one-third (34.3%) operated below 70 percent capacity. (Table B)

Table B. Distribution of Responding Establishments by Capacity Utilization for Total Manufacturing: June 2020^p

Capacity Utilization	Number of Responding Establishments	Percent Share to Responding Establishments
TOTAL	341	100.0
Below 50%	40	11.7
50% - 59%	33	9.6
60% - 69%	44	12.9
70% - 79%	83	24.3
80% - 89%	73	21.4
90% - 100%	68	20.0

p - preliminary

Notes:

- 1) Based on the responses of establishments which were in operation during the reference month.
- 2) There were additional 32 establishments which responded but were not included in the tabulation as they temporarily ceased their business operations.

Source: Philippine Statistics Authority



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TABLE 1-A. Year-on-Year Growth Rate (%) of Value of Production Index
by Industry Group
May and June 2020
(2000 =100)

INDUSTRY GROUP	June 2020 ^p	May 2020 ^r
Gainers		
Petroleum products	6.7	-3.4
Wood and wood products	2.4	-12.1
Losers		
Electrical machinery	-26.4	-33.3
Machinery except electrical	-43.4	-55.1
Transport equipment	-62.7	-78.3
Food manufacturing	-15.0	-18.0
Non-metallic mineral products	-44.9	-47.5
Footwear and wearing apparel	-43.1	-56.1
Tobacco products	-56.8	-63.4
Beverages	-17.9	-27.3
Rubber and plastic products	-29.5	-43.9
Basic metals	-16.6	-37.9
Printing	-62.6	-60.4
Miscellaneous manufactures	-33.9	-39.7
Textiles	-28.2	-35.5
Paper and paper products	-20.7	-30.3
Chemical products	-5.0	-11.8
Fabricated metal products	-18.3	-47.6
Furniture and fixtures	-21.2	-41.6
Leather products	-39.5	-39.4

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

TABLE 1-B. Year-on-Year Growth Rate (%) of Volume of Production Index by Industry Group
 May and June 2020
 (2000 = 100)

INDUSTRY GROUP	June 2020 ^p	May 2020 ^r
Gainers		
Petroleum products	15.3	19.8
Wood and wood products	11.6	-1.9
Chemical products	0.1	-7.3
Losers		
Electrical machinery	-21.9	-30.1
Machinery except electrical	-41.3	-54.1
Food manufacturing	-15.6	-18.4
Transport equipment	-59.6	-77.0
Non-metallic mineral products	-44.4	-46.6
Footwear and wearing apparel	-40.9	-51.7
Tobacco products	-58.7	-65.1
Beverages	-20.9	-29.9
Rubber and plastic products	-27.7	-42.7
Printing	-63.3	-61.2
Miscellaneous manufactures	-33.2	-39.2
Basic metals	-12.1	-34.4
Textiles	-28.4	-33.8
Fabricated metal products	-18.7	-49.6
Furniture and fixtures	-34.2	-51.9
Paper and paper products	-9.4	-20.5
Leather products	-40.9	-30.5

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

TABLE 2-A. Year-on-Year Growth Rate (%) of Value of Net Sales Index
by Industry Group
May and June 2020
(2000 =100)

INDUSTRY GROUP	June 2020 ^p	May 2020 ^r
Gainer		
Food manufacturing	1.8	-8.0
Losers		
Electrical machinery	-27.6	-38.4
Petroleum products	-36.3	-47.2
Machinery except electrical	-35.9	-52.5
Transport equipment	-57.2	-73.5
Footwear and wearing apparel	-53.7	-69.9
Basic metals	-33.2	-44.0
Non-metallic mineral products	-37.8	-62.8
Chemical products	-8.9	-11.8
Beverages	-15.1	-28.3
Printing	-56.2	-53.2
Paper and paper products	-30.8	-36.2
Tobacco products	-23.9	-22.5
Fabricated metal products	-32.2	-47.0
Rubber and plastic products	-35.0	-46.3
Miscellaneous manufactures	-19.6	-40.9
Textiles	-21.3	-33.9
Furniture and fixtures	-27.2	-52.1
Wood and wood products	-15.4	-57.2
Leather products	-34.5	-39.5

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

TABLE 2-B. Year-on-Year Growth Rate (%) of Volume of Net Sales
Index by Industry Group
May and June 2020
(2000 = 100)

INDUSTRY GROUP	June 2020 ^p	May 2020 ^r
Gainer		
Food manufacturing	1.0	-8.4
Losers		
Electrical machinery	-23.2	-35.4
Petroleum products	-31.2	-34.5
Machinery except electrical	-33.6	-51.4
Transport equipment	-53.7	-71.9
Footwear and wearing apparel	-52.0	-66.8
Basic metals	-29.5	-40.9
Non-metallic mineral products	-37.2	-62.2
Beverages	-18.2	-30.9
Printing	-57.0	-54.1
Tobacco products	-27.3	-26.1
Fabricated metal products	-32.5	-49.1
Paper and paper products	-20.9	-27.2
Rubber and plastic products	-33.4	-45.0
Textiles	-21.5	-32.2
Miscellaneous manufactures	-18.8	-40.5
Chemical products	-4.1	-7.3
Furniture and fixtures	-39.2	-60.5
Leather products	-36.4	-31.0
Wood and wood products	-7.8	-52.2

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

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 2020 MISSI at the 3/4-digit 2009 Philippine Standard Industrial Classification (PSIC) level are Value of Production Index (VaPI), Volume of Production Index (VoPI), Value of Net Sales Index (VaNSI), Volume of Net Sales Index (VoNSI) and capacity utilization of industries. The VoPI and VoNSI, however, are derived indicators using the 2020 Producer Price Index (PPI) as deflator.

II. Method of Index Computation

The MISSI utilizes the Laspeyres-type method of index computation where the weights are based on the value of production from the Census of Philippine Business and Industry (CPBI).

For the 2020 MISSI index series with base year of 2000, the weights of the major industries and sub-industries are based from the results of the 2000 CPBI for manufacturing establishments with average total employment of 20 and over. The weights are computed from the value of products sold plus change in inventories.

The formula in the computation of indices and growth rates are as follows:

1. Value of Production Index (VaPI)

a. Computation of Index for Industry Class Level

i. Initial Index

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

where:

- $VaPI_{ijm}$ = VaPI for the i^{th} industry class of the j^{th} industry group at the current month m
- V_{ijm} = total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group at the current month m
- V_{ij0} = average monthly value of production at base year 0

ii. Monthly Index

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

where:

- $VaPI_{ijm}$ = VaPI for the i^{th} industry class of the j^{th} industry group at the current month m
- $VaPI_{ij(m-1)}$ = VaPI for the i^{th} industry class of the j^{th} industry group for the previous month $m-1$
- V_{ijm} = total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group at the current month m
- $V_{ij(m-1)}$ = total value of production for all sample establishments in the i^{th} industry class of the j^{th} industry group for the previous month $m-1$

b. Computation of Index for Industry Group Level

$$VaPI_{jm} = \sum_{i=1}^n W_{ij} \times VaPI_{ijm}$$

where:

- $VaPI_{jm}$ = VaPI for j^{th} industry group at current month m
- $VaPI_{ijm}$ = VaPI for the i^{th} industry class of the j^{th} industry group at the current month m
- W_{ij} = Weight for the i^{th} industry class of the j^{th} industry group
- n = Number of industry class in the j^{th} industry group

Same formula for industry groups without industry class

c. Computation of Index for Total Manufacturing

$$VaPI_m = \sum_{j=1}^p W_j \times VaPI_{jm}$$

where:

- $VaPI_m$ = VaPI for the current month m
- $VaPI_{jm}$ = VaPI for j^{th} industry group (2/3-digit) at current month m
- W_j = Weight for the j^{th} industry group
- p = Number of industry groups = 20

2. Value of Net Sales Index (VaNSI)

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

3. Volume of Production Index (VoPI)

a. Computation for Index for Industry Class Level

$$\text{VoPI}_{ijm} = \frac{\text{VaPI}_{ijm}}{\text{PPI}_{ijm}}$$

where:

VoPI_{ijm} = VoPI for the i^{th} industry class of the j^{th} industry group at the current month m

VaPI_{ijm} = VaPI for the i^{th} industry class of the j^{th} industry group at the current month m

PPI_{ijm} = PPI for the i^{th} industry class of the j^{th} industry group at the current month m

b. Computation of Index for Industry Group Level

$$\text{VoPI}_{jm} = \frac{\text{VaPI}_{jm}}{\text{PPI}_{jm}}$$

where:

VoPI_{jm} = VoPI for the j^{th} industry group at the current month m

VaPI_{jm} = VaPI for the j^{th} industry group at the current month m

PPI_{jm} = PPI for the j^{th} industry group at the current month m

c. Computation of Index for Total Manufacturing (1-digit PSIC)

$$\text{VoPI}_m = \frac{\text{VaPI}_m}{\text{PPI}_m}$$

where:

VoPI_m = VoPI for total manufacturing at the current month m

VaPI_m = VaPI for total manufacturing at the current month m

PPI_m = PPI for total manufacturing at the current month m

4. Volume of Net Sales Index (VoNSI)

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

5. Capacity Utilization Rate

Capacity Utilization Rate is the ratio of total output to the maximum rated capacity of the establishment. Rated Capacity refers to the largest volume of output possible at which the factory can operate with an acceptable degree of efficiency taking into consideration unavoidable losses of productive time (i.e., vacation, holiday, and repair of equipment) and availability of raw materials.

The formulas in obtaining the Average Capacity Utilization Rate are the following:

a. Computation fo Index for Industry Class Level

$$\text{AveCU}_m = \sum_{k=1}^n \left(\text{CU}_{ikjm} \times \frac{\text{Prod}_{kijm}}{\text{Prod}_{ijm}} \right)$$

where:

AveCU_{ijm} = Average capacity utilization rate for the i^{th} industry class in the j^{th} industry group at the current month m

CU_{kijm} = Midpoint of the capacity utilization range reported by the k^{th} sample establishment in the i^{th} industry class of the j^{th} industry group at the current month m

Prod_{kijm} = Value of production for the k^{th} sample establishment in the i^{th} industry class for the j^{th} industry group at the current month m

Prod_{ijm} = Total value of production for the i^{th} industry class of the j^{th} industry group at the current month m

b. Computation of Index for Industry Group Level

- **With Industry Classes**

$$\text{AveCU}_{jm} = \sum_{j=1}^{20} (\text{Ave CU}_{ijm} \times W_{ij})$$

where:

- AveCU_{jm} = Average capacity utilization rate of the j^{th} industry group at the current month m
- AveCU_{ijm} = Average capacity utilization rate of the i^{th} industry class of the j^{th} industry group at the current month m
- W_{ij} = Weight of the i^{th} industry class of the j^{th} industry group

- **Without Industry Classes**

$$\text{AveCU}_m = \sum_{k=1}^n \left(\text{CU}_{kjm} \times \frac{\text{Prod}_{kjm}}{\text{Prod}_{jm}} \right)$$

where:

- AveCU_{jm} = Average capacity utilization rate of the j^{th} industry group at the current month m
- CU_{kjm} = Midpoint of the capacity utilization range reported by the k^{th} sample establishment in the j^{th} industry group at the current month m
- Prod_{kjm} = Value of production for the k^{th} sample establishment in the j^{th} industry group at the current month m
- Prod_{jm} = Value of production for the j^{th} industry group at the current month m

c. Computation of Index for Total Manufacturing

$$\text{AveCU}_m = \sum_{j=1}^{20} (\text{Ave CU}_{jm} \times W_j)$$

where:

AveCU_m = Average capacity utilization rate for total manufacturing at the current month m

CU_{jm} = Average capacity utilization rate of the j^{th} industry group at the current month m

W_j = Weight of the j^{th} industry group at the current 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 2020 MISSI utilizes the 2009 PSIC to classify major industries and sub-industries. Twenty major industries of the 2009 PSIC were formed to comprise the industry coverage of the 2020 MISSI.

The table below presents the industry coverage of 2020 MISSI by 2009 PSIC code.

2009 PSIC CODE	INDUSTRY DESCRIPTION
C10	Food manufacturing *
C11	Beverages
C12	Tobacco products
C13	Textiles*
C14, C152	Footwear and wearing apparel
C151	Leather products
C16	Wood and wood products*
C17	Paper and paper products
C18	Printing
C19	Petroleum products*
C20,C21	Chemical products*
C22	Rubber and plastic products*
C23	Non-metallic mineral products*
C24	Basic metals*
C25,C3311	Fabricated metal products
C262,C275,C28, C263,C268,C3312,C332	Machinery except electrical*
C261,C264,C27, C29301,C3314,C332	Electrical machinery*
C29 except C29301, C30,C3315	Transport equipment
C31	Furniture and fixtures
C265,C266,C267,C32, C3313,C3319	Miscellaneous manufactures

* Industry groups categorized into industry classes