



SPECIAL RELEASE

**SEASONALLY ADJUSTED
 PRODUCTION INDEX AND NET SALES INDEX
 (Monthly Integrated Survey of Selected Industries)
 March 2024
 (2018 = 100)**

Date of Release: 08 May 2024

Reference No. 2024-145

Table A. Month-on-Month Growth Rates of Seasonally Adjusted Production Index and Net Sales Index for Total Manufacturing and Food Manufacturing (2018=100) February 2024^r and March 2024^p (in Percent)

INDICATOR	February 2024 ^r	March 2024 ^p
TOTAL MANUFACTURING		
Production Index (2018=100)		
Value of Production Index (<i>VaPI</i>)	4.0	-3.7
Volume of Production Index (<i>VoPI</i>)	4.1	-4.7
Net Sales Index (2018=100)		
Value of Net Sales Index (<i>VaNSI</i>)	1.0	-1.0
Volume of Net Sales Index (<i>VoNSI</i>)	0.5	-0.5
FOOD MANUFACTURING		
Production Index (2018=100)		
Value of Production Index (<i>VaPI</i>)	12.1	-9.9
Volume of Production Index (<i>VoPI</i>)	12.4	-10.1
Net Sales Index (2018=100)		
Value of Net Sales Index (<i>VaNSI</i>)	2.1	-2.5
Volume of Net Sales Index (<i>VoNSI</i>)	2.0	-2.3

p - preliminary

r - revised

Source: Philippine Statistics Authority



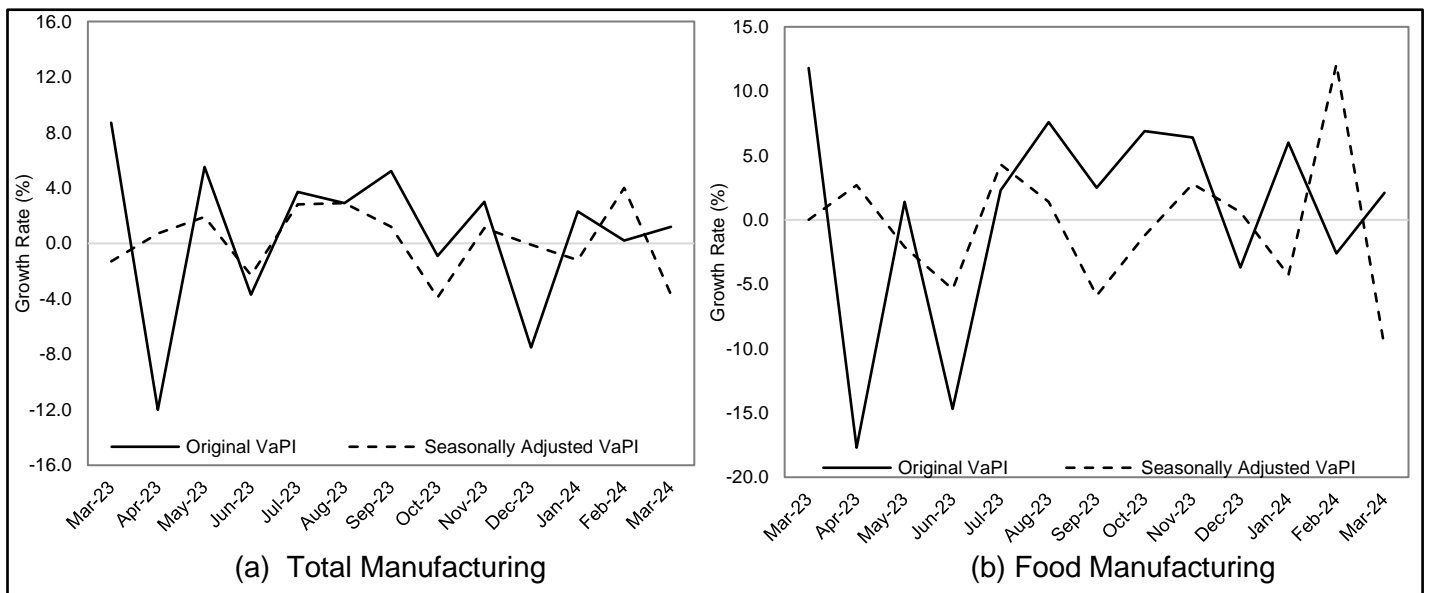
1. Value of Production Index (VaPI)

The seasonally adjusted VaPI for total manufacturing declined in March 2024 at a monthly rate of 3.7 percent from the 4.0 percent monthly growth rate observed in February 2024. (Figure 1a, and Tables A and 1)

Likewise, the seasonally adjusted VaPI for food manufacturing contracted by 9.9 percent month-on-month in March 2024. In the previous month, VaPI for for manufacturing increased monthly by 12.1 percent. (Figure 1b, and Tables A and 1)

The seasonally adjusted VaPI of other industry divisions and their month-on-month growths are shown in Table 1a.

Figure 1. Month-on-Month Growth Rates of Original and Seasonally Adjusted Value of Production Index (VaPI) for Total Manufacturing and Food Manufacturing March 2023 to March 2024^p (2018=100)



p - preliminary
Source: Philippine Statistics Authority

2. Volume of Production Index (VoPI)

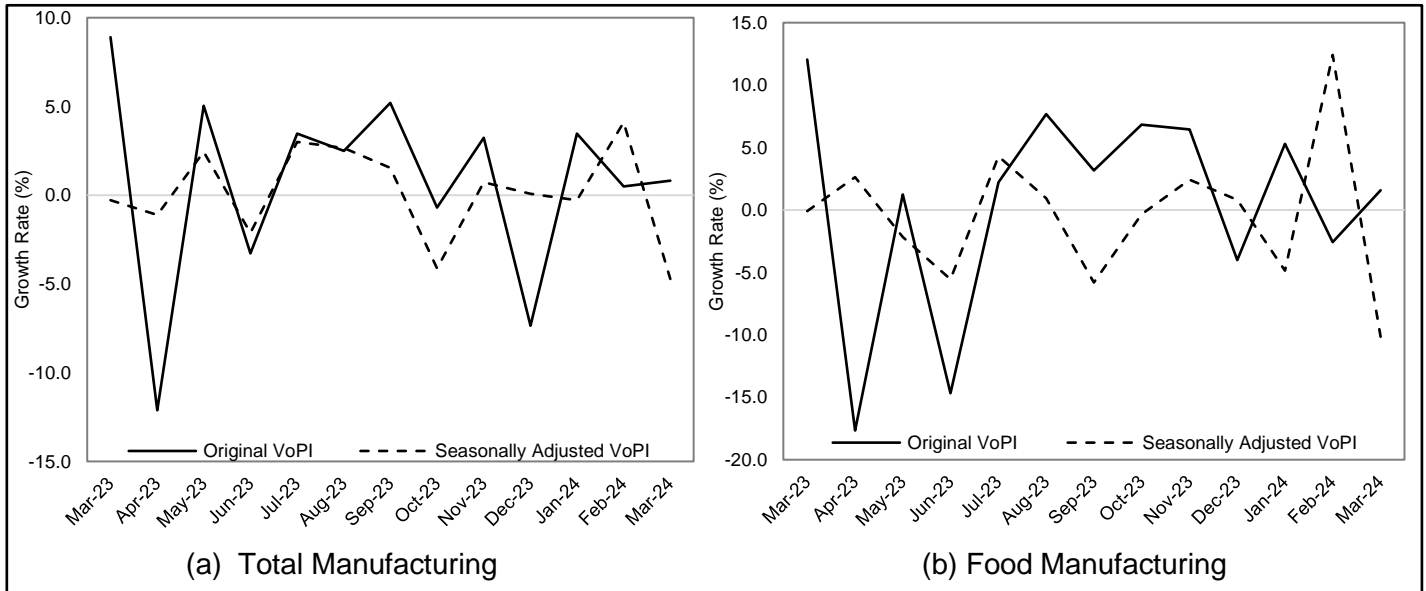
The monthly rate of the seasonally adjusted VoPI for total manufacturing decreased by 4.7 percent in March 2024. In February 2024, a 4.1 percent month-on-month growth rate was observed. (Figure 2a, and Tables A and 2)

Similarly, the monthly rate of the seasonally adjusted VoPI for food manufacturing contracted by 10.1 percent during the period from its monthly expansion of 12.4 percent in February 2024. (Figure 2b, and Tables A and 2)

The seasonally adjusted VoPI of other industry divisions are shown in Table 2a.

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Figure 2. Month-on-Month Growth Rates of Original and Seasonally Adjusted Volume of Production Index (VoPI) for Total Manufacturing and Food Manufacturing March 2023 to March 2024^p (2018=100)



p - preliminary
 Source: Philippine Statistics Authority

3. Value of Net Sales Index (VaNSI)

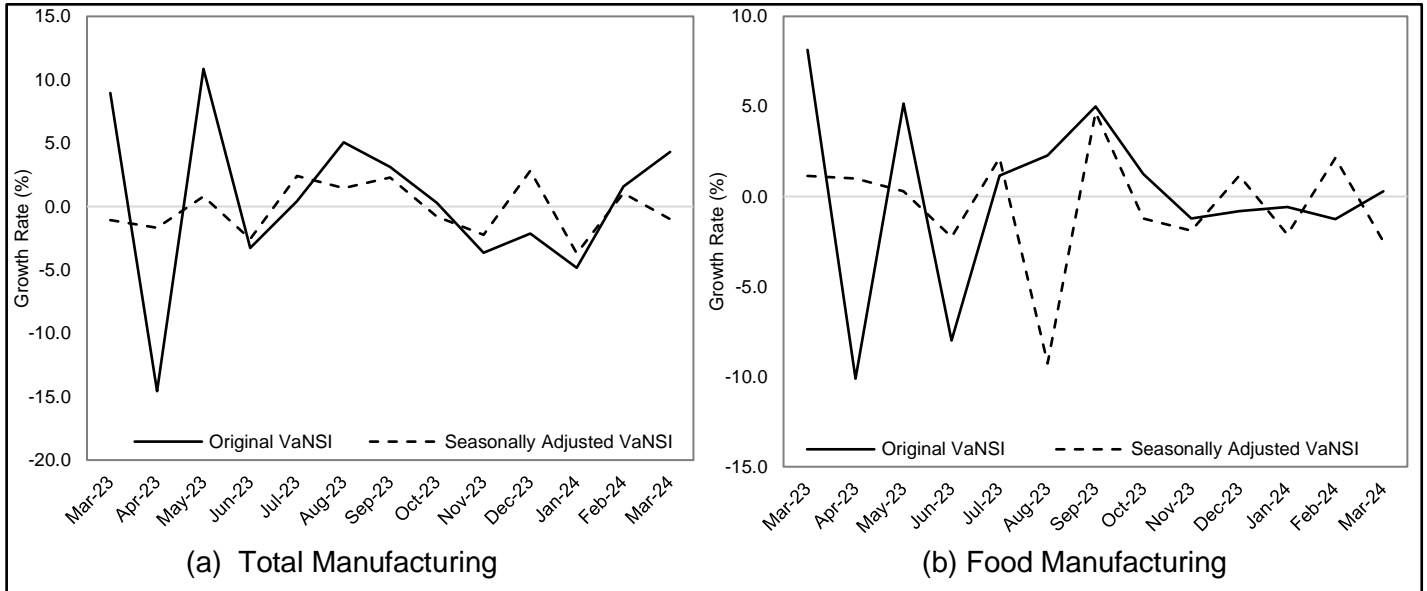
In March 2024, the monthly growth rate of the seasonally adjusted VaNSI for total manufacturing declined by 1.0 percent from the 1.0 percent growth in February 2024. (Figure 3a, and Tables A and 3)

Likewise, the the seasonally adjusted VaNSI for food manufacturing declined month-on-month by 2.5 percent during the month. In the previous month, an expansion of 2.1 percent monthly was recorded. (Figure 3b, and Tables A and 3)

The seasonally adjusted VaNSI of other industry divisions are shown in Table 3a.

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Figure 3. Month-on-Month Growth Rates of Original and Seasonally Adjusted Value of Net Sales Index (VaNSI) for Total Manufacturing and Food Manufacturing March 2023 to March 2024^p (2018=100)



p - preliminary
 Source: Philippine Statistics Authority

4. Volume of Net Sales Index (VoNSI)

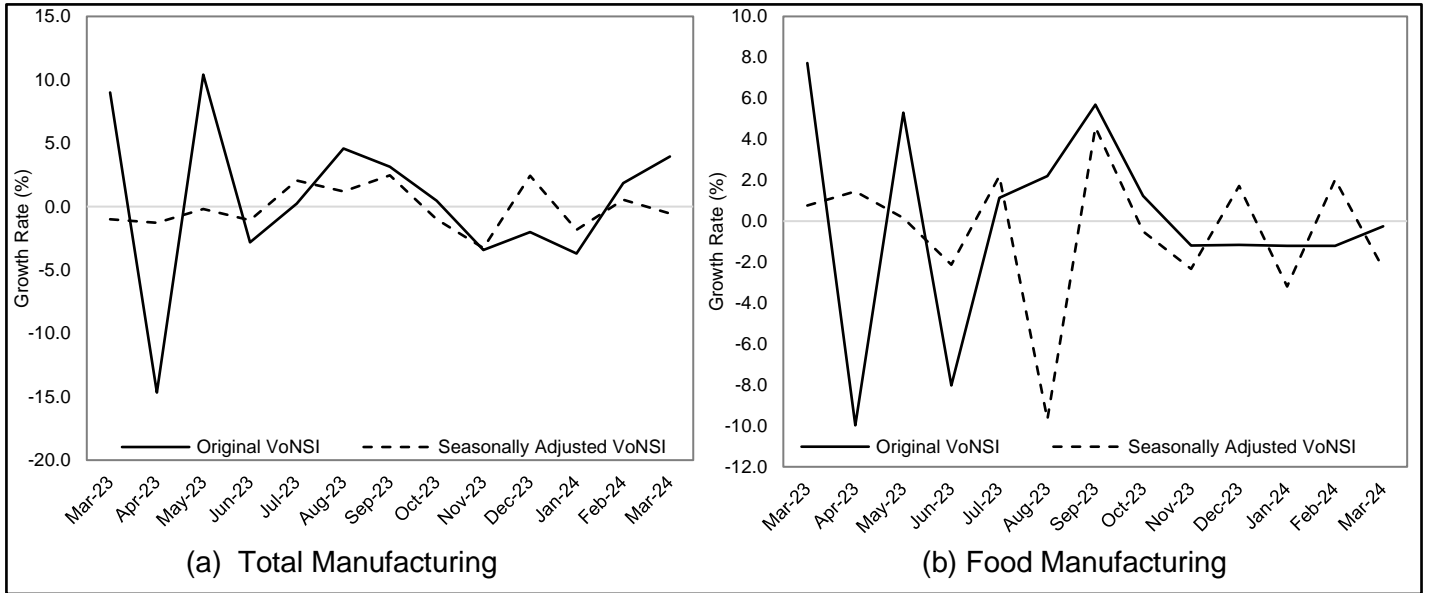
Month-on-month, the seasonally adjusted VoNSI for total manufacturing had a decrease of 0.5 percent in March 2024 from a 0.5 percent monthly growth observed in February 2024. (Figure 4a, and Tables A and 4)

Similarly, the monthly rate of the seasonally adjusted VoNSI for food manufacturing declined by 2.3 percent in March 2024. In February 2024, an expansion of 2.0 percent month-on-month was registered. (Figure 4b, and Tables A and 4)

The seasonally adjusted VoNSI of other industry divisions are shown in Table 4a.

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Figure 4. Month-on-Month Growth Rates of Original and Seasonally Adjusted Volume of Net Sales Index (VoNSI) for Total Manufacturing and Food Manufacturing: March 2023 to March 2024^P (2018=100)



p - preliminary
 Source: Philippine Statistics Authority

CLAIRE DENNIS S. MAPA, PhD
 Undersecretary
 National Statistician and Civil Registrar General

DGLDP/RCL/JPCS

Technical Notes

The Monthly Integrated Survey of Selected Industries (MISSI) generates the original series of the Value of Production Index (VaPI), Volume of Production Index (VoPI), Value of Net Sales Index (VaNSI), and Volume of Net Sales Index (VoNSI). These indices provide information on the performance of growth-oriented industries in the manufacturing section.

This special release features the seasonally adjusted VaPI, VoPI, VaNSI, and VoNSI using X-13 Auto-Regressive Integrated Moving Average (ARIMA) of JDemetra+. The seasonally adjusted series show the trend of value and volume of production and net sales of the manufacturing section without the effects of seasonal factors.

The decomposition model chosen for the seasonal adjustment for each index is shown below.

Table A. Summary of Statistical Models Used in the Generation of Seasonally Adjusted MISSI Indices
(2018=100)

Index	Industry Division	Model	ARIMA
VaPI	Total Manufacturing	Additive	(0,1,1)(0,1,1)
VaPI	Manufacture of Food Products	Multiplicative	(1,1,1)(0,1,1)
VaPI	Manufacture of beverages	Multiplicative	(0,1,1)(0,1,1)
VaPI	Manufacture of tobacco products	Multiplicative	(0,1,1)(0,1,1)
VaPI	Manufacture of textiles	Additive	(1,1,0)(0,1,1)
VaPI	Manufacture of wearing apparel	Additive	(0,1,1)(0,1,1)
VaPI	Manufacture of paper and paper products	Additive	(0,1,1)(0,1,1)
VaPI	Printing and reproduction of recorded media	Multiplicative	(0,1,1)(0,1,1)
VaPI	Manufacture of coke and refined petroleum products	Additive	(1,1,1)(1,0,0)
VaPI	Manufacture of chemical and chemical products	Additive	(2,0,0)(0,0,0)
VaPI	Pharmaceuticals & medicinal products	Multiplicative	(0,1,1)(1,0,0)
VaPI	Manufacture of rubber and plastic products	Additive	(1,1,0)(0,1,1)
VaPI	Manufacture of other non-metallic mineral products	Additive	(0,1,1)(0,1,1)
VaPI	Manufacture of basic metals	Additive	(1,0,0)(1,0,0)
VaPI	Manufacture of fabricated metal products, except machinery and equipment	Additive	(1,0,1)(0,1,1)
VaPI	Manufacture of electrical equipment	Additive	(0,1,1)(0,1,1)



Index	Industry Division	Model	ARIMA
VaPI	Manufacture of furniture	Multiplicative	(1,1,2)(0,0,0)
VaPI	Other manufacturing	Additive	(0,1,1)(0,1,1)
VoPI	Total Manufacturing	Additive	(0,1,1)(0,1,1)
VoPI	Manufacture of Food Products	Multiplicative	(1,0,0)(0,1,1)
VoPI	Manufacture of beverages	Multiplicative	(0,1,1)(0,1,1)
VoPI	Manufacture of tobacco products	Multiplicative	(0,1,1)(0,1,1)
VoPI	Manufacture of textiles	Additive	(1,1,0)(0,1,1)
VoPI	Manufacture of wearing apparel	Additive	(0,1,1)(0,1,1)
VoPI	Manufacture of paper and paper products	Additive	(0,1,1)(0,1,1)
VoPI	Printing and reproduction of recorded media	Multiplicative	(0,1,1)(0,1,1)
VoPI	Manufacture of chemical and chemical products	Additive	(1,0,0)(0,0,0)
VoPI	Pharmaceuticals & medicinal products	Multiplicative	(0,1,1)(1,0,0)
VoPI	Manufacture of rubber and plastic products	Additive	(0,1,1)(0,1,1)
VoPI	Manufacture of other non-metallic mineral products	Additive	(0,1,1)(0,1,1)
VoPI	Manufacture of basic metals	Additive	(1,1,1)(1,0,0)
VoPI	Manufacture of fabricated metal products, except machinery and equipment	Additive	(0,1,1)(0,1,1)
VoPI	Other manufacturing	Additive	(0,1,1)(0,1,1)
VaNSI	Total Manufacturing		(1,1,0)(0,1,1)
VaNSI	Manufacture of Food Products		
VaNSI	Manufacture of beverages	Multiplicative	(1,1,1)(0,1,1)
VaNSI	Manufacture of textiles	Additive	(0,1,1)(1,0,0)
VaNSI	Manufacture of wearing apparel	Additive	(0,1,1)(0,1,1)
VaNSI	Manufacture of wood, bamboo, cane, rattan articles and related products	Multiplicative	(0,1,1)(0,1,1)
VaNSI	Printing and reproduction of recorded media	Multiplicative	(1,1,1)(1,0,1)
VaNSI	Manufacture of coke and refined petroleum products	Multiplicative	(0,1,0)(0,1,1)
VaNSI	Manufacture of chemical and chemical products	Additive	(2,0,1)(0,0,1)
VaNSI	Manufacture of rubber and plastic products	Additive	(0,1,1)(0,1,1)
VaNSI	Manufacture of other non-metallic mineral products	Additive	(0,1,1)(0,1,1)
VaNSI	Manufacture of fabricated metal products, except machinery and equipment	Additive	(0,1,1)(0,1,1)
VaNSI	Manufacture of electrical equipment	Additive	(0,1,0)(0,1,1)
VaNSI	Manufacture of transport equipment	Additive	(0,1,1)(0,1,1)
VoNSI	Total Manufacturing	Additive	(1,1,0)(0,1,1)

Index	Industry Division	Model	ARIMA
VoNSI	Manufacture of Food Products	Additive	(0,1,1)(0,1,1)
VoNSI	Manufacture of beverages	Multiplicative	(0,1,1)(0,1,1)
VoNSI	Manufacture of textiles	Additive	(0,0,0)(0,1,1)
VoNSI	Manufacture of wearing apparel	Additive	(0,1,1)(0,1,1)
VoNSI	Printing and reproduction of recorded media	Multiplicative	(0,1,1)(0,1,1)
VoNSI	Manufacture of coke and refined petroleum products	Multiplicative	(0,1,1)(0,1,1)
VoNSI	Manufacture of chemical and chemical products	Additive	(1,0,0)(1,0,0)
VoNSI	Manufacture of rubber and plastic products	Additive	(0,1,1)(1,0,1)
VoNSI	Manufacture of other non-metallic mineral products	Additive	(0,1,1)(0,1,1)
VoNSI	Manufacture of basic metals	Multiplicative	(0,1,1)(0,0,0)
VoNSI	Manufacture of fabricated metal products, except machinery and equipment	Additive	(0,1,0)(0,1,1)
VoNSI	Manufacture of electrical equipment	Additive	(1,0,0)(0,1,1)
VoNSI	Manufacture of transport equipment	Additive	(0,1,1)(0,1,1)