SPECIAL RELEASE

**SEASONALLY ADJUSTED
PRODUCTION INDEX AND NET SALES INDEX
(Monthly Integrated Survey of Selected Industries)
August 2023
(2018 = 100)**

Date of Release: <u>06 October 2023</u>
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Table A. Month-on-Month Growth Rates of Seasonally Adjusted Production Index and Net Sales Index for Total Manufacturing and Food Manufacturing (2018=100) July 2023[r] and August 2023[p]
(in Percent)

INDICATOR	July 2023[r]	August 2023[p]
TOTAL MANUFACTURING		
Production Index (2018=100)		
Value of Production Index (*VaPI*)	**2.8**	**2.9**
Volume of Production Index (*VoPI*)	**3.0**	**2.7**
Net Sales Index (2018=100)		
Value of Net Sales Index *(VaNSI)*	**2.4**	**1.4**
Volume of Net Sales Index *(VoNSI)*	**2.0**	**1.2**
FOOD MANUFACTURING		
Production Index (2018=100)		
Value of Production Index (*VaPI*)	**4.3**	**1.4**
Volume of Production Index (*VoPI*)	**4.3**	**0.9**
Net Sales Index (2018=100)		
Value of Net Sales Index *(VaNSI)*	**2.1**	**-9.3**
Volume of Net Sales Index *(VoNSI)*	**2.2**	**-9.7**

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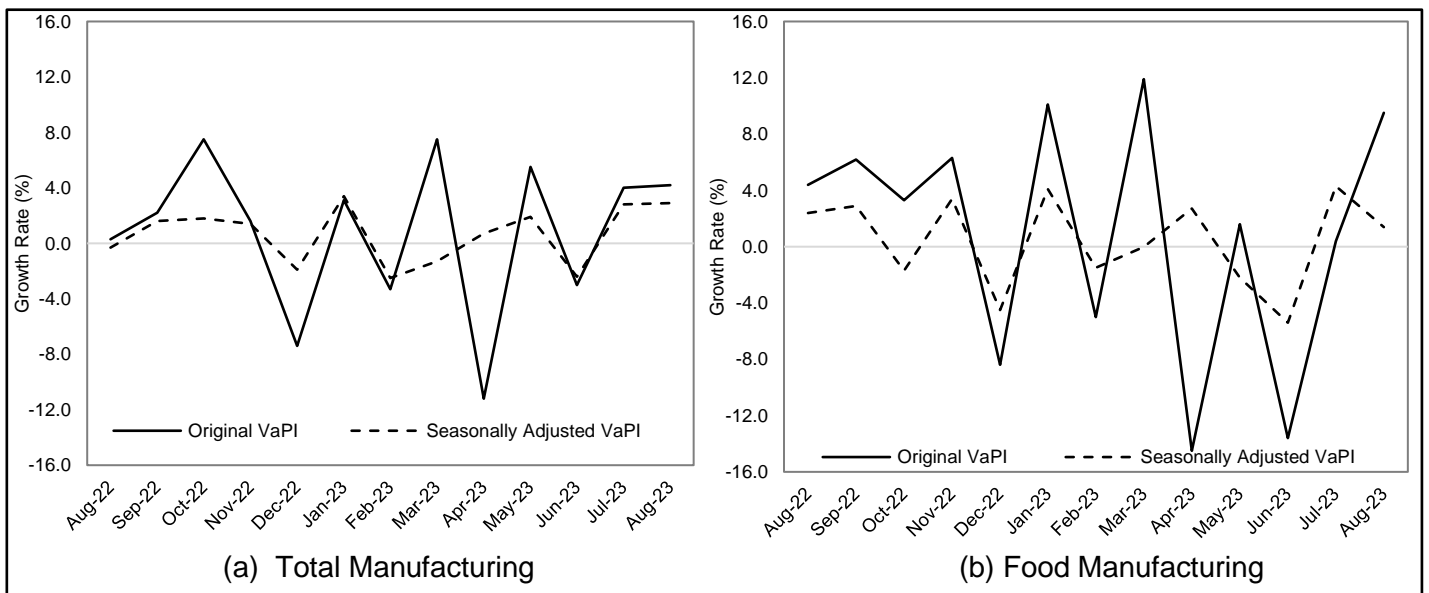*Source: Philippine Statistics Authority*

1. Value of Production Index (VaPI)

The seasonally adjusted VaPI for total manufacturing in August 2023 further accelerated at a monthly rate of 2.9 percent from the 2.8 percent monthly rate observed in July 2023. (Figure 1a, and Tables A and 1)

Meanwhile, the seasonally adjusted VaPI for food manufacturing decelerated at a monthly increment of 1.4 percent during this month from the previous month's increase of 4.3 percent. (Figure 1b, and Tables A and 1)

Figure 1. Month-on-Month Growth Rates of Original and Seasonally Adjusted Value of Production Index (VaPI) for Total Manufacturing and Food Manufacturing
August 2022 to August 2023[p]
(2018=100)

(a) Total Manufacturing   (b) Food Manufacturing

p - preliminary
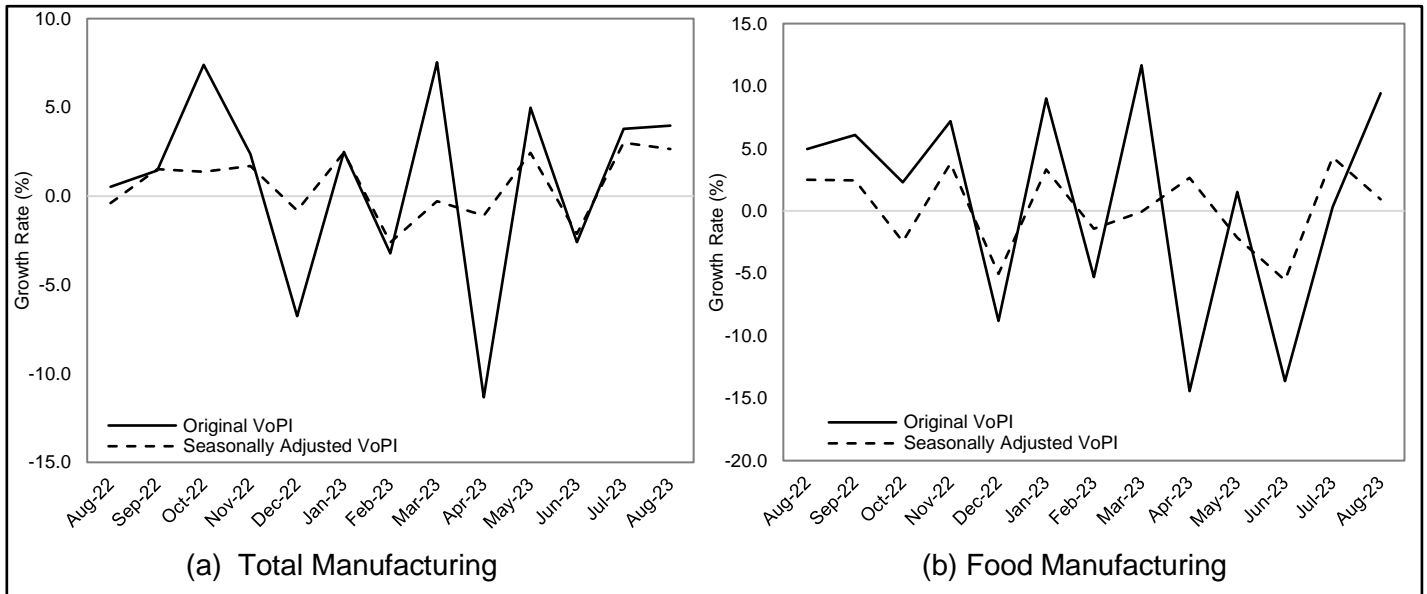*Source: Philippine Statistics Authority*

2. Volume of Production Index (VoPI)

The monthly increase of the seasonally adjusted VoPI for total manufacturing slowed down to 2.7 percent in August 2023 from a month-on-month increment of 3.0 percent in July 2023. (Figure 2a, and Tables A and 2)

Moreover, the seasonally adjusted VoPI for food manufacturing decelerated at a monthly increment of 0.9 percent in August 2023 from the 4.3 percent monthly increase in the previous month. (Figure 2b, and Tables A and 2)

Figure 2. Month-on-Month Growth Rates of Original and Seasonally Adjusted
Volume of Production Index (VoPI) for Total Manufacturing and Food Manufacturing
August 2022 to August 2023[p]
(2018=100)

(a) Total Manufacturing

(b) Food Manufacturing

p - preliminary
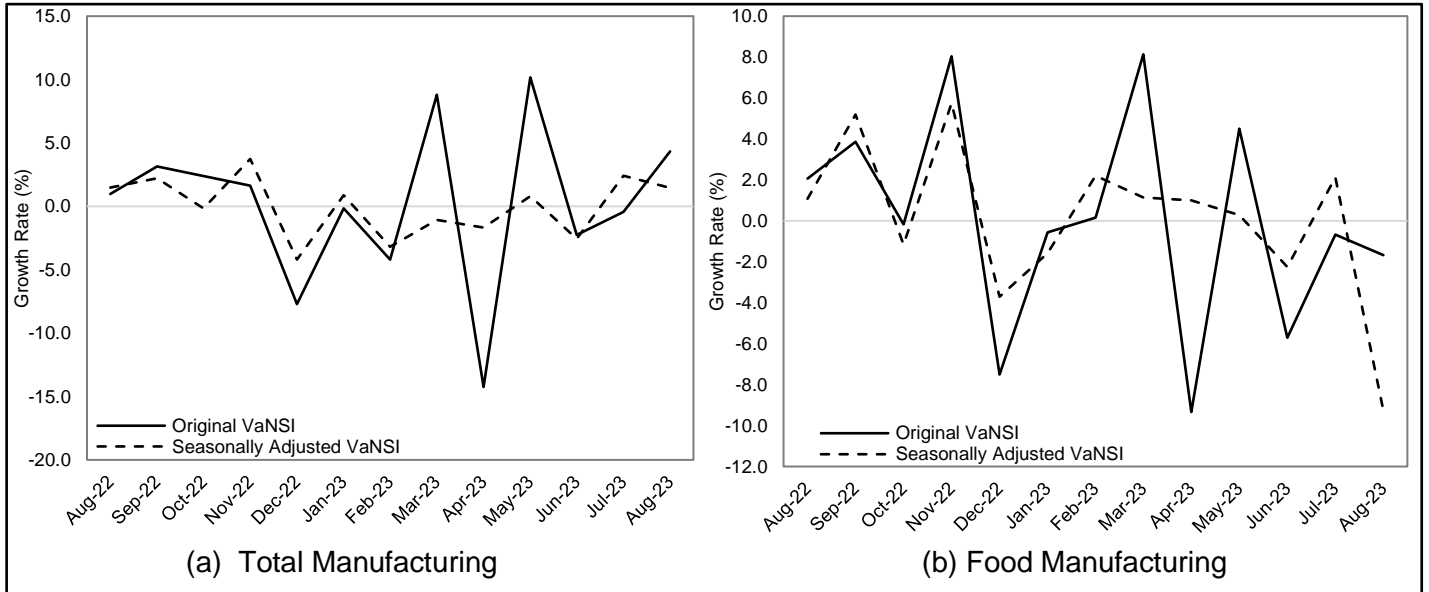*Source: Philippine Statistics Authority*

3. Value of Net Sales Index (VaNSI)

In August 2023, the monthly increase of the seasonally adjusted VaNSI for total manufacturing slowed down to 1.4 percent from 2.4 percent monthly growth in July 2023. (Figure 3a, and Tables A and 3)

Likewise, the month-on-month growth rate of the seasonally adjusted VaNSI for food manufacturing dropped by 9.3 percent during the month from a monthly increase of 2.1 percent in the previous month. (Figure 3b, and Tables A and 3)

Figure 3. Month-on-Month Growth Rates of Original and Seasonally Adjusted Value of Net Sales Index (VaNSI) for Total Manufacturing and Food Manufacturing August 2022 to August 2023[p] (2018=100)

(a) Total Manufacturing   (b) Food Manufacturing

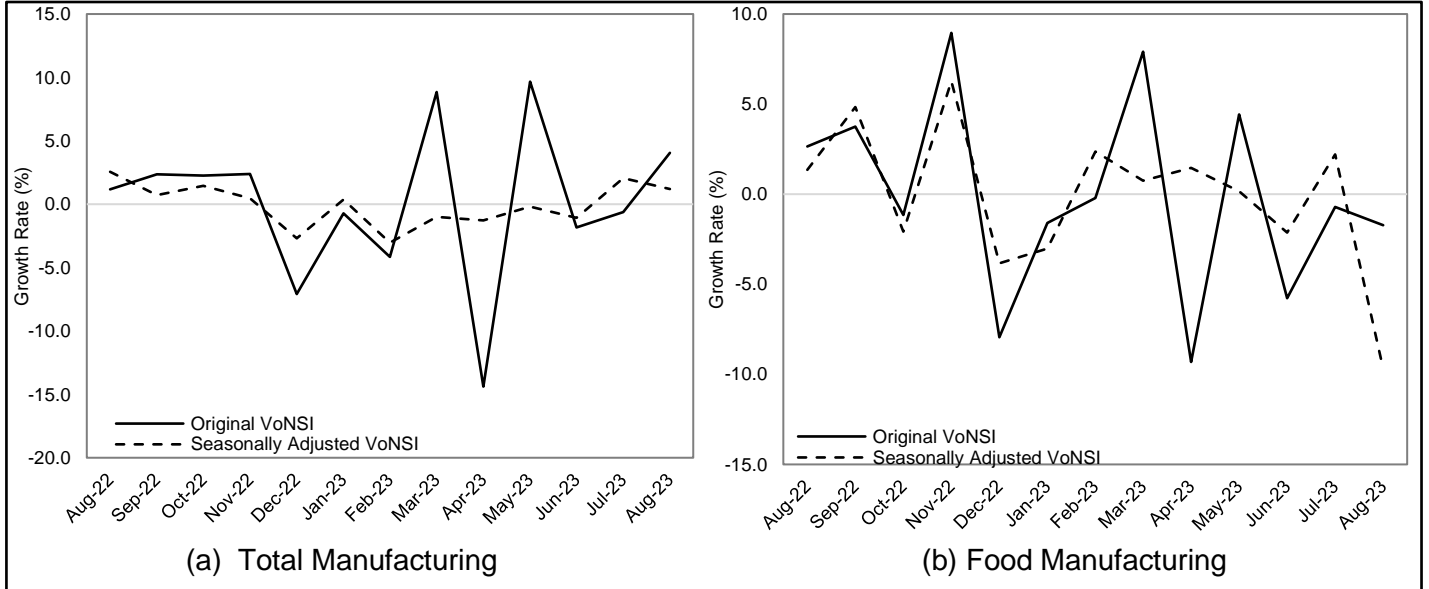*p - preliminary*
Source: Philippine Statistics Authority

4. Volume of Net Sales Index (VoNSI)

A slower month-on-month increase of 1.2 percent was observed in the seasonally adjusted VoNSI for total manufacturing in August 2023 from a monthly increment of 2.0 percent in the previous month. (Figure 4a, and Tables A and 4)

Meanwhile, the seasonally adjusted VoNSI for food manufacturing declined by 9.7 percent month-on-month in August 2023 from a monthly increase of 2.2 percent in July 2023. (Figure 4b, and Tables A and 4)

Figure 4. Month-on-Month Growth Rates of Original and Seasonally Adjusted Volume of Net Sales Index (VoNSI) for Total Manufacturing and Food Manufacturing: August 2022 to August 2023ᵖ (2018=100)

(a) Total Manufacturing

(b) Food Manufacturing

p - preliminary
Source: Philippine Statistics Authority

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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 sector.

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 sector 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	Statistical Model
Value of Production Index (VaPI) Total Manufacturing	Additive Model: (0,1,1)(0,1,1) No data transformation.
Value of Production Index (VaPI) Food Manufacturing	Multiplicative Model: (1,1,1)(0,1,1) Data series have been log-transformed.
Volume of Production Index (VoPI) Total Manufacturing	Additive Model: (0,1,1)(0,1,1) No data transformation.
Volume of Production Index (VoPI) Food Manufacturing	Multiplicative Model: (1,0,0)(0,1,1) Data series have been log-transformed.
Value of Net Sales Index (VaNSI) Total Manufacturing	Additive Model: (1,1,0)(0,1,1) No data transformation.
Value of Net Sales Index (VaNSI) Food Manufacturing	Additive Model: (0,1,1)(0,1,1) No data transformation.
Volume of Net Sales Index (VoNSI) Total Manufacturing	Additive Model: (1,1,0)(0,1,1) No data transformation.
Volume of Net Sales Index (VoNSI) Food Manufacturing	Additive Model: (0,1,1)(0,1,1) No data transformation.