

# SPECIAL RELEASE

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

Date of Release: 07 December 2023

Reference No. 2023-377

Table A. Month-on-Month Growth Rates of Seasonally Adjusted Production Index and Net Sales Index for Total Manufacturing and Food Manufacturing (2018=100) September 2023<sup>r</sup> and October 2023<sup>p</sup> (in Percent)

INDICATOR	September 2023 <sup>r</sup>	October 2023 <sup>p</sup>
<b>TOTAL MANUFACTURING</b>		
<b>Production Index (2018=100)</b>		
Value of Production Index ( <i>VaPI</i> )	1.2	-3.8
Volume of Production Index ( <i>VoPI</i> )	1.5	-4.1
<b>Net Sales Index (2018=100)</b>		
Value of Net Sales Index ( <i>VaNSI</i> )	2.3	-0.8
Volume of Net Sales Index ( <i>VoNSI</i> )	2.5	-1.0
<b>FOOD MANUFACTURING</b>		
<b>Production Index (2018=100)</b>		
Value of Production Index ( <i>VaPI</i> )	-5.9	-1.2
Volume of Production Index ( <i>VoPI</i> )	-5.8	-0.3
<b>Net Sales Index (2018=100)</b>		
Value of Net Sales Index ( <i>VaNSI</i> )	4.7	-1.2
Volume of Net Sales Index ( <i>VoNSI</i> )	4.6	-0.5

*p* - preliminary

*r* - revised

Source: Philippine Statistics Authority

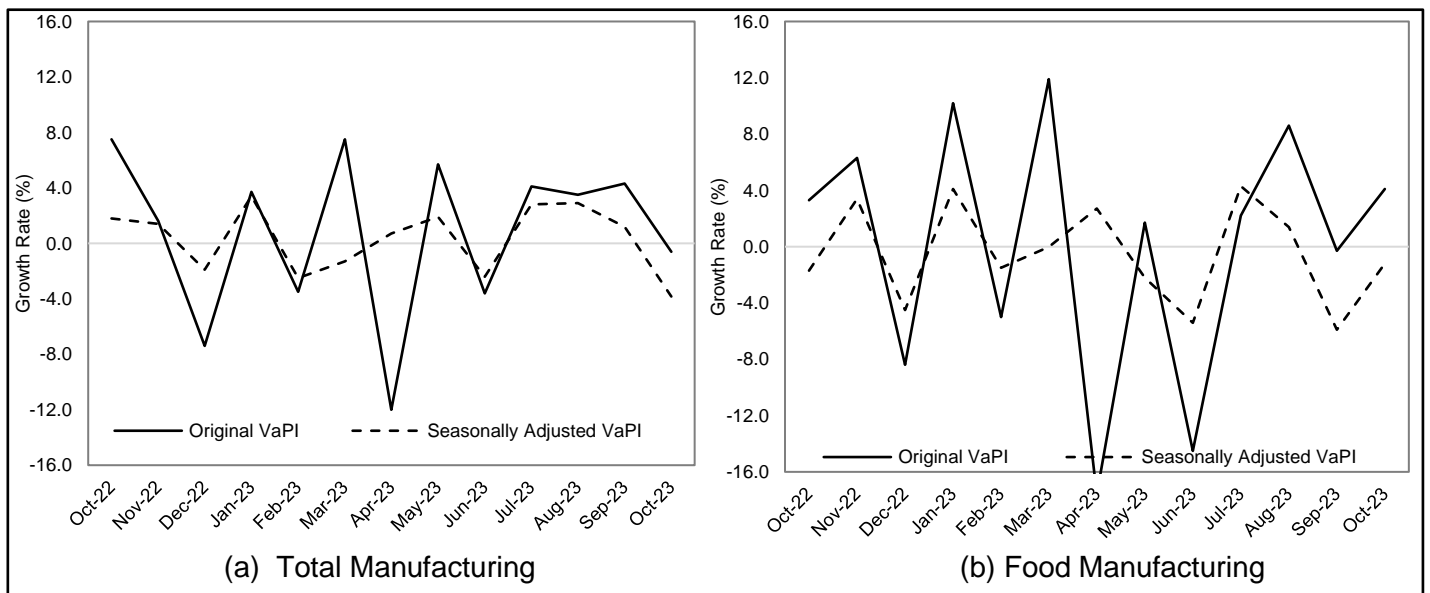



## 1. Value of Production Index (VaPI)

The seasonally adjusted VaPI for total manufacturing in October 2023 declined at a monthly rate of 3.8 percent from 1.2 percent monthly increment observed in September 2023. (Figure 1a, and Tables A and 1)

On the other hand, the seasonally adjusted VaPI for food manufacturing declined by 1.2 percent in October 2023. This was a slowdown from the previous month's drop of 5.9 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 October 2022 to October 2023<sup>p</sup> (2018=100)



*p* - preliminary  
 Source: Philippine Statistics Authority

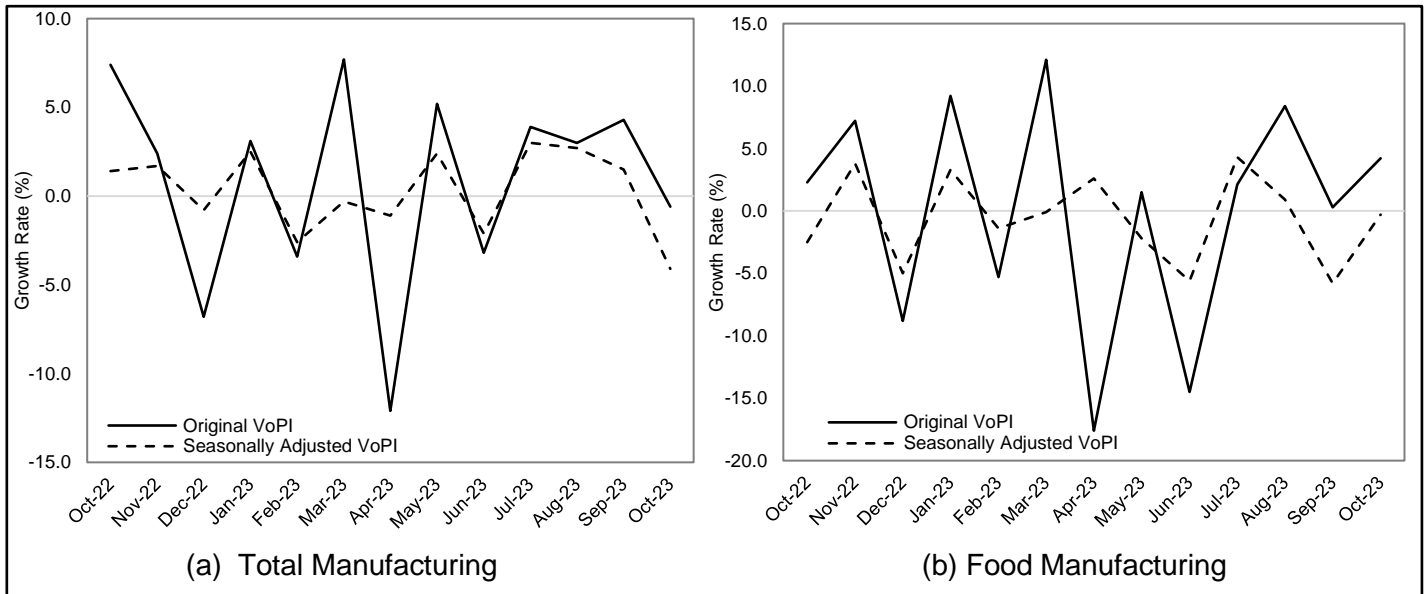
## 2. Volume of Production Index (VoPI)

The monthly rate of the seasonally adjusted VoPI for total manufacturing declined by 4.1 percent in October 2023 from a month-on-month increment of 1.5 percent in September 2023. (Figure 2a, and Tables A and 2)

On the other hand, the monthly decline in the seasonally adjusted VoPI for food manufacturing eased to 0.3 percent in October 2023 from the 5.8 percent monthly drop in the previous month. (Figure 2b, and Tables A and 2)

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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 October 2022 to October 2023<sup>p</sup> (2018=100)



p - preliminary

Source: Philippine Statistics Authority

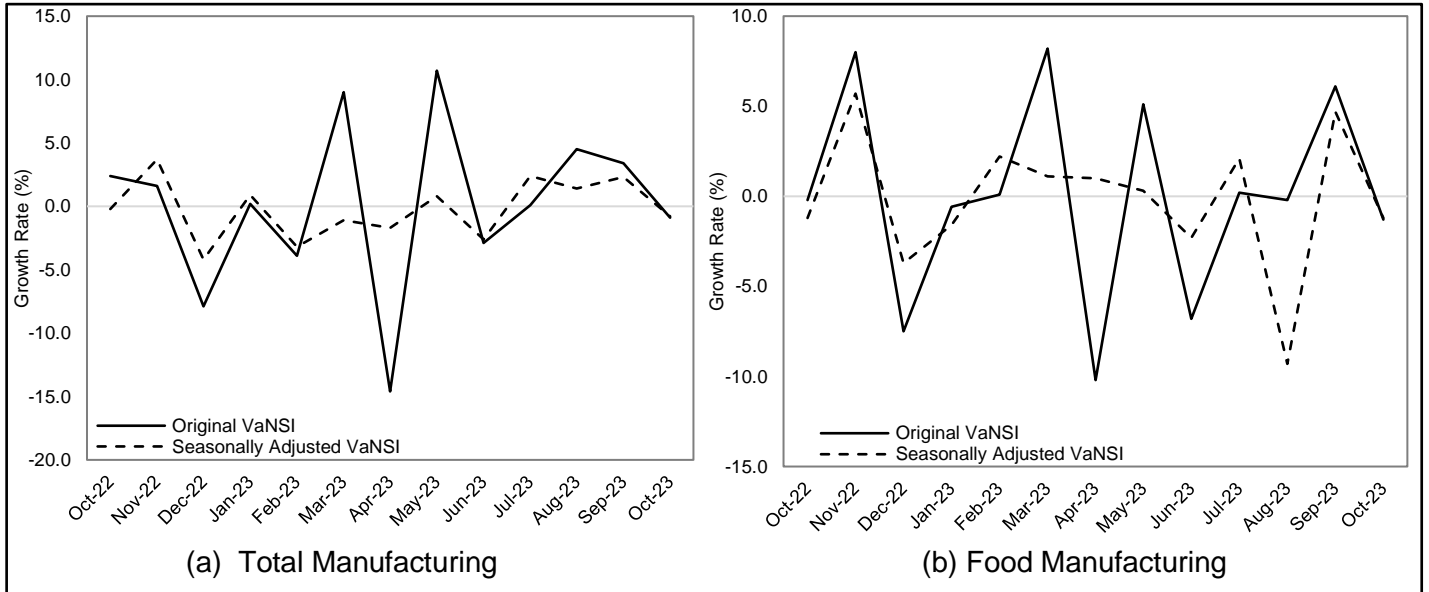
### 3. Value of Net Sales Index (VaNSI)

In October 2023, the monthly rate of the seasonally adjusted VaNSI for total manufacturing contracted by 0.8 percent after posting a 2.3 percent monthly growth in September 2023. (Figure 3a, and Tables A and 3)

Likewise, the month-on-month growth rate of the seasonally adjusted VaNSI for food manufacturing decreased by 1.2 percent during the month. This was a downturn from the monthly increase of 4.7 percent observed in the previous month. (Figure 3b, and Tables A and 3)

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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 October 2022 to October 2023<sup>p</sup> (2018=100)



*p* - preliminary  
 Source: Philippine Statistics Authority

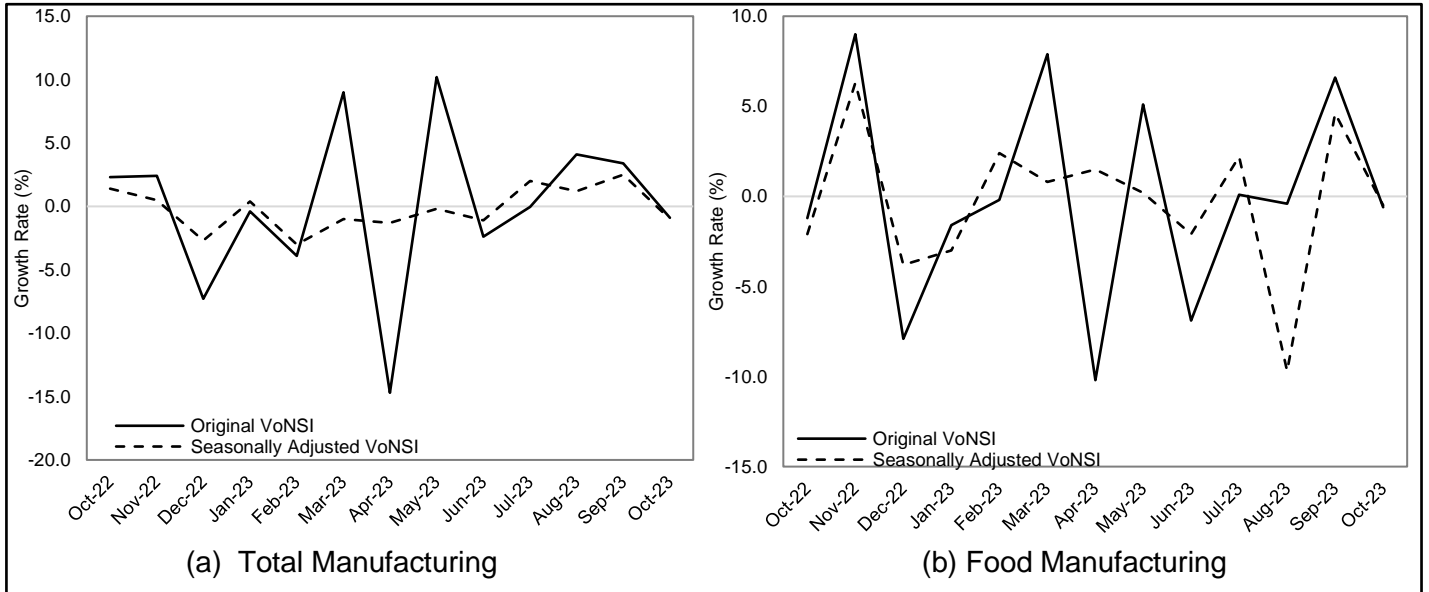
**4. Volume of Net Sales Index (VoNSI)**

A month-on-month decrease of 1.0 percent was observed in the seasonally adjusted VoNSI for total manufacturing in October 2023 after exhibiting a monthly increment of 2.5 percent in September 2023. (Figure 4a, and Tables A and 4)

Likewise, the seasonally adjusted VoNSI for food manufacturing declined by 0.5 percent month-on-month in October 2023 from a monthly increase of 4.6 percent registered in the previous month. (Figure 4b, and Tables A and 4)

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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: October 2022 to October 2023<sup>p</sup> (2018=100)



*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.

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