

REPUBLIC OF THE PHILIPPINES PHILIPPINE STATISTICS AUTHORITY

# SPECIAL RELEASE

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

Date of Release: 09 May 2023 Reference No. 2023-169

### 1. Value of Production Index (VaPI)

The seasonally adjusted VaPI for total manufacturing recorded a lower monthly decline of -1.2 percent in March 2023 from -2.7 percent month-on-month drop in February 2023.

Meanwhile, the seasonally adjusted VaPI for food manufacturing further decreased during the period posting an annual downturn of -1.9 percent from the monthly rate of -1.1 percent in the previous month. (Table 1)

Seasonal factors, such as the degree of demand for manufactured goods during the season, pushed up both indices.

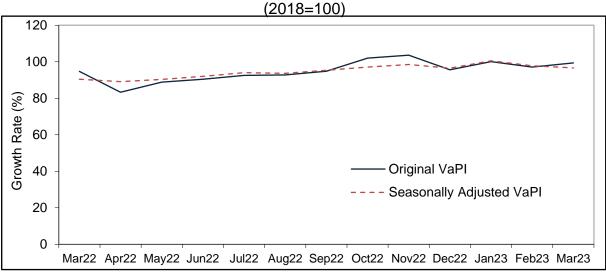


Figure 1. Original and Seasonally Adjusted Value of Production Index (VaPI) for Total Manufacturing: March 2022 - March 2023<sup>p</sup>

p - preliminary

Source: Philippine Statistics Authority



#### 2. Volume of Production Index (VoPI)

The monthly rate of the seasonally adjusted VoPI for total manufacturing decelerated to -1.1 percent in March 2023. This growth rate is lower than the monthly decline of -2.8 percent in February 2023.

On the other hand, the seasonally adjusted VoPI for food manufacturing posted a faster monthly decrement of -1.9 percent in March 2023 than the -0.9 percent monthly rate in the previous month. (Table 2)

High volume of orders received are among the seasonal factors that pushed up the said indices for the season.

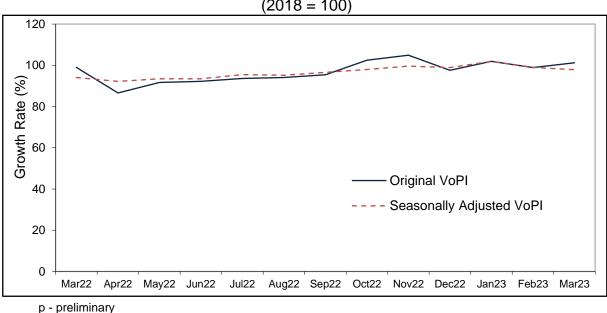


Figure 2. Original and Seasonally Adjusted Volume of Production Index (VoPI) (2018=100) for Total Manufacturing: March 2022 - March 2023<sup>p</sup>

(2018 = 100)

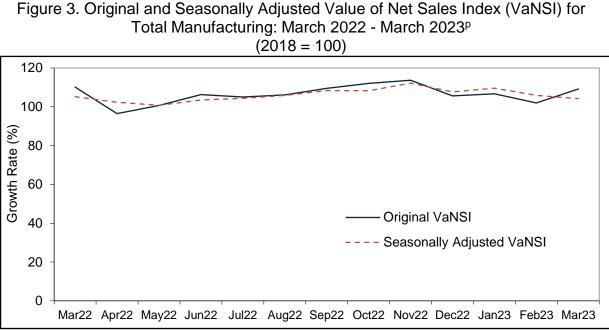
## 3. Value of Net Sales Index (VaNSI)

Source: Philippine Statistics Authority

The seasonally adjusted VaNSI for total manufacturing registered a lower monthly drop of -1.6 percent in March 2023 from the -3.4 percent monthly rate observed in February 2023.

Moreover, the seasonally adjusted VaNSI for food manufacturing posted a monthly increase of 1.4 percent after registering a month-on-month decrement of -0.3 percent in the previous month. (Table 3)

Seasonal factors, such as the degree of demand for manufactured goods during the season, pushed up both indices.



p - preliminary

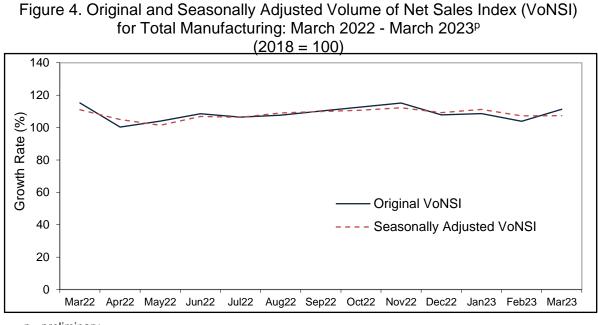
Source: Philippine Statistics Authority

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

The seasonally adjusted VoNSI for total manufacturing exhibited a monthly increment of 0.1 percent in March 2023 from a month-on-month decline of -3.6 percent in February 2023.

Likewise, the seasonally adjusted VoNSI for food manufacturing grew at a monthly rate of 1.0 percent in March 2023. This is an increase from the monthly drop of -0.4 percent in the previous month. (Table 4)

Seasonal factors, such as the high volume of orders for manufactured goods during the season, pushed up the said indices.



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

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

