

Economic activity in the manufacturing sector contracted in March for the fifth consecutive month following a 28-month period of growth, say the nation's supply executives in the latest Manufacturing ISM® *Report On Business*®.

The March Manufacturing PMI® registered 46.3 percent. The New Orders Index remained in contraction territory at 44.3 percent, 2.7 percentage points lower than the figure of 47 percent recorded in February. The Production Index reading of 47.8 percent is a 0.5-percentage point increase compared to February's figure of 47.3 percent. The Prices Index registered 49.2 percent, down 2.1 percentage points compared to the February figure of 51.3 percent. The Backlog of Orders Index registered 43.9 percent, 1.2 percentage points lower than the February reading of 45.1 percent. The Employment Index continued in contraction territory, registering 46.9 percent, down 2.2 percentage points from February's reading of 49.1 percent. The Supplier Deliveries Index figure of 44.8 percent is 0.4 percentage point lower than the 45.2 percent recorded in February; this is the index's lowest reading since March 2009 (43.2 percent). The Inventories Index dropped into contraction at 47.5 percent, 2.6 percentage points lower than the February reading of 50.1 percent.

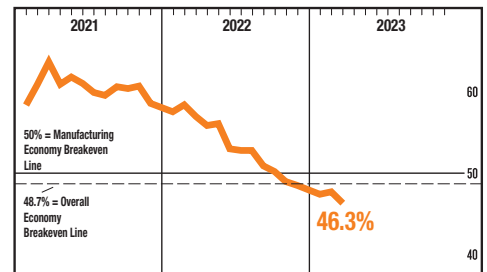
The six manufacturing industries that reported growth in March — in the following order — are: Printing & Related Support Activities; Miscellaneous Manufacturing†; Fabricated Metal Products; Petroleum & Coal Products; Primary Metals; and Machinery. **ISM**

†**Miscellaneous Manufacturing** (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).



# MANUFACTURING PMI® at 46.3%

The U.S. manufacturing sector contracted in March, as the Manufacturing PMI® registered 46.3 percent, 1.4 percentage points lower than the reading of 47.7 percent recorded in February. This is the fifth month of contraction and continuation of a downward trend that began in June 2022. Of the five subindexes that directly factor into the Manufacturing PMI®, none were in growth territory. This month, the PMI® registered its lowest reading since May 2020 (43.5 percent).



## Manufacturing at a Glance

INDEX	Mar Index	Feb Index	% Point Change	Direction	Rate of Change	Trend* (months)
Manufacturing PMI®	46.3	47.7	-1.4	Contracting	Faster	5
New Orders	44.3	47.0	-2.7	Contracting	Faster	7
Production	47.8	47.3	+0.5	Contracting	Slower	4
Employment	46.9	49.1	-2.2	Contracting	Faster	2
Supplier Deliveries	44.8	45.2	-0.4	Faster	Faster	6
Inventories	47.5	50.1	-2.6	Contracting	From Growing	1
Customers' Inventories	48.9	46.9	+2.0	Too Low	Slower	78
Prices	49.2	51.3	-2.1	Decreasing	From Increasing	1
Backlog of Orders	43.9	45.1	-1.2	Contracting	Faster	6
New Export Orders	47.6	49.9	-2.3	Contracting	Faster	8
Imports	47.9	49.9	-2.0	Contracting	Faster	5
<b>Overall Economy</b>				<b>Contracting</b>	<b>Faster</b>	<b>4</b>
<b>Manufacturing Sector</b>				<b>Contracting</b>	<b>Faster</b>	<b>5</b>

\*Number of months moving in current direction. Manufacturing ISM® *Report On Business*® data has been seasonally adjusted for the New Orders, Production, Employment and Inventories indexes.



## Commodities Reported

**Commodities Up in Price:** Copper (4); Electrical Components (5); Electronic Components (2); Plastic Resins\*; Polypropylene (2); Propylenes; Steel (2); Steel — Cold Rolled; Steel — Fabrications; Steel — Hot Rolled; Steel — Scrap; Steel — Stainless (2); and Steel Products (3).

**Commodities Down in Price:** Caustic Soda; Corn; Corrugate (4); Corrugated Boxes (3); Crude Oil; Freight (5); Natural Gas (4); Ocean Freight (7); Plastic Resins\* (10); Polyethylene; and Solvents.

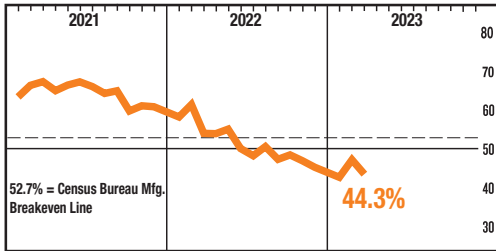
**Commodities in Short Supply:** Electrical Components (30); Electronic Components (28); Hydraulic Components (11); Integrated Circuits; and Semiconductors (28).

Note: To view the full report, visit the ISM® *Report On Business*® website at [ismrob.org](http://ismrob.org)

The number of consecutive months the commodity has been listed is indicated after each item. \*Reported as both up and down in price.

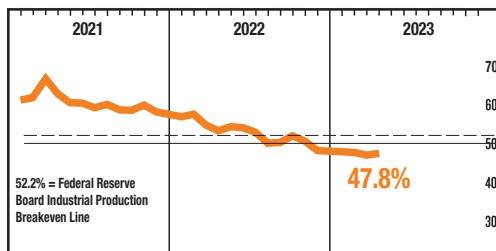
## Manufacturing PMI<sup>®</sup>

Analysis by **Timothy R. Fiore, CPSM, C.P.M.**, Chair of the Institute for Supply Management<sup>®</sup> Manufacturing Business Survey Committee



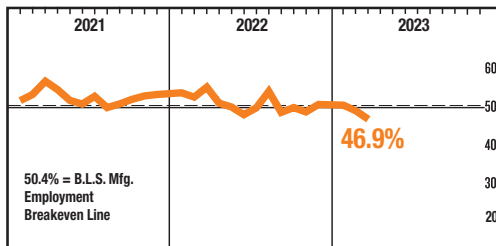
### New Orders

ISM's New Orders Index contracted for the seventh consecutive month in March, registering 44.3 percent. The five manufacturing industries that reported growth in new orders in March are: Printing & Related Support Activities; Miscellaneous Manufacturing<sup>‡</sup>; Primary Metals; Petroleum & Coal Products; and Fabricated Metal Products.



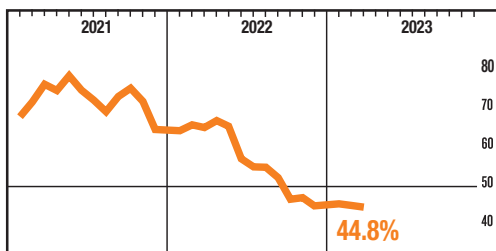
### Production

The Production Index registered 47.8 percent. The eight industries reporting growth in production during the month of March are, in order: Printing & Related Support Activities; Fabricated Metal Products; Miscellaneous Manufacturing<sup>‡</sup>; Electrical Equipment, Appliances & Components; Primary Metals; Food, Beverage & Tobacco Products; Transportation Equipment; and Machinery.



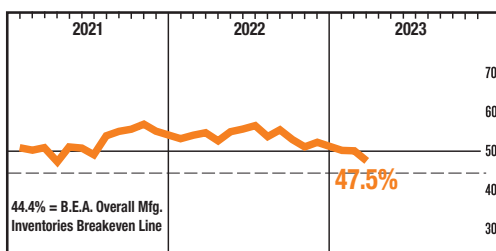
### Employment

ISM's Employment Index registered 46.9 percent. Of 18 manufacturing industries, six reported employment growth in March, in the following order: Printing & Related Support Activities; Primary Metals; Machinery; Fabricated Metal Products; Transportation Equipment; and Miscellaneous Manufacturing<sup>‡</sup>.



### Supplier Deliveries

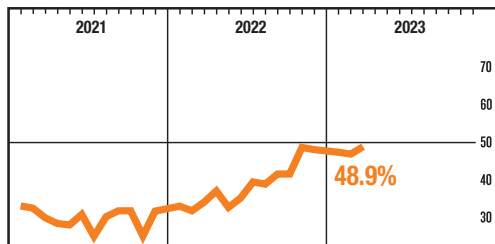
The delivery performance of suppliers to manufacturing organizations was faster for a sixth straight month in March, as the Supplier Deliveries Index registered 44.8 percent. Two of 18 manufacturing industries reported slower supplier deliveries in March: Petroleum & Coal Products; and Miscellaneous Manufacturing<sup>‡</sup>.



### Inventories

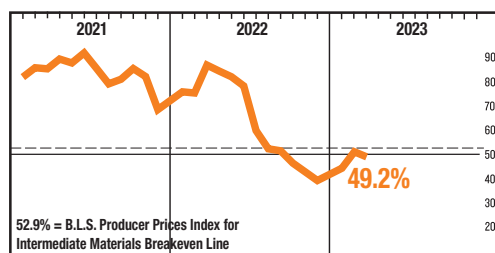
The Inventories Index registered 47.5 percent. Of 18 manufacturing industries, the seven reporting higher inventories in March — in the following order — are: Printing & Related Support Activities; Textile Mills; Nonmetallic Mineral Products; Paper Products; Electrical Equipment, Appliances & Components; Machinery; and Computer & Electronic Products.

<sup>‡</sup>Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).



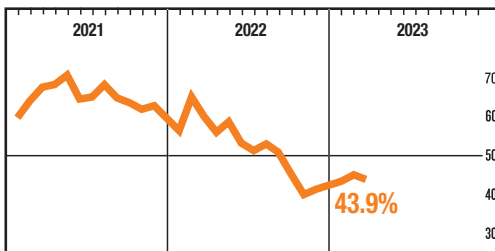
### Customers' Inventories

ISM's Customers' Inventories Index registered 48.9 percent in March, 2 percentage points higher than the 46.9 percent reported for February. Five industries reported customers' inventories as too high in March: Paper Products; Electrical Equipment, Appliances & Components; Furniture & Related Products; Plastics & Rubber Products; and Computer & Electronic Products.



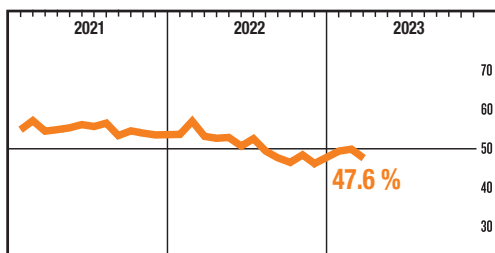
### Prices

The ISM Prices Index registered 49.2 percent. In March, eight industries — in the following order — reported paying increased prices for raw materials: Machinery; Plastics & Rubber Products; Transportation Equipment; Fabricated Metal Products; Nonmetallic Mineral Products; Primary Metals; Electrical Equipment, Appliances & Components; and Miscellaneous Manufacturing‡.



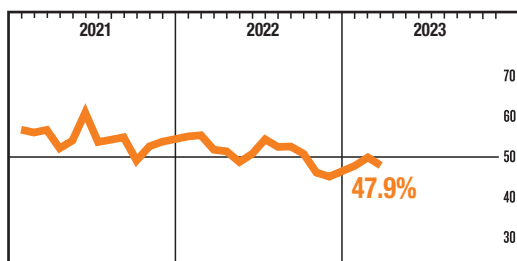
### Backlog of Orders

ISM's Backlog of Orders Index registered 43.9 percent in March, a 1.2-percentage point decrease compared to February's reading of 45.1 percent, indicating order backlogs contracted for the sixth consecutive month after a 27-month period of expansion. Two industries reported growth in order backlogs in March: Textile Mills; and Food, Beverage & Tobacco Products.



### New Export Orders

ISM's New Export Orders Index registered 47.6 percent. Four industries reported growth in new export orders in March: Printing & Related Support Activities; Textile Mills; Paper Products; and Miscellaneous Manufacturing‡.



### Imports

ISM's Imports Index registered 47.9 percent in March, a decrease of 2 percentage points compared to February's figure of 49.9 percent. The four industries reporting an increase in import volumes in March are: Textile Mills; Petroleum & Coal Products; Miscellaneous Manufacturing‡; and Food, Beverage & Tobacco Products.

‡Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).

## About This Report

**DO NOT CONFUSE THIS NATIONAL REPORT** with the various regional purchasing reports released across the country. The national report's information reflects the entire U.S., while the regional reports contain primarily regional data from their local vicinities. Also, the information in the regional reports is not used in calculating the results of the national report.

The data presented herein is obtained from a survey of manufacturing and services supply executives based on information they have collected within their respective organizations. ISM® makes no representation, other than that stated within this release, regarding the individual company data collection procedures. The data should be compared to all other economic data sources when used in decision-making.

## Data and Method of Presentation

The **Manufacturing ISM® Report On Business®** is based on data compiled from purchasing and supply executives nationwide. The composition of the Manufacturing Business Survey Committee is stratified according to the North American Industry Classification System (NAICS) and each of the following NAICS-based industry's contribution to gross domestic product (GDP): Food, Beverage & Tobacco Products; Textile Mills; Apparel, Leather & Allied Products; Wood Products; Paper Products; Printing & Related Support Activities; Petroleum & Coal Products; Chemical Products; Plastics & Rubber Products; Nonmetallic Mineral Products; Primary Metals; Fabricated Metal Products; Machinery; Computer & Electronic Products; Electrical Equipment, Appliances & Components; Transportation Equipment; Furniture & Related Products; and Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies). The data are weighted based on each industry's contribution to GDP. According to the BEA estimates for 2021 GDP (released December 22, 2022), the six largest manufacturing subsectors are: Computer & Electronic Products; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; Machinery; and Petroleum & Coal Products.

The **Services ISM® Report On Business®** (formerly the Non-Manufacturing ISM® Report On Business®) is based on data compiled from purchasing and supply executives nationwide. Membership of the Services Business Survey Committee (formerly Non-Manufacturing Business Survey Committee) is diversified by NAICS, based on each industry's contribution to gross domestic product (GDP). The Services Business Survey Committee responses are divided into the following NAICS code categories: Agriculture, Forestry, Fishing & Hunting; Mining; Utilities; Construction; Wholesale Trade; Retail Trade; Transportation & Warehousing; Information; Finance & Insurance; Real Estate, Rental & Leasing; Professional, Scientific & Technical Services; Management of Companies & Support Services; Educational Services; Health Care & Social Assistance; Arts, Entertainment & Recreation; Accommodation & Food Services; Public Administration; and Other Services (services such as Equipment & Machinery Repairing; Promoting or Administering Religious Activities; Grantmaking; Advocacy; and Providing Dry-Cleaning & Laundry Services, Personal Care Services, Death Care Services, Pet Care Services, Photofinishing Services, Temporary Parking Services, and Dating Services). The data are weighted based on each industry's contribution to GDP. According to the BEA estimates for 2021 GDP (released December 22, 2022), the six largest services sectors are: Real Estate, Rental & Leasing; Government; Professional, Scientific, & Technical Services; Health Care & Social Assistance; Information; and Finance & Insurance.

Survey responses reflect the change, if any, in the current month compared to the previous month. Responses are raw data and are never changed. The diffusion index includes the percent of positive responses plus one-half of those responding the same (considered positive).

The resulting single index number for those meeting the criteria for seasonal adjustments (for Manufacturing: New Orders, Production, Employment, and Inventories) (for Services: Business Activity, New Orders, Employment and Prices) is then seasonally adjusted to allow for the effects of repetitive intra-year variations resulting primarily from normal differences in weather conditions, various institutional arrangements, and differences attributable to non-moveable holidays. The remaining indexes have not indicated significant seasonality. All seasonal adjustment factors are subject annually to relatively minor changes when conditions warrant them.

The Manufacturing PMI® is a composite index based on the diffusion indexes of five of the indexes with equal weights: New Orders (seasonally adjusted), Production (seasonally adjusted), Employment (seasonally adjusted), Supplier Deliveries, and Inventories (seasonally adjusted). The Services PMI® is a composite index based on the diffusion indexes for four of the indicators with equal weights: Business Activity (seasonally adjusted), New Orders (seasonally adjusted), Employment (seasonally adjusted) and Supplier Deliveries.

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change and the scope of change.

A Manufacturing PMI® reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A Manufacturing PMI® above 48.7 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 48.7 percent, it is generally declining.

The distance from 50 percent or 48.7 percent is indicative of the extent of the expansion or decline. A Services PMI® reading above 50 percent indicates that the services economy is generally expanding; below 50 percent indicates that it is generally declining. A Services PMI® above 49.9 percent, over time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 49.9 percent, it is generally declining. The distance from 50 percent or 49.9 percent is indicative of the strength of the expansion or decline. With some of the indicators within the Manufacturing ISM® Report On Business®, ISM® has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis.

The *Report On Business®* surveys are sent out to Manufacturing and Services Business Survey Committee respondents the first part of each month. Respondents are asked to report on information for the current month for U.S. operations only. ISM® receives survey responses throughout most of any given month, with the majority of respondents generally waiting until late in the month to submit responses to give the most accurate picture of current business activity.

The industries reporting growth, as indicated in the monthly reports, are listed in the order of most growth to least growth. For the industries reporting contraction or decreases, those are listed in the order of the highest level of contraction/decrease to the least level of contraction/decrease.

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