# reporton business

Chair of the Institute for Supply Management® Manufacturing Business Survey Committee

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

The February Manufacturing PMI® registered 47.7 percent. In the last two months, the Manufacturing PMI® has been at its lowest levels since May 2020, when it registered 43.5 percent. The New Orders Index remained in contraction territory at 47 percent, 4.5 percentage points higher than the figure of 42.5 percent recorded in January. The Production Index reading of 47.3 percent is a 0.7-percentage point decrease compared to January's figure of 48 percent. The Prices Index registered 51.3 percent, up 6.8 percentage points compared to the January figure of 44.5 percent. The Backlog of Orders Index registered 45.1 percent, 1.7 percentage points higher than the January reading of 43.4 percent. The Employment Index dropped into contraction territory, registering 49.1 percent, down 1.5 percentage points from January's 50.6 percent. Of the six biggest manufacturing industries, two (Transportation Equipment; and Petroleum & Coal Products) registered growth in February. A reading above 50 percent indicates that the manufacturing sector is generally expanding; below 50 percent indicates that it is generally contracting.

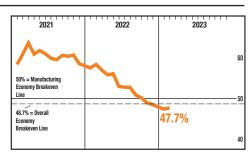
The four manufacturing industries that reported growth in February are: Apparel, Leather & Allied Products; Transportation Equipment; Petroleum & Coal Products; and Electrical Equipment, Appliances & Components. ISM

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



# PMI® at 47.7%

The U.S. manufacturing sector contracted in February, as the Manufacturing PMI® registered 47.7 percent, 0.3 percentage point higher than the reading of 47.4 percent recorded in January. This is the fourth month of slow contraction and continuation of a downward trend that began in June 2022. Of the five subindexes that directly factor into the Manufacturing PMI®, only one (the Inventories



Index), was in growth territory, and just barely. Only three of the 10 subindexes were positive for the period.

### Manufacturing at a Glance

INDEX	Feb Index	Jan Index	% Point Change	Direction	Rate of Change	Trend* (months)
Manufacturing PMI®	47.7	47.4	+0.3	Contracting	Slower	4
New Orders	47.0	42.5	+4.5	Contracting	Slower	6
Production	47.3	48.0	-0.7	Contracting	Faster	3
Employment	49.1	50.6	-1.5	Contracting	From Growing	1
Supplier Deliveries	45.2	45.6	-0.4	Faster	Faster	5
Inventories	50.1	50.2	-0.1	Growing	Slower	19
Customers' Inventories	46.9	47.4	-0.5	Too Low	Faster	77
Prices	51.3	44.5	+6.8	Increasing	From Decreasing	1
Backlog of Orders	45.1	43.4	+1.7	Contracting	Slower	5
New Export Orders	49.9	49.4	+0.5	Contracting	Slower	7
Imports	49.9	47.8	+2.1	Contracting	Slower	4
Overall Economy				Contracting	Slower	3
Manufacturing Sector				Contracting	Slower	4

\*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**

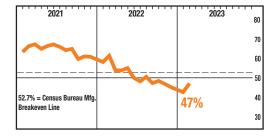
Commodities Up in Price: Aluminum (2)\*; Copper (3); Electrical Components (4); Electronic Components; Maintenance, Repair, and Operations (MRO) Materials; Polyethylene; Polypropylene; Solvents; Steel\*; Steel — Stainless; and Steel Products\* (2).

Commodities Down in Price: Aluminum (10)\*; Corrugate (3); Corrugated Boxes (2); Freight (4); Lumber (2); Natural Gas (3); Ocean Freight (6); Pallets; Plastic Resins (9); Polyethylene; Steel\* (10); Steel — Hot Rolled; and Steel Products\* (8). Commodities in Short Supply: Electrical Components (29); Electronic Components (27); Hydraulic Components (10); Packaging Materials; Plastic Resins; Semiconductors (27); and Steel Products (2).

### ISM® Report On **Business®**

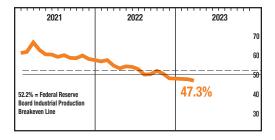
Manufacturing PMI®

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



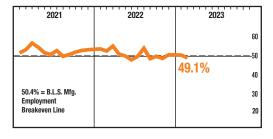
### **New Orders**

ISM's New Orders Index contracted for the sixth consecutive month in February, registering 47 percent. The three manufacturing industries that reported growth in new orders in February are: Petroleum & Coal Products; Transportation Equipment; and Miscellaneous Manufacturing‡.



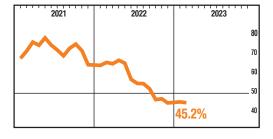
### **Production**

The Production Index registered 47.3 percent. The four industries reporting growth in production during the month of February are: Machinery; Transportation Equipment; Fabricated Metal Products; and Electrical Equipment, Appliances & Components.



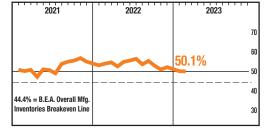
### **Employment**

ISM's Employment Index registered 49.1 percent. Of 18 manufacturing industries, six reported employment growth in February, in the following order: Apparel, Leather & Allied Products; Furniture & Related Products; Electrical Equipment, Appliances & Components; Petroleum & Coal Products; Machinery; and Transportation Equipment.



### **Supplier Deliveries**

The delivery performance of suppliers to manufacturing organizations was faster for a fifth straight month in February, as the Supplier Deliveries Index registered 45.2 percent. Four of 18 manufacturing industries reported slower supplier deliveries in February: Apparel, Leather & Allied Products; Textile Mills; Miscellaneous Manufacturing‡; and Food, Beverage & Tobacco Products.



### **Inventories**

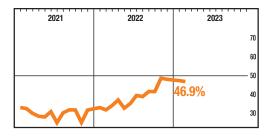
The Inventories Index registered 50.1 percent. Of 18 manufacturing industries, the nine reporting higher inventories in February — in the following order — are: Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Electrical Equipment, Appliances & Components; Paper Products; Computer & Electronic Products; Plastics & Rubber Products; Fabricated Metal Products; Miscellaneous Manufacturing‡; and Transportation Equipment.

## ISM® Report On Business®

February 2023 INSTITUTE FOR SUPPLY MANAGEMEN

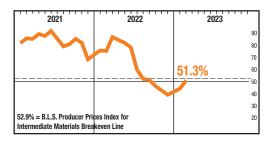
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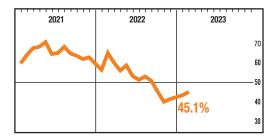
### **Customers' Inventories**

ISM's Customers' Inventories Index registered 46.9 percent. Six industries reported customers' inventories as too high in February, in the following order: Paper Products; Nonmetallic Mineral Products; Printing & Related Support Activities; Electrical Equipment, Appliances & Components; Plastics & Rubber Products; and Fabricated Metal Products.



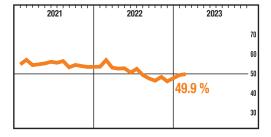
### **Prices**

The ISM Prices Index registered 51.3 percent. In February, eight industries — in the following order — reported paying increased prices for raw materials: Electrical Equipment, Appliances & Components; Plastics & Rubber Products; Fabricated Metal Products; Nonmetallic Mineral Products; Petroleum & Coal Products; Computer & Electronic Products; Miscellaneous Manufacturing‡; and Machinery.



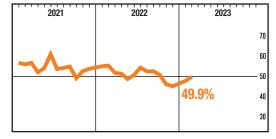
### **Backlog of Orders**

ISM's Backlog of Orders Index registered 45.1 percent. Two industries reported growth in order backlogs in February: Computer & Electronic Products; and Transportation Equipment.



### **New Export Orders**

ISM's New Export Orders Index registered 49.9 percent. Four industries reported growth in new export orders in February: Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Miscellaneous Manufacturing.



### **Imports**

ISM's Imports Index registered 49.9 percent. The four industries reporting an increase in import volumes in February are: Transportation Equipment; Food, Beverage & Tobacco Products; Miscellaneous Manufacturing‡; and Electrical Equipment, Appliances & Components.

#### **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; Frimary 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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Institute for Supply Management® (ISM®) serves supply management professionals in more than 90 countries. Its 50,000 members around the world manage about US\$1 trillion in corporate and government supply chain procurement annually. Founded in 1915 as the first supply management institute in the world, ISM is committed to advancing the practice of supply management to drive value and competitive advantage for its members, contributing to a prosperous and sustainable world. ISM leads the profession through the ISM® Report On Business®, its highly regarded certification programs and the ISM Advance® Digital Platform. This report has been issued by the association since 1931, except for a four-year interruption during World War II.