

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

The April Manufacturing PMI® registered 47.1 percent. The New Orders Index remained in contraction territory at 45.7 percent, 1.4 percentage points higher than the figure of 44.3 percent recorded in March. The Production Index reading of 48.9 percent is a 1.1-percentage point increase compared to March's figure of 47.8 percent. The Prices Index registered 53.2 percent, up 4 percentage points compared to the March figure of 49.2 percent. The Backlog of Orders Index registered 43.1 percent, 0.8 percentage point lower than the March reading of 43.9 percent. The Employment Index elevated into expansion territory, registering 50.2 percent, up 3.3 percentage points from March's reading of 46.9 percent. The Supplier Deliveries Index figure of 44.6 percent is 0.2 percentage point lower than the 44.8 percent recorded in March; this is the index's lowest reading since March 2009 (43.2 percent).

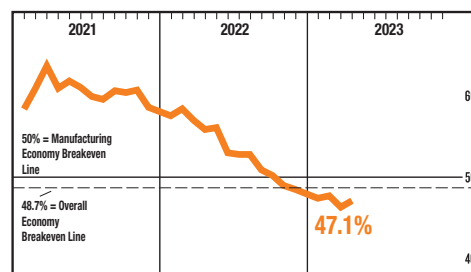
Of the six biggest manufacturing industries, two — Petroleum & Coal Products; and Transportation Equipment — registered growth in April. The five manufacturing industries that reported growth in April are: Printing & Related Support Activities; Apparel, Leather & Allied Products; Petroleum & Coal Products; Fabricated Metal Products; and Transportation Equipment. **ISM**

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



MANUFACTURING PMI® at 47.1%

The U.S. manufacturing sector contracted in April, as the Manufacturing PMI® registered 47.1 percent, 0.8 percentage point higher than the reading of 46.3 percent recorded in March. This is the sixth 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®, only one (Employment) is in growth territory. Of the six biggest manufacturing industries, two (Petroleum & Coal Products; and Transportation Equipment) registered growth in April.



Manufacturing at a Glance

INDEX	Apr Index	Mar Index	% Point Change	Direction	Rate of Change	Trend* (months)
Manufacturing PMI®	47.1	46.3	+0.8	Contracting	Slower	6
New Orders	45.7	44.3	+1.4	Contracting	Slower	8
Production	48.9	47.8	+1.1	Contracting	Slower	5
Employment	50.2	46.9	+3.3	Growing	From Contracting	1
Supplier Deliveries	44.6	44.8	-0.2	Faster	Faster	7
Inventories	46.3	47.5	-1.2	Contracting	Faster	2
Customers' Inventories	51.3	48.9	+2.4	Too High	From Too Low	1
Prices	53.2	49.2	+4.0	Increasing	From Decreasing	1
Backlog of Orders	43.1	43.9	-0.8	Contracting	Faster	7
New Export Orders	49.8	47.6	+2.2	Contracting	Slower	9
Imports	49.9	47.9	+2.0	Contracting	Slower	6
Overall Economy				Contracting	Slower	5
Manufacturing Sector				Contracting	Slower	6

*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

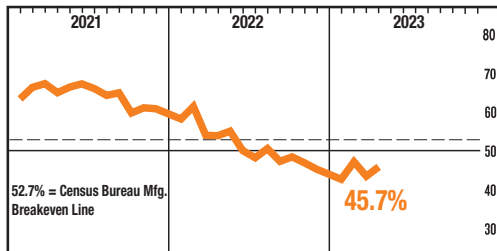
Commodities Up in Price: Copper (5); Diesel; Electrical Components (6); Electronic Components (3); High Density Polyethylene (HDPE); Labor — Temporary; Plastic Resins* (2); Polypropylene (3); Steel (3); Steel — Carbon; Steel — Hot Rolled (2); Steel — Stainless (3); and Steel Products (4).

Commodities Down in Price: Aluminum; Corrugate (5); Corrugated Boxes (4); Epoxy; Freight (6); Methanol; Natural Gas (5); Ocean Freight (8); Plastic Resins* (11); Steel; and Wood Pallets.

Commodities in Short Supply: Electrical Components (31); Electronic Components (29); Labor — Temporary; Plastic Resins; and Semiconductors (29).

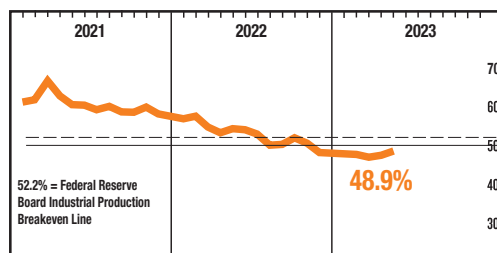
Note: To view the full report, visit the ISM® *Report On Business*® website at ismrob.org

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



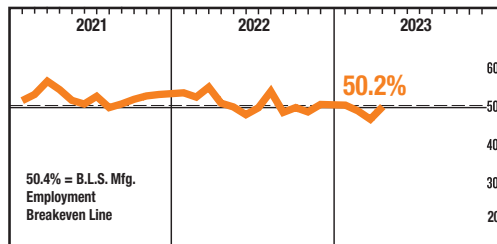
New Orders

ISM's New Orders Index registered 45.7 percent. The eight manufacturing industries that reported growth in new orders in April — in the following order — are: Printing & Related Support Activities; Paper Products; Fabricated Metal Products; Nonmetallic Mineral Products; Petroleum & Coal Products; Plastics & Rubber Products; Miscellaneous Manufacturing[‡]; and Transportation Equipment.



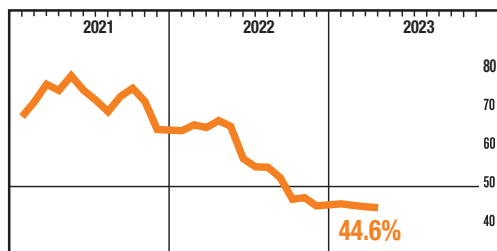
Production

The Production Index registered 48.9 percent. The 11 industries reporting growth in production during the month of April are, in order: Printing & Related Support Activities; Fabricated Metal Products; Nonmetallic Mineral Products; Primary Metals; Transportation Equipment; Food, Beverage & Tobacco Products; Miscellaneous Manufacturing[‡]; Plastics & Rubber Products; Machinery; Electrical Equipment, Appliances & Components; and Computer & Electronic Products.



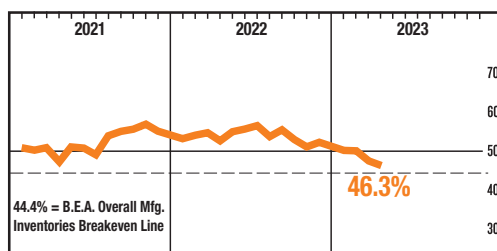
Employment

ISM's Employment Index registered 50.2 percent. Of 18 manufacturing industries, seven reported employment growth in April, in the following order: Apparel, Leather & Allied Products; Paper Products; Fabricated Metal Products; Transportation Equipment; Plastics & Rubber Products; Machinery; and Chemical Products.



Supplier Deliveries

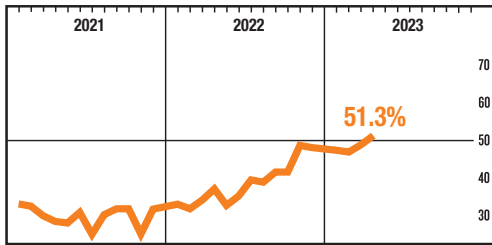
The Supplier Deliveries Index registered 44.6 percent. Three of 18 manufacturing industries reported slower supplier deliveries in April: Textile Mills; Primary Metals; and Computer & Electronic Products.



Inventories

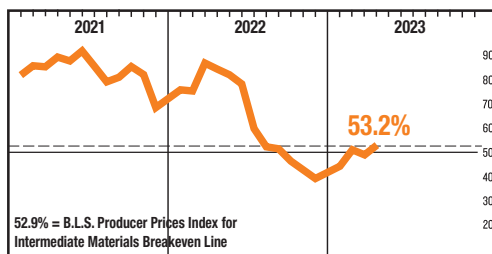
The Inventories Index registered 46.3 percent. Of 18 manufacturing industries, the five reporting higher inventories in April are: Printing & Related Support Activities; Textile Mills; Apparel, Leather & Allied Products; Petroleum & Coal Products; and Electrical Equipment, Appliances & Components.

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



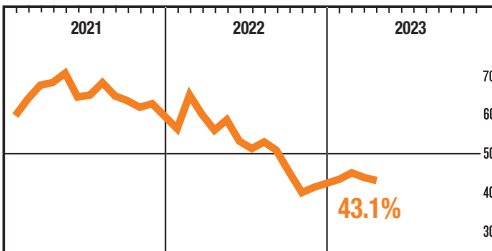
Customers' Inventories

ISM's Customers' Inventories Index registered 51.3 percent. The seven industries reporting customers' inventories as too high in April are, in order: Apparel, Leather & Allied Products; Paper Products; Computer & Electronic Products; Furniture & Related Products; Electrical Equipment, Appliances & Components; Fabricated Metal Products; and Plastics & Rubber Products.



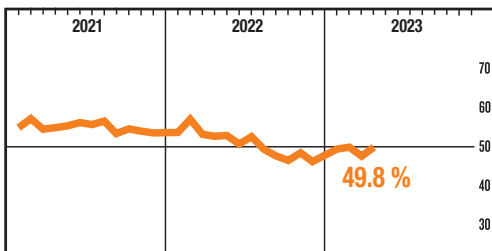
Prices

The ISM Prices Index registered 53.2 percent. In April, nine industries — in the following order — reported paying increased prices for raw materials: Petroleum & Coal Products; Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Plastics & Rubber Products; Machinery; Transportation Equipment; Miscellaneous Manufacturing[‡]; Fabricated Metal Products; and Computer & Electronic Products.



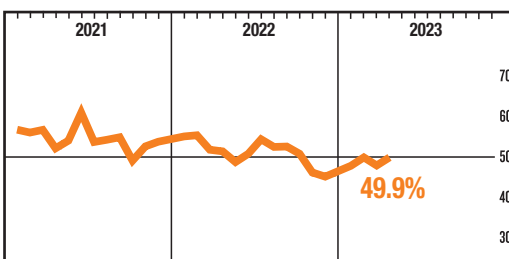
Backlog of Orders

ISM's Backlog of Orders Index registered 43.1 percent. Three industries reported growth in order backlogs in April: Printing & Related Support Activities; Textile Mills; and Paper Products.



New Export Orders

ISM's New Export Orders Index registered 49.8 percent. Five industries reported growth in new export orders in April: Printing & Related Support Activities; Wood Products; Paper Products; Food, Beverage & Tobacco Products; and Miscellaneous Manufacturing[‡].



Imports

ISM's Imports Index registered 49.9 percent. The six industries reporting an increase in import volumes in April — in the following order — are: Printing & Related Support Activities; Textile Mills; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing[‡]; Food, Beverage & Tobacco Products; and Primary Metals.

[‡]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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