

Economic activity in the manufacturing sector contracted in October for the 12th consecutive month following a 28-month period of growth, say the nation's supply executives in the latest Manufacturing ISM® *Report On Business*®.

The Manufacturing PMI® registered 46.7 percent. The New Orders Index remained in contraction territory at 45.5 percent, 3.7 percentage points lower than the figure of 49.2 percent recorded in September. The Production Index reading of 50.4 percent is a 2.1-percentage point decrease compared to September's figure of 52.5 percent. The Prices Index registered 45.1 percent, up 1.3 percentage points compared to the reading of 43.8 percent in September. The Backlog of Orders Index registered 42.2 percent, 0.2 percentage point lower than the September reading of 42.4 percent. The Employment Index registered 46.8 percent, down 4.4 percentage points from the 51.2 percent reported in September. The Inventories Index decreased by 2.5 percentage points to 43.3 percent; the September reading was 45.8 percent. The New Export Orders Index reading of 49.4 percent is 2 percentage points higher than September's figure of 47.4 percent. The Imports Index remained in contraction territory, registering 47.9 percent, 0.3 percentage point lower than the 48.2 percent reported in September.

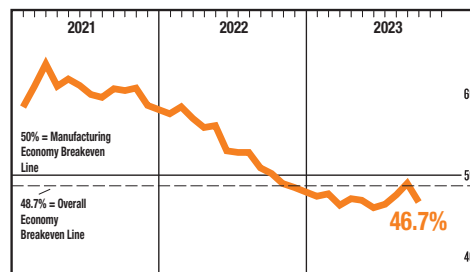
The two manufacturing industries that reported growth in October are: Food, Beverage & Tobacco Products; and Plastics & Rubber Products. **ISM**

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



MANUFACTURING PMI® at 46.7%

The U.S. manufacturing sector contracted in October, as the Manufacturing PMI® registered 46.7 percent, 2.3 percentage points lower than the reading of 49 percent recorded in September. This is the 12th month of contraction. Of the five subindexes that directly factor into the Manufacturing PMI®, only one (the Production Index) is in expansion territory, down from two in September. The New Orders Index logged its 14th month in contraction territory, and at a faster rate in October.



Manufacturing at a Glance

INDEX	Oct Index	Sep Index	% Point Change	Direction	Rate of Change	Trend* (months)
Manufacturing PMI®	46.7	49.0	-2.3	Contracting	Faster	12
New Orders	45.5	49.2	-3.7	Contracting	Faster	14
Production	50.4	52.5	-2.1	Growing	Slower	2
Employment	46.8	51.2	-4.4	Contracting	From Growing	1
Supplier Deliveries	47.7	46.4	+1.3	Faster	Slower	13
Inventories	43.3	45.8	-2.5	Contracting	Faster	8
Customers' Inventories	48.6	47.1	+1.5	Too Low	Slower	5
Prices	45.1	43.8	+1.3	Decreasing	Slower	6
Backlog of Orders	42.2	42.4	-0.2	Contracting	Faster	13
New Export Orders	49.4	47.4	+2.0	Contracting	Slower	5
Imports	47.9	48.2	-0.3	Contracting	Faster	12
Overall Economy				Contracting	From Growing	1
Manufacturing Sector				Contracting	Faster	12

*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: Crude Oil (3); Electronic Components (2); Labor — Professional Services; Labor — Temporary (2); Natural Gas (4); Plastic Resins* (2); Polypropylene; Road Freight* (2); Steel* (4); and Steel Products*.

Commodities Down in Price: Aluminum (5); Caustic Soda (4); Copper Based Products; Corrugate Boxes (3); Packaging; Plastic Resins* (17); Road Freight*; Steel* (7); Steel — Hot Rolled (6); Steel — Stainless; Steel Products* (5); and Wood Pallets.

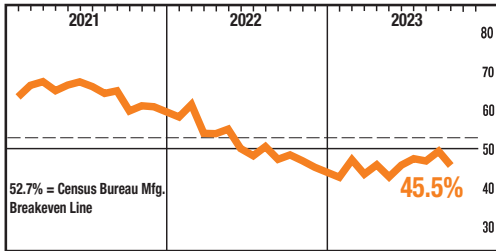
Commodities in Short Supply: Electrical Components (37); Electrical Equipment; and Electronic Components (35).

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. *Indicates both up and down in price.

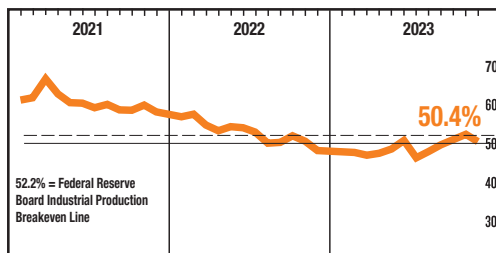
Manufacturing PMI[®]

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



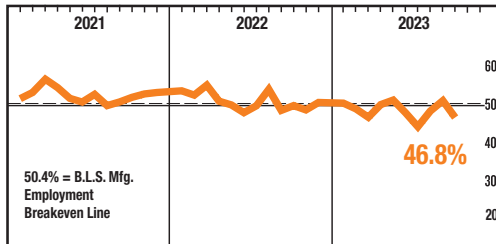
New Orders

ISM's New Orders Index registered 45.5 percent. The three manufacturing industries that reported growth in new orders in October are: Plastics & Rubber Products; Primary Metals; and Transportation Equipment.



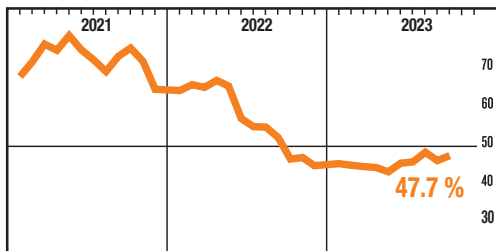
Production

The Production Index registered 50.4 percent. The four industries reporting growth in production during the month of October are: Paper Products; Plastics & Rubber Products; Food, Beverage & Tobacco Products; and Primary Metals.



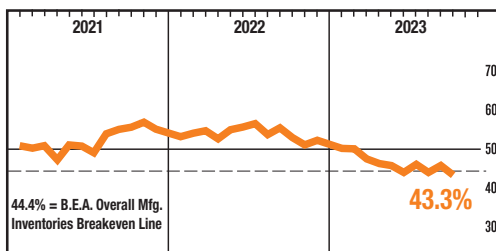
Employment

ISM's Employment Index registered 46.8 percent. Of 18 manufacturing industries, four reported employment growth in October: Nonmetallic Mineral Products; Machinery; Transportation Equipment; and Food, Beverage & Tobacco Products.



Supplier Deliveries

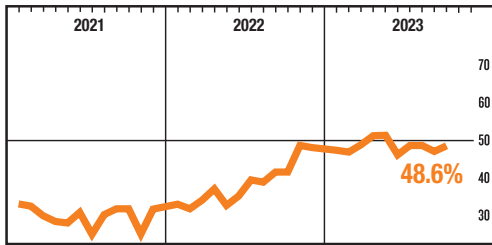
The delivery performance of suppliers to manufacturing organizations improved for the 13th straight month in October, as the Supplier Deliveries Index registered 47.7 percent. The two manufacturing industries reporting slower supplier deliveries in October are: Wood Products; and Food, Beverage & Tobacco Products.



Inventories

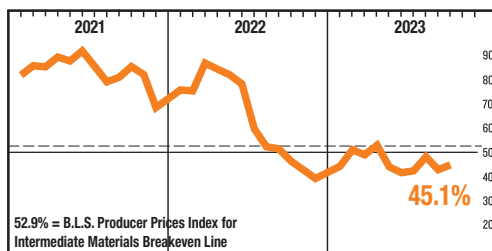
The Inventories Index registered 43.3 percent. Of 18 manufacturing industries, the only industry reporting higher inventories in October is Food, Beverage & Tobacco Products.

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



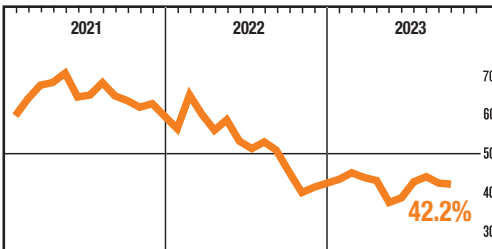
Customers' Inventories

ISM's Customers' Inventories Index registered 48.6 percent. The three industries reporting customers' inventories as too high in October are: Textile Mills; Plastics & Rubber Products; and Computer & Electronic Products.



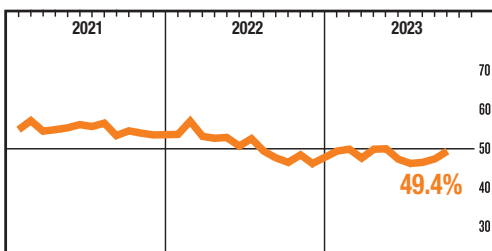
Prices

The ISM Prices Index registered 45.1 percent. In October, the two industries that reported paying increased prices for raw materials are: Nonmetallic Mineral Products; and Plastics & Rubber Products.



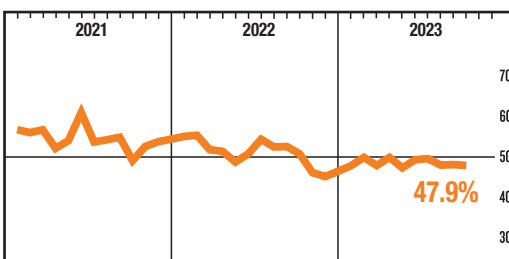
Backlog of Orders

ISM's Backlog of Orders Index registered 42.2 percent. The three industries reporting growth in order backlogs in October are: Primary Metals; Food, Beverage & Tobacco Products; and Transportation Equipment.



New Export Orders

ISM's New Export Orders Index registered 49.4 percent. The six industries reporting growth in new export orders in October — in the following order — are: Nonmetallic Mineral Products; Paper Products; Primary Metals; Food, Beverage & Tobacco Products; Fabricated Metal Products; and Miscellaneous Manufacturing[‡].



Imports

ISM's Imports Index registered 47.9 percent. The three industries reporting an increase in import volumes in October are: Wood Products; Food, Beverage & Tobacco Products; and Chemical 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; Transportation Equipment; Food, Beverage & Tobacco Products; 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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