Economic activity in the manufacturing sector grew in April, with the overall economy achieving a 23rd consecutive month of growth, say the nation's supply executives in the latest Manufacturing ISM ${ }^{\circledast}$ Report On Business ${ }^{\circledR}$.

The April Manufacturing PMI ${ }^{\circledR}$ registered 55.4 percent. This is the lowest reading since July 2020 (53.9 percent). The New Orders Index registered 53.5 percent, down 0.3 percentage point compared to the March reading of 53.8 percent. Manufacturing performed well for the 23rd straight month, with demand registering slower month-over-month growth (likely due to extended lead times and decadeshigh material price increases) and consumption softening (due to labor force constraints). Overseas partners are experiencing COVID-19 impacts, creating a near-term headwind for the U.S. manufacturing community.

Seventeen manufacturing industries reported growth in April, in the following order: Apparel, Leather \& Allied Products; Machinery; Plastics \& Rubber Products; Nonmetallic Mineral Products; Computer \& Electronic Products; Food, Beverage \& Tobacco Products; Transportation Equipment; Printing \& Related Support Activities; Electrical Equipment, Appliances \& Components; Paper Products; Primary Metals; Furniture \& Related Products; Chemical Products; Textile Mills; Fabricated Metal Products; Miscellaneous Manufacturing $\ddagger$; and Wood Products. ISM

## MANUFACTURING

## PMI at 55.4\%

Manufacturing grew in April, as the Manufacturing $\mathrm{PM}{ }^{\circledR}$ registered 55.4 percent, 1.7 percentage points lower than the March reading of 57.1 percent. The 55.4-percent reading is the same as in August and September 2020 and the lowest since July 2020, when the composite index registered 53.9 percent. The Manufacturing $\mathrm{PM}^{\circledR}$ continued to indicate solid sector expansion and U.S. economic
 growth in April. All five subindexes that directly factor into the Manufacturing $\mathrm{PM}^{\circledR}$ were in growth territory.

Manufacturing at a Glance

| INDEX | Apr <br> Index | Mar <br> Index | \% Point <br> Change | Direction | Rate of <br> Change | Trend <br> (months) |
| :--- | :---: | :---: | :---: | :--- | :---: | :---: |
| Manufacturing PM® | 55.4 | 57.1 | -1.7 | Growing | Slower | 23 |
| New Orders | 53.5 | 53.8 | -0.3 | Growing | Slower | 23 |
| Production | 53.6 | 54.5 | -0.9 | Growing | Slower | 23 |
| Employment | 50.9 | 56.3 | -5.4 | Growing | Slower | 8 |
| Supplier Deliveries | 67.2 | 65.4 | +1.8 | Slowing | Faster | 74 |
| Inventories | 51.6 | 55.5 | -3.9 | Growing | Slower | 9 |
| Customers' Inventories | 37.1 | 34.1 | +3.0 | Too Low | Slower | 67 |
| Prices | 84.6 | 87.1 | -2.5 | Increasing | Slower | 23 |
| Backlog of Orders | 56.0 | 60.0 | -4.0 | Growing | Slower | 22 |
| New Export Orders | 52.7 | 53.2 | -0.5 | Growing | Slower | 22 |
| Imports | 51.4 | 51.8 | -0.4 | Growing | Slower | 6 |
| Overall Economy |  |  |  | Growing | Slower | $\mathbf{2 3}$ |
| Manufacturing Sector |  |  |  | Growing | Slower | $\mathbf{2 3}$ |

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

## Commodities Reported

Commodities Up in Price: Adhesives and Paint (5); Aluminum (23); Aluminum Products (4); Brass (2); Caustic Soda (2); Copper (4); Corrugate (3); Corrugated Packaging (18); Diesel Fuel (16); Electrical Components (17); Electronic Components (17); Energy (2); Epoxy; Freight (18); High-Density Polyethylene (HDPE); Hydraulic Components (2); Labor — Temporary (12); Lumber (5); Natural Gas* (10); Nickel (2); Packaging Supplies (17); Paper (2); Plastic Resins (4); Plywood (2); Polypropylene (2); Polyvinyl Chloride (PVC); Resin Based Products; Rubber Based Products (9); Solvents (3); Soy Based Products (4); Steel (21); Steel — Cold Rolled; Steel — Hot Rolled (2); Steel — Stainless (18); Steel Products (20); and Titanium Dioxide.


## Inventories

The Inventories Index registered 51.6 percent. The 11 industries reporting higher inventories in April - in the following order - are: Apparel, Leather \& Allied Products; Textile Mills; Nonmetallic Mineral Products; Electrical Equipment, Appliances \& Components; Paper Products; Machinery; Chemical Products; Plastics \& Rubber Products; Transportation Equipment; Fabricated Metal Products; and Computer \& Electronic Products.

## New Orders

ISM's New Orders Index registered 53.5 percent. Of the 18 manufacturing industries, 11 reported growth in new orders in April, in the following order: Printing \& Related Support Activities; Computer \& Electronic Products; Transportation Equipment; Food, Beverage \& Tobacco Products; Furniture \& Related Products; Paper Products; Fabricated Metal Products; Machinery; Miscellaneous Manufacturing ${ }^{\ddagger}$; Chemical Products; and Plastics \& Rubber Products.

## Production

The Production Index registered 53.6 percent. The 14 industries reporting growth in production during the month of April - listed in order - are: Printing \& Related Support Activities; Nonmetallic Mineral Products; Food, Beverage \& Tobacco Products; Primary Metals; Wood Products; Plastics \& Rubber Products; Transportation Equipment; Machinery; Computer \& Electronic Products; Miscellaneous Manufacturing ${ }^{\ddagger}$; Paper Products; Furniture \& Related Products; Electrical Equipment, Appliances \& Components; and Chemical Products.

## Employment

ISM's Employment Index registered 50.9 percent. Of 18 manufacturing industries, nine industries reported employment growth in April, in the following order: Apparel, Leather \& Allied Products; Textile Mills; Electrical Equipment, Appliances \& Components; Transportation Equipment; Machinery; Primary Metals; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; and Chemical Products.

## Supplier Deliveries

The Supplier Deliveries Index registered 67.2 percent. Of 18 manufacturing industries, 16 reported slower supplier deliveries in April, in the following order: Apparel, Leather \& Allied Products; Plastics \& Rubber Products; Textile Mills; Paper Products; Food, Beverage \& Tobacco Products; Printing \& Related Support Activities; Computer \& Electronic Products; Machinery; Primary Metals; Furniture \& Related Products; Chemical Products; Fabricated Metal Products; Miscellaneous Manufacturing ${ }^{\ddagger}$; Nonmetallic Mineral Products; Transportation Equipment; and Electrical Equipment, Appliances \& Components.

[^0] supplies, jewelry, sporting goods, toys and office supplies).


## Imports

ISM's Imports Index registered 51.4 percent in April. The four industries reporting growth in imports in April are: Wood Products; Food, Beverage \& Tobacco Products; Computer \& Electronic Products; and Chemical Products. Eight industries reported no change in imports in April.

## Customers' Inventories

ISM's Customers' Inventories Index registered 37.1 percent. Only Apparel, Leather \& Allied Products reported customers' inventories as too high in April. The 13 industries reporting customers' inventories as too low during April - listed in order - are: Nonmetallic Mineral Products; Plastics \& Rubber Products; Transportation Equipment; Machinery; Fabricated Metal Products; Wood Products; Primary Metals; Miscellaneous Manufacturing ${ }^{\ddagger}$; Computer \& Electronic Products; Chemical Products; Furniture \& Related Products; Food, Beverage \& Tobacco Products; and Electrical Equipment, Appliances \& Components.

## Prices

The ISM Prices Index registered 84.6 percent. In April, 17 of 18 industries reported paying increased prices for raw materials, in the following order: Apparel, Leather \& Allied Products; Paper Products; Plastics \& Rubber Products; Textile Mills; Primary Metals; Machinery; Food, Beverage \& Tobacco Products; Furniture \& Related Products; Miscellaneous Manufacturing ${ }^{\ddagger}$; Transportation Equipment; Computer \& Electronic Products; Fabricated Metal Products; Chemical Products; Electrical Equipment, Appliances \& Components; Nonmetallic Mineral Products; Printing \& Related Support Activities; and Wood Products.

## Backlog of Orders

ISM's Backlog of Orders Index registered 56 percent. Ten industries reported growth in order backlogs in April, in the following order: Apparel, Leather \& Allied Products; Computer \& Electronic Products; Paper Products; Machinery; Plastics \& Rubber Products; Furniture \& Related Products; Transportation Equipment; Electrical Equipment, Appliances \& Components; Fabricated Metal Products; and Miscellaneous Manufacturing ${ }^{\ddagger}$.

## New Export Orders

ISM's New Export Orders Index registered 52.7 percent. The five industries reporting growth in new export orders in April are: Food, Beverage \& Tobacco Products; Transportation Equipment; Computer \& Electronic Products; Machinery; and Chemical Products. The only industry reporting a decrease in new export orders in April is Paper 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 ${ }^{\oplus}$ 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 ${ }^{\circledR}$ Report On Business ${ }^{\circledR}$ 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 2020 GDP (released December 22, 2021), the six largest manufacturing subsectors are: Computer \& Electronic Products; Chemical Products; Transportation Equipment; Petroleum \& Coal Products; Food, Beverage \& Tobacco Products; and Machinery. Beginning in February 2018 with January 2018 data, computation of the indexes is accomplished utilizing unrounded numbers.

The Services ISM ${ }^{\oplus}$ Report On Business ${ }^{\circledR}$ (formerly the Non-Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\oplus}$ ) 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 DryCleaning \& 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 2020 GDP (released December 22, 2021), the six largest services sectors are: Real Estate, Rental \& Leasing; Government; Professional, Scientific, \& Technical Services; Health Care \& Social Assistance; Information; and Finance \& Insurance. Beginning in February 2020 with January 2020 data, computation of the indexes is accomplished utilizing unrounded numbers.

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 $\mathrm{PM}^{\circledR}$ 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 $\mathrm{PMI}{ }^{\oplus}$ 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 $\mathrm{PM}{ }^{\oplus}$ reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A Manufacturing

PMI ${ }^{\circledR}$ 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 $\mathrm{PM}{ }^{\oplus}$ reading above 50 percent indicates that the services economy is generally expanding; below 50 percent indicates that it is generally declining. A Services $\mathrm{PM}{ }^{\circledR}$ above 50.1 percent, over time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 50.1 percent, it is generally declining. The distance from 50 percent or 50.1 percent is indicative of the strength of the expansion or decline. With some of the indicators within the Manufacturing ISM ${ }^{\circledR}$ Report On Business ${ }^{\oplus}$, ISM ${ }^{\circledR}$ has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis.

The Report On Business ${ }^{\oplus}$ 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 ${ }^{\circledR}$ 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.

## ISM ROB Content

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## About Institute for Supply Management ${ }^{\circledR}$

Institute for Supply Management ${ }^{\oplus}\left(\right.$ ISM ${ }^{\ominus}$ ) 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 ${ }^{\oplus}$ Report On Business ${ }^{\oplus}$, its highly regarded certification programs and the ISM Advance ${ }^{\text {m" }}$ Digital Platform. This report has been issued by the association since 1931, except for a four-year interruption during World War II.


[^0]:    $\neq$ Miscellaneous Manufacturing (products such as medical equipment and

