

Manufacturing PMI[®] at 53%

June 2022 Manufacturing ISM[®] Report On Business[®]

New Orders and Employment Contracting Production and Backlogs Growing Supplier Deliveries Slowing at a Slower Rate Raw Materials Inventories Growing; Customers' Inventories Too Low Prices Increasing at a Slower Rate; Exports and Imports Growing Record-Long Lead Times for Capital Expenditures and Production Materials

(Tempe, Arizona) — Economic activity in the **manufacturing sector grew in June**, with the **overall economy achieving a 25th consecutive month of growth**, say the nation's supply executives in the latest **Manufacturing ISM[®] Report On Business[®]**.

The report was issued today by Timothy R. Fiore, CPSM, C.P.M., Chair of the Institute for Supply Management[®] (ISM[®]) Manufacturing Business Survey Committee:

“The June Manufacturing PMI[®] registered 53 percent, down 3.1 percentage points from the reading of 56.1 percent in May. This figure indicates expansion in the overall economy for the 25th month in a row after a contraction in April and May 2020. This is the lowest Manufacturing PMI[®] reading since June 2020, when it registered 52.4 percent. The New Orders Index reading of 49.2 percent is 5.9 percentage points lower than the 55.1 percent recorded in May. The Production Index reading of 54.9 percent is a 0.7-percentage point increase compared to May's figure of 54.2 percent. The Prices Index registered 78.5 percent, down 3.7 percentage points compared to the May figure of 82.2 percent. The Backlog of Orders Index registered 53.2 percent, 5.5 percentage points below the May reading of 58.7 percent. The Employment Index contracted for a second straight month at 47.3 percent, 2.3 percentage points lower than the 49.6 percent recorded in May. The Supplier Deliveries Index reading of 57.3 percent is 8.4 percentage points lower than the May figure of 65.7 percent. The Inventories Index registered 56 percent, 0.1 percentage point higher than the May reading of 55.9 percent. The New Export Orders Index reading of 50.7 percent is down 2.2 percentage points compared to May's figure of 52.9 percent. The Imports Index climbed into expansion territory, up 2 percentage points to 50.7 percent from 48.7 percent in May.”

Fiore continues, “The U.S. manufacturing sector continues to be powered — though less so in June — by demand while held back by supply chain constraints. Despite the Employment Index contracting in May and June, companies improved their progress on addressing moderate-term labor shortages at all tiers of the supply chain, according to Business Survey Committee respondents’ comments. Panelists reported lower rates of quits compared to May. Prices expansion slightly eased for a third straight month in June, but instability in global energy markets continues. Sentiment remained optimistic regarding demand, with three positive growth comments for every cautious comment. Panelists continue to note supply chain and pricing issues as their biggest concerns. **Demand** dropped, with the (1) New Orders Index contracting, (2) Customers’ Inventories Index remaining at a very low level, though it increased and (3) Backlog of Orders Index decreasing but still in growth territory. **Consumption** (measured by the Production and Employment indexes) was mixed during the period, with a combined minus-1.6-percentage point change to the Manufacturing PMI[®] calculation. The Employment Index contracted for the second month in a row after expanding for eight straight months (September through April), but panelists again indicated month-over-month improvement in ability to hire in June. Challenges with turnover (quits and retirements) and resulting backfilling continue to plague efforts to adequately staff organizations, but to a lesser degree compared to the previous month. **Inputs** — expressed as supplier deliveries, inventories and imports — continued to constrain production expansion but to a lesser extent compared to May. The Supplier Deliveries Index indicated deliveries slowed at a slower rate in June, which was supported by a slight increase in the Inventories Index. The Imports Index expanded in June after one month of contraction preceded by six consecutive months of expansion. The Prices Index increased for the 25th consecutive month, at a slower rate compared to May.

“All of the six biggest manufacturing industries — Computer & Electronic Products; Machinery; Transportation Equipment; Petroleum & Coal Products; Food, Beverage & Tobacco Products; and Chemical Products — registered moderate-to-strong growth in June.

“Manufacturing performed well for the 25th straight month. There are signs of new order rate softening — cited in 17 percent of general comments, compared to 10 percent in May — but the root cause is difficult to determine: (1) demand reduction, (2) adjustment for excessive lead times, causing order rate adjustments or (3) a combination of both. Employment activity remain strongly positive in spite of the uncertainty with new order rates,” says Fiore.

Fifteen manufacturing industries reported growth in June, in the following order: Apparel, Leather & Allied Products; Textile Mills; Printing & Related Support Activities; Computer & Electronic Products; Machinery; Electrical Equipment, Appliances & Components; Primary Metals; Nonmetallic Mineral Products; Plastics & Rubber Products; Transportation Equipment; Fabricated Metal Products; Miscellaneous Manufacturing; Petroleum & Coal Products; Food, Beverage & Tobacco Products; and Chemical Products. The three industries reporting contraction in June compared to May are: Paper Products; Wood Products; and Furniture & Related Products.

WHAT RESPONDENTS ARE SAYING

- “Backlog is high, but incoming orders slowing this month.” [Computer & Electronic Products]
- “New orders have stabilized and not increased.” [Chemical Products]
- “Continued strong demand for transportation equipment.” [Transportation Equipment]
- “Business is slower than expected in volume, but revenue is on pace with our budget. Ocean freight costs are finally beginning to fall a bit. We are already receiving large orders for the fall, which is encouraging.” [Food, Beverage & Tobacco Products]
- “Continued tightening of market, rising gas/diesel prices, and limited labor/drivers equates to increased cost. Few markets showing a levelling off.” [Petroleum & Coal Products]
- “Our suppliers are experiencing a softening of orders. We are still running at the same high level we did throughout 2021 and in early 2022.” [Machinery]
- “Business is still steady. Some customers are pushing orders out because they have too much inventory. We are able to backfill the pushed orders from customers that want theirs earlier, so we aren’t losing capacity.” [Fabricated Metal Products]
- “We are hearing from customers that their inventories are high, and sales are coming down. We expect orders to decline in the coming months until inventories are leveled properly against demand.” [Apparel, Leather & Allied Products]
- “Orders and production continue to be strong, but material availability is holding us back. Cannot run enough hours to eat into the backlog.” [Electrical Equipment, Appliances & Components]
- “Supply seems to be settling to some degree, but what it is settling into remains in question. Diminishing cost and (continued) limited supply in aluminum make for an interesting combination. There are actually more questions than answers this month.” [Primary Metals]

Manufacturing at a Glance
June 2022

Index	Series Index Jun	Series Index May	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Manufacturing PMI®	53.0	56.1	-3.1	Growing	Slower	25
New Orders	49.2	55.1	-5.9	Contracting	From Growing	1
Production	54.9	54.2	+0.7	Growing	Faster	25
Employment	47.3	49.6	-2.3	Contracting	Faster	2
Supplier Deliveries	57.3	65.7	-8.4	Slowing	Slower	76
Inventories	56.0	55.9	+0.1	Growing	Faster	11
Customers' Inventories	35.2	32.7	+2.5	Too Low	Slower	69
Prices	78.5	82.2	-3.7	Increasing	Slower	25
Backlog of Orders	53.2	58.7	-5.5	Growing	Slower	24
New Export Orders	50.7	52.9	-2.2	Growing	Slower	24
Imports	50.7	48.7	+2.0	Growing	From Contracting	1
OVERALL ECONOMY				Growing	Slower	25
Manufacturing Sector				Growing	Slower	25

Manufacturing ISM® *Report On Business*® data is seasonally adjusted for the New Orders, Production, Employment and Inventories indexes.

*Number of months moving in current direction.

COMMODITIES REPORTED UP/DOWN IN PRICE AND IN SHORT SUPPLY

Commodities Up in Price

Adhesives and Paint (7); Aluminum* (25); Caustic Soda (4); Corrugate (5); Corrugated Packaging (20); Crude Oil (2); Diesel Fuel (18); Electrical Components (19); Electricity; Electronic Components (19); Energy (4); Freight (20); High-Density Polyethylene (HDPE) Resin; Labor — Temporary (14); Lumber* (7); Natural Gas (12); Packaging Supplies (19); Paper (4); Petroleum Based Products (2); Pigments and Dyes; Resin Based Products (3); Plastic Resins* (6); Rubber Based Products (11); Steel* (23); Steel — Fabricated & Machined Components (2); Steel — Stainless (20); Steel Castings; Steel Products (22); and Synthetic Rubber.

Commodities Down in Price

Aluminum* (2); Lumber*; Ocean Freight; Plastic Resins*; Steel* (2); Steel — Cold Rolled; Steel — Hot Rolled (2); and Steel — Scrap (2).

Commodities in Short Supply

Electric Motors; Electrical Components (21); Electronic Components (19); Hydraulic Components (2); Labor — Temporary (14); Packaging Products (2); Paper (3); Plastic Resins (2); Rubber Based Products; Semiconductors (19); Steel — Fabricated & Machined Components (2); Steel — Stainless; and Steel Products (3).

Note: The number of consecutive months the commodity is listed is indicated after each item.

*Indicates both up and down in price.

JUNE 2022 MANUFACTURING INDEX SUMMARIES

Manufacturing PMI®

Manufacturing grew in June, as the Manufacturing PMI® registered 53 percent, 3.1 percentage points lower than the May reading of 56.1 percent. “The Manufacturing PMI® continued to indicate sector expansion and U.S. economic growth in June. Three of the five subindexes that directly factor into the Manufacturing PMI® were in growth territory. All of the six biggest manufacturing industries registered moderate-to-strong growth in June, in this order: Computer & Electronic Products; Machinery; Transportation Equipment; Petroleum & Coal Products; Food, Beverage & Tobacco Products; and Chemical Products. The Production Index increased at a slightly faster rate. The Supplier Deliveries Index slowed at a slower rate while the Inventories Index increased slightly, indicating somewhat easing supply chain congestion. Eight of the 10 subindexes were positive for the period; a reading of ‘too low’ for the Customers’ Inventories Index is considered a positive for future production,” says Fiore. A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting.

A Manufacturing PMI® above 48.7 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the June Manufacturing PMI® indicates the overall economy grew in June for the 25th consecutive month following contraction in April and May 2020. “The past relationship between the Manufacturing PMI® and the overall economy indicates that the Manufacturing PMI® for June (53 percent) corresponds to a 1.5-percent increase in real gross domestic product (GDP) on an annualized basis,” says Fiore.

THE LAST 12 MONTHS

Month	Manufacturing PMI®
Jun 2022	53.0
May 2022	56.1
Apr 2022	55.4
Mar 2022	57.1

Month	Manufacturing PMI®
Feb 2022	58.6
Jan 2022	57.6
Month	Manufacturing PMI®
Dec 2021	58.8
Nov 2021	60.6
Oct 2021	60.8
Sep 2021	60.5
Aug 2021	59.7
Jul 2021	59.9

Average for 12 months - 58.2

High - 60.8

Low - 53.0

New Orders

ISM®'s New Orders Index dropped to 49.2 percent in June, a decrease of 5.9 percentage points compared to the 55.1 percent reported in May. This indicates that new order volumes contracted after growing for 24 consecutive months. “Two of the six largest manufacturing sectors — Petroleum & Coal Products; and Computer & Electronic Products — increased new orders at moderate-to-strong levels. Price elevation and extended lead times resulted in a continuing slowing in new order rates across the supply chain. Backlog sagged in the month due to the weakness in new orders,” says Fiore. A New Orders Index above 52.9 percent, over time, is generally consistent with an increase in the Census Bureau’s series on manufacturing orders (in constant 2000 dollars).

Of the 18 manufacturing industries, eight reported growth in new orders in June, in the following order: Textile Mills; Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Petroleum & Coal Products; Primary Metals; Plastics & Rubber Products; Computer & Electronic Products; and Miscellaneous Manufacturing. Seven industries reported a decline in new orders in June, in the following order: Wood Products;

Furniture & Related Products; Paper Products; Transportation Equipment; Electrical Equipment, Appliances & Components; Chemical Products; and Food, Beverage & Tobacco Products.

New Orders	% Higher	% Same	% Lower	Net	Index
Jun 2022	17.8	65.1	17.1	+0.7	49.2
May 2022	28.2	58.5	13.3	+14.9	55.1
Apr 2022	25.1	64.0	10.9	+14.2	53.5
Mar 2022	28.2	60.4	11.4	+16.8	53.8

Production

The Production Index registered 54.9 percent in June, 0.7 percentage point higher than the May reading of 54.2 percent, indicating growth for the 25th consecutive month. “Of the top six industries, four —Petroleum & Coal Products; Computer & Electronic Products; Transportation Equipment; and Chemical Products — expanded in June. Hiring and materials availability continue to show signs of recovery, but factories are still struggling to hit optimum output rates — primarily due to high levels of employee turnover,” says Fiore. An index above 52.4 percent, over time, is generally consistent with an increase in the Federal Reserve Board’s Industrial Production figures.

Ten industries reported growth in production during the month of June, in the following order: Apparel, Leather & Allied Products; Printing & Related Support Activities; Petroleum & Coal Products; Nonmetallic Mineral Products; Computer & Electronic Products; Transportation Equipment; Electrical Equipment, Appliances & Components; Chemical Products; Plastics & Rubber Products; and Fabricated Metal Products. The three industries reporting a decrease in production in June are: Textile Mills; Paper Products; and Furniture & Related Products.

Production	% Higher	% Same	% Lower	Net	Index
Jun 2022	27.4	60.9	11.7	+15.7	54.9
May 2022	23.9	59.2	16.9	+7.0	54.2
Apr 2022	27.5	61.0	11.5	+16.0	53.6
Mar 2022	25.7	62.3	12.0	+13.7	54.5

Employment

ISM[®]'s Employment Index registered 47.3 percent in June, 2.3 percentage points below the May reading of 49.6 percent. “The index contracted for a second straight month after an eight-month period of expansion. This is the lowest reading since August 2020, when the index registered 47.1 percent. Of the six big manufacturing sectors, two (Computer & Electronic Products; and Food, Beverage & Tobacco Products) expanded. Survey panelists’ companies are still struggling to meet labor management plans, though there are more signs of improvement: A larger share of comments (14 percent in June, up from 7 percent in May) noted greater hiring ease. An overwhelming majority of panelists again indicate their companies are hiring. Among those respondents, 42 percent expressed difficulty in filling positions, up from 30 percent in May. Turnover rates remain elevated (29 percent of comments cited backfills and retirements, a decrease from 36 percent in May). Employment levels, driven primarily by turnover, remain the top issue affecting further output growth,” says Fiore. An Employment Index above 50.5 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) data on manufacturing employment.

Nine of 18 manufacturing industries reported employment growth in June, in the following order: Nonmetallic Mineral Products; Apparel, Leather & Allied Products; Printing & Related Support Activities; Textile Mills; Plastics & Rubber Products; Computer & Electronic Products; Fabricated Metal Products; Electrical Equipment, Appliances & Components; and Food, Beverage & Tobacco Products. The six industries reporting a decrease in employment in June — in the following order — are: Paper Products; Petroleum & Coal Products; Furniture & Related Products; Miscellaneous Manufacturing; Chemical Products; and Transportation Equipment.

Employment	% Higher	% Same	% Lower	Net	Index
Jun 2022	17.9	63.7	18.4	-0.5	47.3
May 2022	21.8	55.4	22.8	-1.0	49.6
Apr 2022	21.0	61.9	17.1	+3.9	50.9
Mar 2022	24.4	65.2	10.4	+14.0	56.3

Supplier Deliveries*

The delivery performance of suppliers to manufacturing organizations was slower in June, as the Supplier Deliveries Index registered 57.3 percent, 8.4 percentage points lower than the 65.7 percent reported in May. Five of the top six manufacturing industries (Machinery; Computer & Electronic Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Chemical Products) reported slower deliveries. “Deliveries slowed

at a slower rate compared to the previous month. The index continues to reflect suppliers' difficulties in meeting demand from panelists' companies, but there are clear signs of easing. In June, suppliers remained in a labor-constrained environment, based on panelists' comments and the Employment Index remaining in contraction territory. Transportation networks reflected improvement compared to May. Among supplier delivery comments, 6 percent noted stable month-over-month improvement," says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

Fourteen of 18 manufacturing industries reported slower supplier deliveries in June, in the following order: Textile Mills; Furniture & Related Products; Apparel, Leather & Allied Products; Machinery; Printing & Related Support Activities; Primary Metals; Computer & Electronic Products; Paper Products; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Transportation Equipment; Electrical Equipment, Appliances & Components; Fabricated Metal Products; and Chemical Products. Three industries reported faster supplier deliveries in June as compared to May: Nonmetallic Mineral Products; Wood Products; and Petroleum & Coal Products.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Jun 2022	27.4	59.8	12.8	+14.6	57.3
May 2022	37.1	57.2	5.7	+31.4	65.7
Apr 2022	38.7	57.0	4.3	+34.4	67.2
Mar 2022	34.8	61.2	4.0	+30.8	65.4

Inventories

The Inventories Index registered 56 percent in June, 0.1 percentage point higher than the 55.9 percent reported for May. "Manufacturing inventories expanded at a slightly faster rate compared to May. Of the six big manufacturing industries, four (Computer & Electronic Products; Machinery; Chemical Products; and Transportation Equipment) grew their inventories of manufacturing raw materials in June. Companies report a continued willingness to take early delivery of raw materials as well as building extra work in process to support quick conversion," says Fiore. An Inventories Index greater than 44.4 percent, over time, is generally consistent with expansion in the Bureau of Economic Analysis (BEA) figures on overall manufacturing inventories (in chained 2000 dollars).

Of 18 manufacturing industries, the eight reporting higher inventories in June — in the following order — are: Textile Mills; Apparel, Leather & Allied Products; Computer & Electronic Products; Machinery; Electrical Equipment, Appliances & Components; Chemical Products;

Transportation Equipment; and Miscellaneous Manufacturing. The three industries reporting contracting inventories in June are: Paper Products; Nonmetallic Mineral Products; and Primary Metals. Seven industries reported no change in inventories in June as compared to May.

Inventories	% Higher	% Same	% Lower	Net	Index
Jun 2022	25.4	59.8	14.8	+10.6	56.0
May 2022	24.3	62.5	13.2	+11.1	55.9
Apr 2022	21.4	61.4	17.2	+4.2	51.6
Mar 2022	24.5	63.6	11.9	+12.6	55.5

Customers' Inventories*

ISM[®]'s Customers' Inventories Index registered 35.2 percent in June, 2.5 percentage points higher than the 32.7 percent reported for May, indicating that customers' inventory levels were considered much too low. "Customers' inventories are too low for the 69th consecutive month, a positive for future production growth. For 23 straight months, the Customers' Inventories Index has been at historically low levels," says Fiore.

Two industries (Apparel, Leather & Allied Products; and Wood Products) reported customers' inventories as too high in June. The 14 industries reporting customers' inventories as too low during June — listed in order — are: Textile Mills; Nonmetallic Mineral Products; Primary Metals; Machinery; Computer & Electronic Products; Electrical Equipment, Appliances & Components; Transportation Equipment; Miscellaneous Manufacturing; Plastics & Rubber Products; Petroleum & Coal Products; Furniture & Related Products; Food, Beverage & Tobacco Products; Fabricated Metal Products; and Chemical Products.

Customers' Inventories	% Reporting	% Too High	% About Right	% Too Low	Net	Index
Jun 2022	75	11.1	48.1	40.8	-29.7	35.2
May 2022	75	12.8	39.7	47.5	-34.7	32.7
Apr 2022	76	10.5	53.2	36.3	-25.8	37.1
Mar 2022	69	7.3	53.6	39.1	-31.8	34.1

Prices*

The ISM[®] Prices Index registered 78.5 percent, 3.7 percentage points lower compared to the May reading of 82.2 percent, indicating raw materials prices increased for the 25th consecutive month, at a slower rate in June. The Prices Index has exceeded 70 percent in 18 out of the last 19 months and been above 60 percent for 22 straight months. “Continued oil and fuel price increases, packaging supplies (including corrugate), food ingredients, and petroleum-based products and petrochemicals were the primary causes of prices growth. Notably, 8.3 percent of respondents reported lower prices in June, supporting a continued slow but steady move towards price softening,” says Fiore. A Prices Index above 52.6 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

In June, 17 of 18 industries reported paying increased prices for raw materials, in the following order: Petroleum & Coal Products; Textile Mills; Paper Products; Plastics & Rubber Products; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Chemical Products; Electrical Equipment, Appliances & Components; Furniture & Related Products; Apparel, Leather & Allied Products; Printing & Related Support Activities; Machinery; Computer & Electronic Products; Food, Beverage & Tobacco Products; Transportation Equipment; Primary Metals; and Fabricated Metal Products. No industry reported paying decreased prices for raw materials in June.

Prices	% Higher	% Same	% Lower	Net	Index
Jun 2022	65.2	26.5	8.3	+56.9	78.5
May 2022	70.2	24.2	5.6	+64.6	82.2
Apr 2022	73.5	22.1	4.4	+69.1	84.6
Mar 2022	75.1	24.0	0.9	+74.2	87.1

Backlog of Orders*

ISM[®]'s Backlog of Orders Index registered 53.2 percent in June, a 5.5-percentage point decrease compared to the 58.7 percent reported in May, indicating order backlogs expanded for the 24th straight month. Of the six largest manufacturing sectors, three — Petroleum & Coal Products; Machinery; and Computer & Electronic Products — expanded their order backlogs. “Backlogs expanded in June at a slower rate, as output remains stable at relatively low levels and new orders have slowed due to excessive lead times and historically high prices,” says Fiore.

Nine industries reported growth in order backlogs in June, in the following order: Apparel, Leather & Allied Products; Printing & Related Support Activities; Petroleum & Coal Products; Textile Mills; Electrical Equipment, Appliances & Components; Machinery; Primary Metals; Computer & Electronic Products; and Miscellaneous Manufacturing. The four industries reporting lower backlogs in June are: Furniture & Related Products; Paper Products; Fabricated Metal Products; and Chemical Products.

Backlog of Orders	% Reporting	% Higher	% Same	% Lower	Net	Index
Jun 2022	93	25.6	55.3	19.1	+6.5	53.2
May 2022	91	31.6	54.3	14.1	+17.5	58.7
Apr 2022	92	27.9	56.3	15.8	+12.1	56.0
Mar 2022	92	29.8	60.4	9.8	+20.0	60.0

New Export Orders*

ISM[®]'s New Export Orders Index registered 50.7 percent in June, 2.2 percentage points below the May reading of 52.9 percent. “The New Export Orders Index grew for the 24th consecutive month, at a slower rate in June. For the fourth straight month, COVID-19 in China has suppressed customer demand from overseas, and the war in Ukraine has limited European demand. Of the six big industry sectors, two — Food, Beverage & Tobacco Products; and Computer & Electronic Products — expanded,” says Fiore.

The five industries reporting growth in new export orders in June are: Paper Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Electrical Equipment, Appliances & Components; and Fabricated Metal Products. The five industries reporting a decrease in new export orders in June are: Wood Products; Primary Metals; Machinery; Transportation Equipment; and Miscellaneous Manufacturing. Six industries reported no change in exports in June as compared to May.

New Export Orders	% Reporting	% Higher	% Same	% Lower	Net	Index
Jun 2022	72	12.3	76.8	10.9	+1.4	50.7
May 2022	73	14.6	76.6	8.8	+5.8	52.9
Apr 2022	73	10.7	84.1	5.2	+5.5	52.7
Mar 2022	72	14.3	77.7	8.0	+6.3	53.2

Imports*

ISM[®]'s Imports Index registered 50.7 percent in June after contracting in May, an increase of 2 percentage points compared to May's figure of 48.7 percent. "Imports grew marginally in June. Import demand remains strong entering the back-to-school and holiday import seasons," says Fiore.

The 12 industries reporting growth in imports in June — in the following order — are: Apparel, Leather & Allied Products; Printing & Related Support Activities; Furniture & Related Products; Primary Metals; Plastics & Rubber Products; Food, Beverage & Tobacco Products; Transportation Equipment; Computer & Electronic Products; Machinery; Miscellaneous Manufacturing; Electrical Equipment, Appliances & Components; and Fabricated Metal Products. Three industries reported lower volumes of imports in June: Petroleum & Coal Products; Paper Products; and Chemical Products.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Jun 2022	84	14.4	72.5	13.1	+1.3	50.7
May 2022	85	13.4	70.6	16.0	-2.6	48.7
Apr 2022	83	13.2	76.5	10.3	+2.9	51.4
Mar 2022	83	15.2	73.1	11.7	+3.5	51.8

*The Supplier Deliveries, Customers' Inventories, Prices, Backlog of Orders, New Export Orders and Imports indexes do not meet the accepted criteria for seasonal adjustments.

Buying Policy

The average commitment lead time for Capital Expenditures in June was 186 days, an increase of eight days compared to May and another all-time high. (ISM[®] began tracking lead times data in 1987.) CapEx lead times have increased in 10 of the last 12 months, for a net gain of 38 days since July 2021 (148 days). Average lead time in June for Production Materials increased by one day to return to its all-time high of 100 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased by four days, to 44 days.

Percent Reporting

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jun 2022	15	6	7	9	31	32	186
May 2022	17	5	8	10	30	30	178
Apr 2022	18	4	6	14	30	28	173
Mar 2022	18	3	8	14	29	28	172

Percent Reporting

Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jun 2022	8	19	23	25	18	7	100
May 2022	9	21	21	26	15	8	99
Apr 2022	9	16	26	24	18	7	100
Mar 2022	8	21	23	26	15	7	96

Percent Reporting

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jun 2022	25	39	19	12	5	0	44
May 2022	27	35	19	12	6	1	48
Apr 2022	24	33	23	15	4	1	49
Mar 2022	24	33	22	16	5	0	48

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 information compiled in this report is for the month of June 2022.

The data presented herein is obtained from a survey of manufacturing 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 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.

Survey responses reflect the change, if any, in the current month compared to the previous month. For each of the indicators measured (New Orders, Backlog of Orders, New Export Orders, Imports, Production, Supplier Deliveries, Inventories, Customers' Inventories, Employment and Prices), this report shows the percentage reporting each response, the net difference between the number of responses in the positive economic direction

(higher, better and slower for Supplier Deliveries) and the negative economic direction (lower, worse and faster for Supplier Deliveries), and the diffusion index. 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 (Manufacturing PMI[®], New Orders, Production, Employment and Inventories) 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. 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).

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. With some of the indicators within this report, ISM[®] has indicated the departure point between expansion and decline of comparable government series, as determined by regression analysis. The **Manufacturing ISM[®] Report On Business[®]** survey is sent out to Manufacturing 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. ISM[®] then compiles the report for release on the first business day of the following month.

The industries reporting growth, as indicated in the **Manufacturing ISM[®] Report On Business[®]** monthly report, 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.

Responses to Buying Policy reflect the percent reporting the current month's lead time, the approximate weighted number of days ahead for which commitments are made for Capital Expenditures; Production Materials; and Maintenance, Repair and Operating (MRO) Supplies, expressed as hand-to-mouth (five days), 30 days, 60 days, 90 days, six months (180 days), a year or more (360 days), and the weighted average number of days. These responses are raw data, never revised, and not seasonally adjusted.

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