

PMI® at 52.6%

June 2020 Manufacturing ISM® Report On Business®

**New Orders and Production Growing; Employment Contracting
Supplier Deliveries Slowing at Slower Rate; Backlog Contracting
Raw Materials Inventories Growing; Customers' Inventories Too Low
Prices Increasing; Exports and Imports Contracting**

(Tempe, Arizona) — Economic activity in the **manufacturing sector grew in June**, with the **overall economy notching a second month of growth after one month of contraction**, 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 PMI® registered 52.6 percent, up 9.5 percentage points from the May reading of 43.1 percent. This figure indicates expansion in the **overall economy** for the second straight month after April's contraction, which ended a period of 131 consecutive months of growth. The New Orders Index registered 56.4 percent, an increase of 24.6 percentage points from the May reading of 31.8 percent. The Production Index registered 57.3 percent, up 24.1 percentage points compared to the May reading of 33.2 percent. The Backlog of Orders Index registered 45.3 percent, an increase of 7.1 percentage points compared to the May reading of 38.2 percent. The Employment Index registered 42.1 percent, an increase of 10 percentage points from the May reading of 32.1 percent. The Supplier Deliveries Index registered 56.9 percent, down 11.1 percentage points from the May figure of 68 percent.

"The Inventories Index registered 50.5 percent, 0.1 percentage point higher than the May reading of 50.4 percent. The Prices Index registered 51.3 percent, up 10.5 percentage points compared to the May reading of 40.8 percent. The New Export Orders Index registered 47.6 percent, an increase of 8.1 percentage points compared to the May reading of 39.5 percent. The Imports Index registered 48.8 percent, a 7.5-percentage point increase from the May reading of 41.3 percent.

"June signifies manufacturing entering an expected expansion cycle after the disruption caused by the coronavirus (COVID-19) pandemic. Comments from the panel were positive (1.3 positive comments for every one cautious comment), reversing the cautious trend which began in March. The manufacturing sector is reversing the heavy contraction of April, with the PMI® increasing month-over-month at a rate not seen since August 1980, with several other indexes also posting gains not seen in modern times. **Demand** expanded, with the (1) New Orders Index growing at a respectable level, supported by New Export Orders Index contraction softening; (2) Customers' Inventories Index returning to a level considered a positive for future production, and (3) Backlog of Orders Index softening, although still contracting. **Consumption** (measured by the Production and Employment indexes) contributed positively (a combined 34.1-percentage point increase) to the PMI® calculation, with most companies' employees returning to work in June. **Inputs** — expressed as supplier deliveries, inventories and imports — weakened, due to supplier delivery issues abating and import levels improving. Inventory levels reached parity with supply and demand. Inputs contributed negatively (a combined 11-percentage point decrease) to the PMI® calculation but were more than offset by the demand and consumption improvement. (The Supplier Deliveries and Inventories indexes directly factor into the PMI®; the Imports Index does not.) Prices entered expansion again, but at marginal levels, supporting a positive outlook.

“As predicted, the growth cycle has returned after three straight months of COVID-19 disruptions. Demand, consumption and inputs are reaching parity and are positioned for a demand-driven expansion cycle as we enter the second half of the year. Among the six biggest industry sectors, Food, Beverage & Tobacco Products remains the best performing industry sector, and Computer & Electronic Products, and Chemical Products returned to respectable growth. Transportation Equipment and Fabricated Metal Products continue to contract, but at much softer levels,” says Fiore.

Of the 18 manufacturing industries, the 13 that reported growth in June — in the following order — are: Textile Mills; Wood Products; Furniture & Related Products; Printing & Related Support Activities; Apparel, Leather & Allied Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Plastics & Rubber Products; Chemical Products; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Paper Products; and Electrical Equipment, Appliances & Components. The four industries reporting contraction in June are: Transportation Equipment; Primary Metals; Fabricated Metal Products; and Machinery.

WHAT RESPONDENTS ARE SAYING

- “While we are seeing signs of an uptick in business activity, it is a slow recovery at this point.” (Chemical Products)
- “Gradually ramping production back in our plants. Most of our supply base continued to operate during COVID-19, so we are not seeing a significant supply risk. Will be monitoring supply chain financial health closely.” (Transportation Equipment)
- “Thankfully, we are in quite a few industries, so impact wasn't as harsh on us and more stable. However, during the last two weeks, our bookings have grown, and supply seems to be more readily available.” (Fabricated Metal Products)
- “Difficulty keeping up with a significant increase in demand related to COVID-19. Industry is up 62.5 percent versus [a] year ago. Supply challenges throughout the supply chain. Supply could be hindered if another wave of COVID-19 hits in the fall.” (Food, Beverage & Tobacco Products)
- “Market demand for refined products has increased as statewide quarantines have been lifted, but it is still below normal volumes.” (Petroleum & Coal Products)
- “Orders have picked up and are trending toward normal production requirements [volume similar to 2019 production].” (Plastics & Rubber Products)
- “We are seeing an increase in orders as the economy starts to get rolling again. Slow and steady, sales are increasing. So far, so good.” (Primary Metals)
- “Looks like May was the bottom in terms of orders. June is stronger, and our order books are rebuilding.” (Machinery)
- “Demand is down significantly due to COVID-19 but is starting to stabilize. We are hopeful for recovery in the second half of the year.” (Miscellaneous Manufacturing)
- “The building industry continues to defy expectations, as we continue to rebound stronger from the previous month. Being an essential business across most states and a surge in DIY projects has fueled the industry forward. While the industry will follow the greater economy, we do

believe it will be more resilient than most due to potential migration from larger cities and an undersupplied housing market.” (Wood Products)

Manufacturing at a Glance

June 2020

Index	Series Index Jun	Series Index May	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
PMI®	52.6	43.1	+9.5	Growing	From Contracting	1
New Orders	56.4	31.8	+24.6	Growing	From Contracting	1
Production	57.3	33.2	+24.1	Growing	From Contracting	1
Employment	42.1	32.1	+10.0	Contracting	Slower	11
Supplier Deliveries	56.9	68.0	-11.1	Slowing	Slower	8
Inventories	50.5	50.4	+0.1	Growing	Faster	2
Customers' Inventories	44.6	46.2	-1.6	Too Low	Faster	45
Prices	51.3	40.8	+10.5	Increasing	From Decreasing	1
Backlog of Orders	45.3	38.2	+7.1	Contracting	Slower	4
New Export Orders	47.6	39.5	+8.1	Contracting	Slower	4
Imports	48.8	41.3	+7.5	Contracting	Slower	5
OVERALL ECONOMY				Growing	Faster	2
Manufacturing Sector				Growing	From Contracting	1

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

Aluminum*; Caustic Soda; Copper; Crude Oil (2); Diesel Fuel*; Ethanol; Natural Gas; Personal Protective Equipment (PPE) — Masks (3); Steel — Hot Rolled; Steel — Scrap; and Steel Products*.

Commodities Down in Price

Aluminum* (5); Diesel Fuel* (4); Methanol (2); Nylon (2); Packaging Materials (2); Plastic Products (2); Resins; Solvents (2); and Steel Products* (3).

Commodities in Short Supply

Ethanol; PPE (2); Sanitizers & Disinfectants; and PPE — Gloves (4).

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

*Indicates both up and down in price.

JUNE 2020 MANUFACTURING INDEX SUMMARIES

PMI[®]

Manufacturing grew in June, as the PMI[®] registered 52.6 percent, 9.5 percentage points higher than the May reading of 43.1 percent. “The PMI[®] signaled a rebuilding of economic activity in June after three months below 50 percent. The PMI[®] recorded its largest increase since August 1980, when it increased 10.5 percentage points. Among the big six industries, three of the industry sectors expanded. New Orders and Production returned to expansion, and at respectable levels. Supplier Deliveries reached a normal level of tension between supply and demand. Five of the 10 subindexes registered expansion, a marked improvement from previous periods,” 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 PMI[®] above 42.8 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the June PMI[®] indicates the overall economy grew in June after a small increase in May, following contraction in April. The manufacturing sector grew after three consecutive months of contraction. “The past relationship between the PMI[®] and the overall economy indicates that the PMI[®]

for June (52.6 percent) corresponds to a 2.9-percent increase in real gross domestic product (GDP) on an annualized basis,” says Fiore.

The Last 12 Months

Month	PMI[®]
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Jun 2020	52.6
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May 2020	43.1
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Apr 2020	41.5
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Mar 2020	49.1
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Feb 2020	50.1
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Jan 2020	50.9
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Month	PMI[®]
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Dec 2019	47.8
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Nov 2019	48.1
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Oct 2019	48.5
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Sep 2019	48.2
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Aug 2019	48.8
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Jul 2019	51.3
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Average for 12 months - 48.3

High - 52.6

Low - 41.5

New Orders

ISM[®]'s New Orders Index registered 56.4 percent in June, an increase of 24.6 percentage points compared to the 31.8 percent reported in May. This indicates that new orders grew after contracting for four consecutive months. This is the index's largest month-over-month increase since records began in January 1948. "Of the top six industry sectors, Food, Beverage & Tobacco Products and Chemical Products expanded strongly. Transportation Equipment and Fabricated Metal Products remained in contraction, but at much softer levels. Demand improved in June across all six big industry sectors," says Fiore. A New Orders Index above 52.5 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, the 11 that reported growth in new orders in June — in the following order — are: Textile Mills; Plastics & Rubber Products; Wood Products; Printing & Related Support Activities; Food, Beverage & Tobacco Products; Chemical Products; Furniture & Related Products; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Machinery; and Computer & Electronic Products. The two industries reporting a decline in new orders in June are: Fabricated Metal Products; and Transportation Equipment.

New Orders % Higher % Same % Lower Net Index

Jun 2020	37.3	38.9	23.9	+13.4	56.4
May 2020	21.2	26.0	52.9	-31.7	31.8
Apr 2020	17.7	22.7	59.7	-42.0	27.1
Mar 2020	23.5	44.4	32.1	-8.6	42.2

Production

The Production Index registered 57.3 percent in June, indicating that production grew after contracting for three straight months. The increase of 24.1 percentage points is the largest since August 1952, when the index increased 46.8 percentage points. “Four of the top six industries expanded strongly, with two contracting softly, a marked improvement from May,” says Fiore. An index above 51.7 percent, over time, is generally consistent with an increase in the Federal Reserve Board’s Industrial Production figures.

The 13 industries reporting growth in production during the month of June — listed in order — are: Textile Mills; Furniture & Related Products; Wood Products; Printing & Related Support Activities; Petroleum & Coal Products; Plastics & Rubber Products; Food, Beverage & Tobacco Products; Chemical Products; Computer & Electronic Products; Paper Products; Machinery; Electrical Equipment, Appliances & Components; and Miscellaneous Manufacturing. The three industries reporting a decrease in production in June are: Primary Metals; Transportation Equipment; and Fabricated Metal Products.

Production % Higher % Same % Lower Net Index

Jun 2020	39.2	37.7	23.1	+16.1	57.3
May 2020	20.7	27.8	51.5	-30.8	33.2
Apr 2020	18.6	21.2	60.2	-41.6	27.5
Mar 2020	21.5	53.7	24.8	-3.3	47.7

Employment

ISM’s Employment Index registered 42.1 percent in June, 10 percentage points higher than the May reading of 32.1 percent. This is the index’s largest month-over-month increase since April 1961 (11 percentage points). “This is the 11th consecutive month of employment contraction, but at a slower rate compared to May. Three of the six big industry sectors experienced expansion, as stay-at-home orders

were lifted and more people returned to work. Long-term labor market growth remains uncertain, but moderately strong new order levels and a softening of backlog contraction were encouraging signs,” says Fiore. An Employment Index above 50.8 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) data on manufacturing employment.

Of the 18 manufacturing industries, the five industries to report employment growth in June are: Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Computer & Electronic Products; Food, Beverage & Tobacco Products; and Chemical Products. The 11 industries reporting a decrease in employment in June, in the following order, are: Printing & Related Support Activities; Petroleum & Coal Products; Transportation Equipment; Primary Metals; Electrical Equipment, Appliances & Components; Plastics & Rubber Products; Paper Products; Furniture & Related Products; Fabricated Metal Products; Machinery; and Miscellaneous Manufacturing.

Employment % Higher % Same % Lower Net Index

Jun 2020	14.6	58.8	26.6	-12.0	42.1
May 2020	7.6	51.2	41.1	-33.5	32.1
Apr 2020	2.8	50.7	46.6	-43.8	27.5
Mar 2020	8.6	70.1	21.3	-12.7	43.8

Supplier Deliveries*

The delivery performance of suppliers to manufacturing organizations was slower in June, as the Supplier Deliveries Index registered 56.9 percent. This is 11.1 percentage points lower than the 68 percent reported in May. That percentage-point decrease is the index’s largest month-over-month decline since a drop of 11.9 percentage points in May 1979. “Suppliers continue to struggle to deliver, although at a slower rate compared to May. Plant shutdowns, transportation challenges and continuing difficulties in importing parts and components continue to be factors, but to lesser degrees. The Supplier Delivery Index currently reflects a healthy supply/demand balance,” says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

Fourteen of 18 industries reported slower supplier deliveries in June, listed in the following order: Printing & Related Support Activities; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Textile Mills; Computer & Electronic Products; Paper Products; Petroleum & Coal Products; Nonmetallic Mineral Products; Chemical Products; Food, Beverage & Tobacco Products; Plastics & Rubber Products; Fabricated Metal Products; Transportation Equipment; and Machinery. The only industry reporting faster supplier deliveries in June is Furniture & Related Products.

Supplier Deliveries % Slower % Same % Faster Net Index

Jun 2020	22.9	68.1	9.0	+13.9	56.9
May 2020	41.0	54.2	4.9	+36.1	68.0

Supplier Deliveries % Slower % Same % Faster Net Index

Apr 2020	55.8	40.3	3.9	+51.9	76.0
Mar 2020	35.7	58.6	5.7	+30.0	65.0

Inventories

The Inventories Index registered 50.5 percent in June, 0.1 percentage point higher than the 50.4 percent reported for May. Inventories expanded for a second straight month after 11 consecutive months of index contraction. “The index grew again, but at a marginal level. Inventories appear to have reached an equilibrium with consumption and inputs,” says Fiore. An Inventories Index greater than 44.3 percent, over time, is generally consistent with expansion in the Bureau of Economic Analysis (BEA) figures on overall manufacturing inventories (in chained 2000 dollars).

The nine industries reporting higher inventories in June, in order, are: Apparel, Leather & Allied Products; Furniture & Related Products; Textile Mills; Printing & Related Support Activities; Wood Products; Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; Miscellaneous Manufacturing; and Computer & Electronic Products. The six industries reporting a decrease in inventories in June — listed in order — are: Electrical Equipment, Appliances & Components; Fabricated Metal Products; Machinery; Plastics & Rubber Products; Transportation Equipment; and Chemical Products.

Inventories % Higher % Same % Lower Net Index

Jun 2020	22.9	54.1	23.0	-0.1	50.5
May 2020	29.0	42.0	29.0	0.0	50.4
Apr 2020	31.7	37.2	31.2	+0.5	49.7
Mar 2020	20.5	55.0	24.5	-4.0	46.9

Customers' Inventories*

ISM[®]'s Customers' Inventories Index registered 44.6 percent in June, 1.6 percentage points lower than the 46.2 percent reported for May, indicating that customers' inventory levels were considered too low. “Customers' inventories are too low for the 45th consecutive month and moved further from ‘about right’ territory in June, a positive for future production,” says Fiore.

Of the 18 industries, the four reporting higher customers' inventories in June are: Furniture & Related Products; Transportation Equipment; Primary Metals; and Electrical Equipment, Appliances & Components. The nine industries reporting customers' inventories as too low during June — listed in order — are: Wood Products; Apparel, Leather & Allied Products; Plastics & Rubber Products; Fabricated Metal Products; Chemical Products; Computer & Electronic Products; Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; and Machinery.

Customers' Inventories % Reporting % Too High % About Right % Too Low Net Index

Jun 2020	74	15.4	58.4	26.1	-10.7	44.6
May 2020	75	21.8	48.7	29.5	-7.7	46.2
Apr 2020	73	21.7	54.2	24.1	-2.4	48.8
Mar 2020	75	11.4	64.0	24.6	-13.2	43.4

Prices*

The ISM® Prices Index registered 51.3 percent, 10.5 percentage points higher than the May reading of 40.8 percent, indicating raw materials prices increased after four consecutive months of declines. “Prices increased in June, driven primarily by alcohols and other chemicals, steels, steel scrap, aluminum, copper, personal protective equipment, and energy. The return of price growth indicates that supplier/buyer pricing power is closer to parity,” says Fiore. A Prices Index above 52.5 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

The eight industries reporting paying increased prices for raw materials in June — listed in order — are: Apparel, Leather & Allied Products; Wood Products; Fabricated Metal Products; Computer & Electronic Products; Nonmetallic Mineral Products; Miscellaneous Manufacturing; Machinery; and Chemical Products. The five industries reporting a decrease in prices for raw materials in June are: Plastics & Rubber Products; Paper Products; Primary Metals; Transportation Equipment; and Food, Beverage & Tobacco Products.

Prices % Higher % Same % Lower Net Index

Jun 2020	18.5	65.6	15.9	+2.6	51.3
May 2020	13.9	53.8	32.3	-18.4	40.8
Apr 2020	10.0	50.6	39.4	-29.4	35.3
Mar 2020	11.6	51.7	36.7	-25.1	37.4

Backlog of Orders*

ISM®’s Backlog of Orders Index registered 45.3 percent in June, a 7.1-percentage point increase compared to the 38.2 percent reported in May, indicating order backlogs contracted for the fourth consecutive month. “A slowing of backlog contraction is a positive for the future. It indicates that production satisfied most new-order intake and consumed a lower amount of backlog while customer inventories declined. Panelists also indicated that the period of order-book adjustment is ending. Two of the six big industry sectors’ backlogs expanded, a marked improvement from May,” says Fiore.

The six industries reporting growth in order backlogs in June, in the following order, are: Textile Mills; Plastics & Rubber Products; Nonmetallic Mineral Products; Computer & Electronic Products; Machinery; and Chemical Products. In June, seven industries reported lower backlogs, in the following order: Food,

Beverage & Tobacco Products; Transportation Equipment; Petroleum & Coal Products; Miscellaneous Manufacturing; Furniture & Related Products; Fabricated Metal Products; and Electrical Equipment, Appliances & Components.

Backlog of Orders* % Reporting % Higher % Same % Lower Net Index

Jun 2020	89	19.4	51.9	28.7	-9.3	45.3
May 2020	91	18.2	40.1	41.8	-23.6	38.2
Apr 2020	91	20.9	33.7	45.4	-24.5	37.8
Mar 2020	90	18.1	55.5	26.3	-8.2	45.9

New Export Orders*

ISM[®]'s New Export Orders Index registered 47.6 percent in June, up 8.1 percentage points compared to the May reading of 39.5 percent. "The New Export Orders Index contracted modestly after two straight months of strong contraction. However, none of the six big industry sectors expanded," says Fiore.

The three industries reporting growth in new export orders in June are: Textile Mills; Paper Products; and Plastics & Rubber Products. The nine industries reporting a decrease in new export orders in June, in the following order, are: Nonmetallic Mineral Products; Printing & Related Support Activities; Electrical Equipment, Appliances & Components; Primary Metals; Fabricated Metal Products; Computer & Electronic Products; Transportation Equipment; Food, Beverage & Tobacco Products; and Chemical Products. Six industries reported no change in new export orders in June compared to May.

New Export Orders* % Reporting % Higher % Same % Lower Net Index

Jun 2020	75	13.8	67.7	18.5	-4.7	47.6
May 2020	77	14.3	50.6	35.2	-20.9	39.5
Apr 2020	79	12.0	46.5	41.5	-29.5	35.3
Mar 2020	76	12.5	68.1	19.4	-6.9	46.6

Imports*

ISM[®]'s Imports Index registered 48.8 percent in June, up 7.5 percentage points compared to the 41.3 percent reported for May. "For the fifth consecutive month, imports were in contraction territory, but at significantly slower rates, reflecting increased U.S. demand. However, panelists noted continuing difficulty in obtaining import materials, primarily from China," says Fiore.

The five industries reporting growth in imports in June are: Apparel, Leather & Allied Products; Wood Products; Printing & Related Support Activities; Machinery; and Food, Beverage & Tobacco Products. The eight industries reporting a decrease in imports in June — in the following order — are: Nonmetallic Mineral Products; Plastics & Rubber Products; Primary Metals; Miscellaneous Manufacturing; Electrical

Equipment, Appliances & Components; Transportation Equipment; Fabricated Metal Products; and Computer & Electronic Products.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Jun 2020	83	15.3	67.1	17.6	-2.3	48.8
May 2020	84	13.6	55.4	31.0	-17.4	41.3
Apr 2020	86	20.4	44.6	35.1	-14.7	42.7
Mar 2020	83	16.5	51.4	32.2	-15.7	42.1

***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

Average commitment lead time for Capital Expenditures decreased by five days in June to 132 days. Average lead time for Production Materials decreased by two days to 63 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies was unchanged at 36 days.

Percent Reporting

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jun 2020	25	7	9	17	24	18	132
May 2020	24	7	10	16	23	20	137
Apr 2020	26	6	11	17	20	20	133
Mar 2020	22	6	9	21	24	18	135

Percent Reporting

Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jun 2020	11	37	25	18	7	2	63
May 2020	12	34	28	15	9	2	65
Apr 2020	14	33	23	20	8	2	64
Mar 2020	12	28	31	20	7	2	65

Percent Reporting

MRO Supplies Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days

Jun 2020	38	37	15	7	2	1	36
May 2020	39	31	17	10	3	0	36
Apr 2020	39	32	14	10	4	1	40
Mar 2020	40	32	16	8	3	1	37

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 2020.

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 2018 GDP (released October 29, 2019), the six largest manufacturing sub-sectors are: Computer & Electronic Products; Chemical Products; Transportation Equipment Manufacturing; Food, Beverage & Tobacco Products; Petroleum & Coal Products; and Fabricated Metal Products. Beginning in April 2018 with March 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 (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 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 (seasonally adjusted), and Inventories.

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 PMI[®] reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally declining. A PMI[®] above 42.8 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 42.8 percent, it is generally declining. The distance from 50 percent or 42.8 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 in order 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 since there is no significant seasonal pattern.

ISM ROB Content

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