

Manufacturing PMI[®] at 59.5%

July 2021 Manufacturing ISM[®] *Report On Business*[®]

New Orders, Production, & Employment Growing

Supplier Deliveries Slowing at Slower Rate; Backlog Growing

Raw Materials Inventories Contracting; Customers' Inventories Too Low

Prices Increasing; Exports and Imports Growing

(Tempe, Arizona) — Economic activity in the **manufacturing sector grew in July**, with the **overall economy notching a 14th 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 July Manufacturing PMI[®] registered 59.5 percent, a decrease of 1.1 percentage points from the June reading of 60.6 percent. This figure indicates expansion in the overall economy for the 14th month in a row after contraction in April 2020. The New Orders Index registered 64.9 percent, decreasing 1.1 percentage points from the June reading of 66 percent. The Production Index registered 58.4 percent, a decrease of 2.4 percentage points compared to the June reading of 60.8 percent. The Prices Index registered 85.7 percent, down 6.4 percentage points compared to the June figure of 92.1 percent, which was the index's highest reading since July 1979 (93.1 percent). The Backlog of Orders Index registered 65 percent, 0.5 percentage point higher than the June reading of 64.5 percent. The Employment Index registered 52.9 percent, 3 percentage points higher compared to the June reading of 49.9 percent. The Supplier Deliveries Index registered 72.5 percent, down 2.6 percentage points from the June figure of 75.1 percent. The Inventories Index registered 48.9 percent, 2.2 percentage points lower than the June reading of 51.1 percent. The New Export Orders Index registered 55.7 percent, a decrease of 0.5 percentage point compared to the June reading of 56.2 percent. The Imports Index registered 53.7 percent, a 7.3-percentage point decrease from the June reading of 61 percent.”

Fiore continues, “Business Survey Committee panelists reported that their companies and suppliers continue to struggle to meet increasing demand levels. As we enter the third quarter, all segments of the manufacturing economy are impacted by near record-long raw-material lead times, continued shortages of critical basic materials, rising commodities prices and difficulties in transporting products. Worker absenteeism, short-term shutdowns due to parts shortages and difficulties in filling open positions continue to be issues limiting manufacturing-growth potential. Optimistic panel sentiment remained strong, with 13 positive comments for every

cautious comment. **Demand** expanded, with the (1) New Orders Index growing, supported by continued expansion of the New Export Orders Index, (2) Customers' Inventories Index remaining at very low levels and (3) Backlog of Orders Index staying at a very high level.

Consumption (measured by the Production and Employment indexes) improved in the period, posting a combined 0.6-percentage point increase to the Manufacturing PMI[®] calculation. The Employment Index returned to expansion after one month of contraction; panelists continued to note significant difficulties in attracting and retaining labor at their companies' and suppliers' facilities, although there were signs of improvement. **Inputs** — expressed as supplier deliveries, inventories, and imports — continued to support input-driven constraints to production expansion, at slower rates compared to June as the Supplier Deliveries Index softened while the Inventories Index contracted, likely due to long lead times. The Prices Index expanded for the 14th consecutive month, indicating continued supplier pricing power and scarcity of supply chain goods.

“All of the six biggest manufacturing industries — Computer & Electronic Products; Fabricated Metal Products; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Petroleum & Coal Products, in that order — registered moderate to strong growth in July.

“Manufacturing performed well for the 14th straight month, with demand, consumption and inputs registering growth compared to June. Panelists' companies and their supply chains continue to struggle to respond to strong demand due to difficulties in hiring and retaining direct labor. Comments indicate slight improvements in labor and supplier deliveries offset by continued problems in the transportation sector. High backlog levels, too low customers' inventories and near record raw-materials lead times continue to be reported. Labor challenges across the entire value chain and transportation inefficiencies are the major obstacles to increasing growth,” says Fiore.

Seventeen of 18 manufacturing industries reported growth in July, in the following order: Furniture & Related Products; Printing & Related Support Activities; Apparel, Leather & Allied Products; Miscellaneous Manufacturing; Computer & Electronic Products; Nonmetallic Mineral Products; Machinery; Fabricated Metal Products; Paper Products; Chemical Products; Food, Beverage & Tobacco Products; Primary Metals; Plastics & Rubber Products; Transportation Equipment; Electrical Equipment, Appliances & Components; Wood Products; and Petroleum & Coal Products. The only industry reporting a decrease in July compared to June was Textile Mills.

WHAT RESPONDENTS ARE SAYING

- “Business levels continue to exhibit strong demand, with no signs of backing down. Purchases continue to have long lead times due to shortages of raw materials and labor

force, as well as logistics challenges. Increased costs are being passed to customers.”
[Computer & Electronic Products]

- “Supply chains are slowly, very slowly filling up. Like a water hose, starting upstream and slowly flowing downstream. Rumor is a full return to ‘normal’ may be nearer to year’s end, but the situation is progressing. Transportation (equipment and drivers) is the current pinch point, more so than material shortages.” [Chemical Products]
- “Strong sales continue, and inventories are low as the chip shortage is keeping production numbers down — we have idled several of our assembly plants to reduce the strain on the chip supply base.” [Transportation Equipment]
- “Still dealing with price increases from force majeure issues as well as overseas shipping premiums and higher costs of items like fuel. Customer demand still high; pushing plant to max production rates.” [Food, Beverage & Tobacco Products]
- “Strong operations, (with) new programs, orders and launches. Continue to have hiring difficulties and are unable to fill production and salaried jobs (due to) a lack of candidates. Raw materials are still in short supply, with longer lead times.” [Fabricated Metal Products]
- “Incoming bookings continue to be strong, and economy continues to return. Still struggling with inflation and availability (of materials, labor and freight).” [Furniture & Related Products]
- “Sales are above last year by a good percentage, but meeting demand is just not possible due to force majeure situations, logistics, and labor shortages. We don’t anticipate this ending until well into 2022.” [Nonmetallic Mineral Products]
- “Supply chain continues to be extremely challenging in a variety of categories. Having to place orders months ahead of time just to get a place in line.” [Machinery]
- “Very busy with new orders. Material costs continue to rise, and supplies are sometimes delayed. Labor issues are still affecting us the most with finding proper labor. Labor—costs are increasing as we are competing locally for top talent.” [Miscellaneous Manufacturing]
- “Business levels continue to be very strong, but we also continue to struggle finding employees. We can only fill 75 percent of our order requirements due to the labor shortage.” [Primary Metals]

Manufacturing at a Glance July 2021

Index	Series Index Jul	Series Index Jun	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Manufacturing PMI®	59.5	60.6	-1.1	Growing	Slower	14
New Orders	64.9	66.0	-1.1	Growing	Slower	14
Production	58.4	60.8	-2.4	Growing	Slower	14
Employment	52.9	49.9	+3.0	Growing	From Contracting	1

Index	Series Index Jul	Series Index Jun	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Supplier Deliveries	72.5	75.1	-2.6	Slowing	Slower	65
Inventories	48.9	51.1	-2.2	Contracting	From Growing	1
Customers' Inventories	25.0	30.8	-5.8	Too Low	Faster	58
Prices	85.7	92.1	-6.4	Increasing	Slower	14
Backlog of Orders	65.0	64.5	+0.5	Growing	Faster	13
New Export Orders	55.7	56.2	-0.5	Growing	Slower	13
Imports	53.7	61.0	-7.3	Growing	Slower	13
OVERALL ECONOMY				Growing	Slower	14
Manufacturing Sector				Growing	Slower	14

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; Aluminum (14); Aluminum Products (4); Ammonia; Cable & Harnesses; Capacitors; Caustic Soda (2); Coatings (4); Copper (14); Corrugate (10); Corrugated Packaging (9); Crude Oil (2); Diesel Fuel (7); Electrical Components (8); Electrical Motors; Electronic Components (8); Ethylene; Freight (9); High-Density Polyethylene (HDPE) (7); Hydraulic Components; Labor — Temporary (3); Lumber* (13); Medium-Density Fiberboard (MDF); Natural Gas; Ocean Freight (8); Packaging Film; Packaging Supplies (8); Pallets; Paper Products; Phosphates; Plastic Resins (11); Polyethylene (6); Polyols; Polypropylene (13); Polyvinyl Chloride (PVC) Products (2); Printed Circuit Board Assemblies (PCBAs); Propylene; Resin-Based Products (6);

Resins; Resistors; Semiconductors (6); Shipping Containers; Solvents; Steel (12); Steel — Carbon (8); Steel — Hot Rolled (11); Steel — Scrap (3); Steel — Stainless (9); Steel Products (11); Steel Wire; Sulfuric Acid; Totes; Wood (2); and Wood Products (2).

Commodities Down in Price

Copper; and Lumber*.

Commodities in Short Supply

Adhesives & Paint; Aluminum (4); Aluminum Products (3); Capacitors; Chlorine; Corrugate (2); Corrugated Packaging; Electrical Components (10); Electronic Components (8); Freight; Hardware; Hydraulic Components; Labor — Temporary (3); Lumber; Nylon Polymer; Ocean Freight (4); Packaging Supplies (2); Paper (2); Phosphates; Plastic Products (6); Plastic Resins — Other (5); Polyols; Polyvinyl Chloride (PVC) Resin (3); Personal Protective Equipment (PPE) — Gloves; Resistors; Semiconductors (8); Steel (8); Steel — Carbon; Steel — Cold Rolled (3); Steel — Hot Rolled (9); Steel — Stainless (5); Steel Drums; Steel Products (6); Steel Wire; Totes; and Wood — Pallets (4).

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

*Indicates both up and down in price.

JULY 2021 MANUFACTURING INDEX SUMMARIES

Manufacturing PMI®

Manufacturing grew in July, as the Manufacturing PMI® registered 59.5 percent, 1.1 percentage points lower than the June reading of 60.6 percent. “The Manufacturing PMI® continued to indicate strong sector expansion and U.S. economic growth in July. Four out of five subindexes

that directly factor into the Manufacturing PMI® were in growth territory. All of the six biggest manufacturing industries expanded, in the following order: Computer & Electronic Products; Fabricated Metal Products; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Petroleum & Coal Products. The New Orders and Production indexes continued to expand at strong levels. The Supplier Deliveries Index continued to reflect suppliers' difficulties in maintaining delivery rates, due to a lack of direct labor, transportation challenges and sustained levels of increasing demand. Nine out of 10 subindexes were positive for the period; a reading of 'too low' for 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 43.1 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the July Manufacturing PMI® indicates the overall economy grew in July for the 14th consecutive month following contraction in April 2020. "The past relationship between the Manufacturing PMI® and the overall economy indicates that the Manufacturing PMI® for July (59.5 percent) corresponds to a 4.7-percent increase in real gross domestic product (GDP) on an annualized basis," says Fiore.

THE LAST 12 MONTHS

Month	Manufacturing PMI®
Jul 2021	59.5
Jun 2021	60.6
May 2021	61.2
Apr 2021	60.7
Mar 2021	64.7
Feb 2021	60.8

Month	Manufacturing PMI®
Jan 2021	58.7
Dec 2020	60.5
Nov 2020	57.7
Oct 2020	58.8
Sep 2020	55.7
Aug 2020	55.6

Average for 12 months - 59.5

High - 64.7

Low - 55.6

New Orders

ISM®'s New Orders Index registered 64.9 percent in July, down 1.1 percentage points compared to the 66 percent reported in June. This indicates that new orders grew for the 14th consecutive month. “All of the six largest manufacturing sectors — Computer & Electronic Products; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; Fabricated Metal Products; and Petroleum & Coal Products, in that order — expanded at strong levels. This is the 13th consecutive month of index readings of above 60, nearly matching a 14-month streak during the last manufacturing expansion, which began in 2016,” says Fiore. A New Orders Index above 52.8 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 15 that reported growth in new orders in July — in the following order — are: Furniture & Related Products; Computer & Electronic Products; Printing & Related Support Activities; Machinery; Miscellaneous Manufacturing; Paper Products; Electrical Equipment, Appliances & Components; Chemical Products; Food, Beverage & Tobacco Products; Transportation Equipment; Fabricated Metal Products; Petroleum & Coal Products; Nonmetallic Mineral Products; Plastics & Rubber Products; and Primary Metals. The only industry reporting a decline in new orders in July is Textile Mills.

New Orders	% Higher	% Same	% Lower	Net	Index
Jul 2021	34.7	62.0	3.3	+31.4	64.9
Jun 2021	42.1	49.7	8.2	+33.9	66.0
May 2021	46.9	43.1	10.0	+36.9	67.0
Apr 2021	48.7	43.4	7.9	+40.8	64.3

Production

The Production Index registered 58.4 percent in July, 2.4 percentage points lower than the June reading of 60.8 percent, indicating growth for the 14th consecutive month. “All of the top six industries — Chemical Products; Petroleum & Coal Products; Computer & Electronic Products; Transportation Equipment; Food, Beverage & Tobacco Products; and Fabricated Metal Products, in that order — expanded at strong levels. Lack of direct labor and raw materials continued to be constraints to production growth, but less so compared to June,” says Fiore. An index above 52.1 percent, over time, is generally consistent with an increase in the Federal Reserve Board’s Industrial Production figures.

The 16 industries reporting growth in production during the month of July — listed in order — are: Printing & Related Support Activities; Chemical Products; Wood Products; Furniture & Related Products; Primary Metals; Miscellaneous Manufacturing; Petroleum & Coal Products; Computer & Electronic Products; Nonmetallic Mineral Products; Transportation Equipment; Paper Products; Electrical Equipment, Appliances & Components; Food, Beverage & Tobacco Products; Fabricated Metal Products; Machinery; and Plastics & Rubber Products. The only industry reporting decreased production in July is Textile Mills.

	Production % Higher	% Same	% Lower	Net	Index
Jul 2021	31.1	59.9	9.1	+22.0	58.4
Jun 2021	39.1	49.3	11.6	+27.5	60.8
May 2021	39.2	43.6	17.2	+22.0	58.5
Apr 2021	44.3	44.3	11.4	+32.9	62.5

Employment

ISM®'s Employment Index registered 52.9 percent in July, 3 percentage points higher than the June reading of 49.9 percent. “The Employment Index returned to expansionary territory after dipping below 50 percent. Of the six big manufacturing sectors, four (Computer & Electronic Products; Fabricated Metal Products; Transportation Equipment; and Food, Beverage & Tobacco Products) expanded. Strong new-order levels, low customers’ inventories and expanding backlogs continue to support employment strength; however, survey panelists’ companies are still struggling to meet labor-management plans but less so compared to prior months. An overwhelming majority of panelists indicate their companies are hiring or attempting to hire, with about 30 percent of comments — a slight decrease from previous months — expressing difficulty in filling positions. A significant number of panelists note increasing employee-turnover rates,” says Fiore. An Employment Index above 50.6 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 11 industries reporting employment growth in July — in the following order — are: Furniture & Related Products; Printing & Related Support Activities; Miscellaneous Manufacturing; Machinery; Nonmetallic Mineral Products; Computer & Electronic Products; Electrical Equipment, Appliances & Components; Fabricated Metal Products; Primary Metals; Transportation Equipment; and Food, Beverage & Tobacco Products. The four industries reporting a decrease in employment in July are: Textile Mills; Wood Products; Plastics & Rubber Products; and Chemical Products.

	Employment % Higher	% Same	% Lower	Net	Index
Jul 2021	26.1	57.8	16.0	+10.1	52.9
Jun 2021	26.6	54.1	19.3	+7.3	49.9
May 2021	20.8	61.1	18.0	+2.8	50.9
Apr 2021	21.2	67.9	10.9	+10.3	55.1

Supplier Deliveries*

The delivery performance of suppliers to manufacturing organizations was slower in July, as the Supplier Deliveries Index registered 72.5 percent, 2.6 percentage points lower than the 75.1 percent reported in June and the second straight month of slowing expansion. All six (Fabricated

Metal Products; Computer & Electronic Products; Food, Beverage & Tobacco Products; Transportation Equipment; Chemical Products; and Petroleum & Coal Products) of the top manufacturing industries reported slowing deliveries. “Deliveries slowed at a slower rate compared to the previous month, but the index continues to reflect difficulties suppliers are experiencing in meeting customer demand, including (1) ongoing hiring challenges, (2) product shortages, extended raw-materials lead times and stubbornly high prices, and (3) inconsistent transportation availability,” says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

All 18 industries reported slower supplier deliveries in July, in the following order: Apparel, Leather & Allied Products; Furniture & Related Products; Paper Products; Plastics & Rubber Products; Nonmetallic Mineral Products; Fabricated Metal Products; Computer & Electronic Products; Machinery; Miscellaneous Manufacturing; Printing & Related Support Activities; Food, Beverage & Tobacco Products; Transportation Equipment; Chemical Products; Textile Mills; Wood Products; Electrical Equipment, Appliances & Components; Primary Metals; and Petroleum & Coal Products.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Jul 2021	48.1	48.8	3.1	+45.0	72.5
Jun 2021	53.5	43.2	3.3	+50.2	75.1
May 2021	58.9	39.7	1.4	+57.5	78.8
Apr 2021	53.9	42.2	3.9	+50.0	75.0

Inventories

The Inventories Index registered 48.9 percent in July, 2.2 percentage points lower than the 51.1 percent reported for June, reversing two months of expansion. “Inventories remain unstable due to ongoing supplier constraints, as demonstrated by the index returning to contraction. In July, supplier delivery rates were not able to keep up with production levels, causing a draw down in inventory levels. Panelists’ companies are continuing to call for more materials from their suppliers than they are able to deliver,” says Fiore. An Inventories Index greater than 44.5 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 10 industries reporting higher inventories in July — in the following order — are: Apparel, Leather & Allied Products; Textile Mills; Furniture & Related Products; Printing & Related Support Activities; Nonmetallic Mineral Products; Fabricated Metal Products; Miscellaneous Manufacturing; Plastics & Rubber Products; Computer & Electronic Products; and Chemical Products. The four industries reporting a decrease in inventories in July are: Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Transportation Equipment; and Machinery.

Inventories % Higher % Same % Lower Net Index

Jul 2021	21.6	53.7	24.7	-3.1	48.9
Jun 2021	20.7	59.9	19.4	+1.3	51.1
May 2021	23.8	54.1	22.2	+1.6	50.8
Apr 2021	18.2	58.3	23.5	-5.3	46.5

Customers' Inventories*

ISM®'s Customers' Inventories Index registered 25 percent in July, 5.8 percentage points lower than the 30.8 percent reported for June, indicating that customers' inventory levels were considered too low. The July reading is the lowest since the index was established in January 1997. "Customers' inventories are too low for the 58th consecutive month, a positive for future production growth. For 12 straight months, the Customers' Inventories Index has been at historically low levels," says Fiore.

The only industry reporting higher customers' inventories in July is Apparel, Leather & Allied Products. The 15 industries reporting customers' inventories as too low during July — listed in order — are: Petroleum & Coal Products; Primary Metals; Paper Products; Wood Products; Transportation Equipment; Fabricated Metal Products; Textile Mills; Computer & Electronic Products; Machinery; Miscellaneous Manufacturing; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Chemical Products; Furniture & Related Products; and Food, Beverage & Tobacco Products.

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

Jul 2021	74	6.3	37.4	56.3	-50.0	25.0
Jun 2021	79	6.5	48.7	44.8	-38.3	30.8
May 2021	79	4.6	46.8	48.6	-44.0	28.0
Apr 2021	80	3.7	49.4	46.9	-43.2	28.4

Prices*

The ISM® Prices Index registered 85.7 percent, a decrease of 6.4 percentage points compared to the June reading of 92.1 percent, indicating raw-materials prices increased for the 14th consecutive month but at slower levels. This is the index's seventh straight month above 80 percent. "Aluminum, basic chemicals, packaging supplies, electrical and electronic components, energy, some plastics and plastic products, freight and steels continue to remain at elevated prices due to some product scarcity, but supply and demand dynamics appear to be moving closer to equilibrium for the first time in many months," says Fiore. A Prices Index above 52.7 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

In July, all 18 industries reported paying increased prices for raw materials, in the following order: Apparel, Leather & Allied Products; Paper Products; Printing & Related Support Activities; Nonmetallic Mineral Products; Plastics & Rubber Products; Furniture & Related Products; Fabricated Metal Products; Miscellaneous Manufacturing; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Machinery; Primary Metals; Transportation Equipment; Computer & Electronic Products; Textile Mills; Chemical Products; Food, Beverage & Tobacco Products; and Wood Products.

	Prices	% Higher	% Same	% Lower	Net	Index
Jul 2021	73.8	23.8	2.4	+71.4	85.7	
Jun 2021	84.8	14.5	0.7	+84.1	92.1	
May 2021	77.1	21.6	1.2	+75.9	88.0	
Apr 2021	80.1	19.1	0.9	+79.2	89.6	

Backlog of Orders*

ISM®'s Backlog of Orders Index registered 65 percent in July, a 0.5-percentage point increase compared to the 64.5 percent reported in June, indicating order backlogs expanded for the 13th straight month. “Backlogs expanded at similar rates in July compared to June, indicating production was able to maintain the level of backlog growth even with continuing strong new order levels. Five (Computer & Electronic Products; Transportation Equipment; Fabricated Metal Products; Chemical Products; and Food, Beverage & Tobacco Products) of the six big industry sectors reported that backlogs expanded strongly,” says Fiore.

The 15 industries reporting growth in order backlogs in July, in the following order, are: Apparel, Leather & Allied Products; Furniture & Related Products; Plastics & Rubber Products; Paper Products; Computer & Electronic Products; Transportation Equipment; Machinery; Fabricated Metal Products; Textile Mills; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Chemical Products; Primary Metals; and Food, Beverage & Tobacco Products. No industry reported lower backlogs in July compared to June.

	Backlog of Orders	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2021	92	36.2	57.5	6.2	+30.0	65.0	
Jun 2021	92	39.5	50.1	10.4	+29.1	64.5	
May 2021	91	49.1	42.9	8.0	+41.1	70.6	
Apr 2021	89	44.4	47.6	8.0	+36.4	68.2	

New Export Orders*

ISM®'s New Export Orders Index registered 55.7 percent in July, down 0.5 percentage point compared to the June reading of 56.2 percent. “The New Export Orders Index grew for the 13th consecutive month, but at a slightly slower rate. Of the six big industry sectors, five (Transportation Equipment; Computer & Electronic Products; Chemical Products; Fabricated Metal Products; and Food, Beverage & Tobacco Products) expanded. New export orders were again a positive factor to the growth in the New Orders Index. Export levels remain sluggish compared to the strong export activity experienced in the first quarter of 2018, when the index averaged 60.4 percent,” says Fiore.

The 11 industries reporting growth in new export orders in July — in the following order — are: Furniture & Related Products; Nonmetallic Mineral Products; Primary Metals; Miscellaneous Manufacturing; Paper Products; Transportation Equipment; Computer & Electronic Products; Machinery; Chemical Products; Fabricated Metal Products; and Food, Beverage & Tobacco Products. The two industries reporting a decrease in new export orders in July are: Wood Products; and Plastics & Rubber Products.

New Export Orders	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2021	74	16.9	77.5	5.6	+11.3	55.7
Jun 2021	76	17.7	77.1	5.2	+12.5	56.2
May 2021	74	16.8	77.2	6.0	+10.8	55.4
Apr 2021	72	16.3	77.1	6.5	+9.8	54.9

Imports*

ISM®'s Imports Index registered 53.7 percent in July, a decrease of 7.3 percentage points compared to the 61 percent reported for June. “Imports expanded for the 13th consecutive month, at a significantly slower rate compared to June, reflecting continuing challenges with throughput at U.S. ports of entry. Overland-transport challenges and container shortages continue to persist across the global supply chain, causing major stability issues with respect to predictable import levels. Imports will continue to be challenged through the fourth quarter of 2021,” says Fiore.

The seven industries reporting growth in imports in July — in the following order — are: Nonmetallic Mineral Products; Paper Products; Machinery; Computer & Electronic Products; Chemical Products; Transportation Equipment; and Food, Beverage & Tobacco Products. The three industries reporting a decrease in imports in July are: Furniture & Related Products; Fabricated Metal Products; and Electrical Equipment, Appliances & Components. Eight industries reported no change in imports in July compared to June.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Jul 2021	87	17.8	71.8	10.4	+7.4	53.7
Jun 2021	86	30.7	60.6	8.7	+22.0	61.0
May 2021	85	20.6	66.8	12.7	+7.9	54.0

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Apr 2021	84	16.3	71.9	11.8	+4.5	52.2

*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 increased in July by four days to 148 days. Average lead time for production materials in July was 86 days, down two days from the June figure of 88 days, the highest since ISM[®] began collecting this data in 1987. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased in July by three days to 42 days.

Percent Reporting

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2021	23	5	6	14	32	20	148
Jun 2021	23	5	8	16	28	20	144
May 2021	21	5	11	12	31	20	148
Apr 2021	21	5	7	16	32	19	147

Percent Reporting

Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2021	12	21	28	19	15	5	86
Jun 2021	11	23	27	19	14	6	88
May 2021	11	23	25	23	13	5	85
Apr 2021	10	25	25	26	10	4	79

Percent Reporting

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Jul 2021	26	38	21	11	4	0	42
Jun 2021	30	33	20	12	4	1	45
May 2021	28	39	18	10	5	0	42

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Apr 2021	29	37	16	13	4	1	45

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 July 2021.

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 subsectors are: Computer & Electronic Products; Chemical Products; Transportation Equipment Manufacturing; Food, Beverage & Tobacco Products; Petroleum & Coal Products; and Fabricated Metal Products. 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 (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 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 43.1 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 43.1 percent, it is generally declining. The distance from 50 percent or 43.1 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 since there is no significant seasonal pattern.

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Institute for Supply Management® (ISM®) 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 Report On Business*®, its highly regarded certification programs and the ISM Mastery Model®. This report has been issued by the association since 1931, except for a four-year interruption during World War II.

The full text version of the **Manufacturing ISM® Report On Business**® is posted on ISM®'s website at www.ismrob.org on the first business day* of every month after 10:00 a.m. ET.

The next **Manufacturing ISM® Report On Business**® featuring August 2021 data will be released at 10:00 a.m. ET on Wednesday, September 1, 2021.

*Unless the New York Stock Exchange is closed.