

Manufacturing PMI® at 61.1%

September 2021 Manufacturing ISM® *Report On Business*®

New Orders, Employment, and Production Growing

Supplier Deliveries Slowing at Faster Rate; Backlog Growing

Manufacturing Inventories Growing; Customers' Inventories Too Low

Prices Increasing; Exports and Imports Growing

(Tempe, Arizona) — Economic activity in the **manufacturing sector grew in September**, with the **overall economy notching a 16th 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 September Manufacturing PMI® registered 61.1 percent, an increase of 1.2 percentage points from the August reading of 59.9 percent. This figure indicates expansion in the overall economy for the 16th month in a row after contraction in April 2020. The New Orders Index registered 66.7 percent, unchanged from the August reading. The Production Index registered 59.4 percent, a decrease of 0.6 percentage point compared to the August reading of 60 percent. The Prices Index registered 81.2 percent, up 1.8 percentage points compared to the August figure of 79.4 percent. The Backlog of Orders Index registered 64.8 percent, 3.4 percentage points lower than the August reading of 68.2 percent. The Employment Index returned to growth with a reading at 50.2 percent, 1.2 percentage points higher compared to the August reading of 49 percent. The Supplier Deliveries Index registered 73.4 percent, up 3.9 percentage points from the August figure of 69.5 percent. The Inventories Index registered 55.6 percent, 1.4 percentage points higher than the August reading of 54.2 percent. The New Export Orders Index registered 53.4 percent, a decrease of 3.2 percentage points compared to the August reading of 56.6 percent. The Imports Index registered 54.9 percent, an 0.6-percentage point increase from the August reading of 54.3 percent."

Fiore continues, "Business Survey Committee panelists reported that their companies and suppliers continue to deal with an unprecedented number of hurdles to meet increasing demand. All segments of the manufacturing economy are impacted by record-long raw materials lead times, continued shortages of critical materials, rising commodities prices and difficulties in transporting products. Global pandemic-related issues — worker absenteeism, short-term shutdowns due to parts shortages, difficulties in filling open positions and overseas supply chain problems — continue to limit manufacturing growth potential. However, optimistic panel sentiment remains strong, with three positive growth comments for every cautious comment. Panelists are fully focused on supply chain issues in order to respond to the ongoing high levels of demand. **Demand** expanded, with the (1) New Orders Index growing, supported by continued expansion of the New Export Orders Index, the (2) Customers' Inventories Index remaining at very low levels, and the (3) Backlog of Orders Index staying at a very high level. **Consumption** (measured by the Production and Employment indexes) grew slightly during the period, with a combined 0.6-percentage point increase to the Manufacturing PMI® calculation. The Employment Index returned to expansion after one month of contraction, but hiring difficulties at panelists' companies show no significant signs of abating. **Inputs** — expressed as supplier deliveries, inventories, and imports — continued to support input-driven constraints to production expansion, at higher rates compared to

August. The Supplier Deliveries Index reversed a recent pattern of softening, while the Inventories Index continued to expand faster due to work-in-process inventory being held longer because of key part shortages, as well as more finished goods inventory being held due to downstream customer issues. The Prices Index expanded for the 16th consecutive month, at a faster rate in September, indicating continued supplier pricing power and scarcity of supply chain goods.

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

“Manufacturing performed well for the 16th straight month, with demand, consumption and inputs registering month-over-month growth, in spite of continuing unprecedented obstacles and ever-increasing demand. Panelists’ companies and their supply chains continue to struggle to meet demand due to difficulties in hiring and a clear cycle of labor turnover, as workers opt for more attractive job opportunities. Disruptions from COVID-19, primarily in Southeast Asia, continue to have an impact on many industry sectors. Congestion at ports in China and the U.S. continues to be a headwind, as transportation networks remain stressed. Demand remains at strong levels, despite increasing prices,” says Fiore.

The 17 manufacturing industries reporting growth in September — in the following order — are: Furniture & Related Products; Petroleum & Coal Products; Machinery; Electrical Equipment, Appliances & Components; Computer & Electronic Products; Chemical Products; Apparel, Leather & Allied Products; Textile Mills; Paper Products; Printing & Related Support Activities; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Fabricated Metal Products; Transportation Equipment; Primary Metals; Nonmetallic Mineral Products; and Plastics & Rubber Products. The only industry reporting a decrease in September compared to August is Wood Products.

WHAT RESPONDENTS ARE SAYING

- “Many electronic components and assemblies shortages showing up (due to) port issues, lack of containers and other issues. Problematic, but nothing completely shut down yet. Watching COVID-19 restrictions country by country.” [Computer & Electronic Products]
- “The impacts from Hurricane Ida on the petrochemical industry has put additional stress on an already fragile supply chain. Logistics with intermodal containers and motor carriers continues to be a challenge for planning deliveries of materials.” [Chemical Products]
- “In the U.S., labor availability is the most significant supply challenge for our company, with raw materials just behind. Plastic resin, polyurethanes, small-volume steel purchases and electronics are the biggest material challenges.” [Transportation Equipment]
- “Lack of labor and escalating costs from every direction are very concerning.” [Food, Beverage & Tobacco Products]
- “Ocean freight delays creating disruptions in many areas. Southeast Asia supply continues to be challenged due to COVID-19 outbreaks.” [Furniture & Related Products]
- “Delivery and availability of raw materials, primarily carbon steel, are becoming more and more difficult to source. This has resulted in delaying order deliveries. Computer numerical control

(CNC) machining services are at a premium; it's difficult to get the deliveries needed to complete jobs. Traditional in-house machining now has to be outsourced due to a lack of experienced machinists. All this has had a negative impact on production throughput." [Fabricated Metal Products]

- "Customer demand continues to swell as we prepare for the fourth quarter, and overall growth has been extremely good for the year. Supply chain concerns are growing beyond electronics and chips into most other commodities. Lead times are extending, shipping lanes are slowing, and we will not see an end to this in 2021." [Electrical Equipment, Appliances & Components]
- "We are still amazed by the labor market. We used to have 100 applicants for an opening; we are now seeing about 10 — and often, the applicant does not show for the interview." [Paper Products]
- "Our company's entire supply chain continues to have significant challenges getting manpower, which is impacting production of parts and ability to meet daily build schedules. Additionally, the logistics problems — especially port delays and a shortage of shipping containers — are significantly impacting inbound and outbound shipments. Raw materials costs still are at record highs, and we have raised customer pricing, with additional increases in the near future due to labor costs going up. Huge customer orders are nine months out (due to) backorders. Seeing this domestically and internationally." [Machinery]
- "Global supply chain constraints are still a major concern and focus. Inventory builds continue to compensate for potential supply disruption." [Miscellaneous Manufacturing]

Manufacturing at a Glance September 2021

Index	Series Index Sep	Series Index Aug	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Manufacturing PMI®	61.1	59.9	+1.2	Growing	Faster	16
New Orders	66.7	66.7	0.0	Growing	Unchanged	16
Production	59.4	60.0	-0.6	Growing	Slower	16
Employment	50.2	49.0	+1.2	Growing	From Contracting	1
Supplier Deliveries	73.4	69.5	+3.9	Slowing	Faster	67
Inventories	55.6	54.2	+1.4	Growing	Faster	2
Customers' Inventories	31.7	30.2	+1.5	Too Low	Slower	60

Index	Series Index Sep	Series Index Aug	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
Prices	81.2	79.4	+1.8	Increasing	Faster	16
Backlog of Orders	64.8	68.2	-3.4	Growing	Slower	15
New Export Orders	53.4	56.6	-3.2	Growing	Slower	15
Imports	54.9	54.3	+0.6	Growing	Faster	15
OVERALL ECONOMY				Growing	Faster	16
Manufacturing Sector				Growing	Faster	16

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 (3); Aluminum (16); Aluminum Extrusions (2); Aluminum Products (6); Caustic Soda (4); Copper; Corrugate (12); Corrugated Packaging (11); Diesel Fuel (9); Electrical Components (10); Electrical Motors (3); Electronic Components (10); Foam; Freight (11); High-Density Polyethylene (HDPE) (9); Labor — Temporary (5); Logistics Services; Maintenance, Repair, and Operations (MRO) Supplies; Natural Gas (3); Ocean Freight (10); Packaging Supplies (10); Pallets (3); Paper; Plastic Containers; Plastic Resins (13); Polyethylene (8); Polypropylene (15); Resins; Resin-Based Products (8); Rubber-Based Products (2); Semiconductors (8); Solvents; Steel (14); Steel — Carbon (10); Steel — Cold Rolled (2); Steel — Drums; Steel — Galvanized; Steel — Hot Rolled (13); Steel — Stainless (11); Steel Products (13); Surfactants; and Tires.

Commodities Down in Price

Lumber (3); Steel — Scrap; and Wood (2).

Commodities in Short Supply

Adhesives and Paints (3); Aluminum (6); Aluminum Products (5); Corrugated Packaging (3); Electrical Components (12); Electronic Components (10); Freight; Harnesses; Labor — Temporary (5); Nylon 6,6 Polymer; Ocean Freight (6); Plastic Containers; Plastic Products (8); Plastic Resins — Other (7); Plastic Totes; Polyvinyl Chloride (PVC) Plastics; Printed Circuit Board Assemblies (2); Resin-Based Products (2); Rubber-Based Products (2); Semiconductors (10); Steel (10); Steel — Hot Rolled (11); Steel — Stainless (7); and Steel Products (8).

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

SEPTEMBER 2021 MANUFACTURING INDEX SUMMARIES

Manufacturing PMI[®]

Manufacturing grew in September, as the Manufacturing PMI[®] registered 61.1 percent, 1.2 percentage points higher than the August reading of 59.9 percent. “The Manufacturing PMI[®] continued to indicate strong sector expansion and U.S. economic growth in September. All 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: Petroleum & Coal Products; Computer & Electronic Products; Chemical Products; Food, Beverage & Tobacco Products; Fabricated Metal Products; and Transportation Equipment. 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 persistent lack of direct labor, transportation challenges and sustained levels of increasing demand. All 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 43.1 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the September Manufacturing PMI[®] indicates the overall economy grew in September for the 16th consecutive month following contraction in April 2020. “The past relationship between the Manufacturing PMI[®] and the overall economy indicates that the Manufacturing PMI[®] for September (61.1 percent) corresponds to a 5.1-percent increase in real gross domestic product (GDP) on an annualized basis,” says Fiore.

THE LAST 12 MONTHS

Month	Manufacturing PMI[®]
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Sep 2021	61.1
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Aug 2021	59.9
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Month Manufacturing PMI[®]

Jul 2021 59.5

Jun 2021 60.6

May 2021 61.2

Apr 2021 60.7

**Month Manufacturing
 PMI[®]**

Mar 2021 64.7

Feb 2021 60.8

Jan 2021 58.7

Dec 2020 60.5

Nov 2020 57.7

Oct 2020 58.8

Average for 12 months - 60.4

High - 64.7

Low - 57.7

New Orders

ISM[®]'s New Orders Index registered 66.7 percent in September, unchanged compared to the 66.7 percent reported in August. This indicates that new orders grew for the 16th consecutive month. "All of the six largest manufacturing sectors — Food, Beverage & Tobacco Products; Petroleum & Coal Products; Computer & Electronic Products; Chemical Products; Transportation Equipment; and Fabricated Metal Products, in that order — expanded at moderate to strong levels. This is the 15th consecutive month of index readings of above 60 percent, beating a 14-month streak (May 2017-June 2018) during the last manufacturing expansion. The monthly average during the current cycle exceeds that of the previous streak by 2 percentage points," 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 13 that reported growth in new orders in September — in the following order — are: Primary Metals; Food, Beverage & Tobacco Products; Furniture & Related Products; Petroleum & Coal Products; Computer & Electronic Products; Machinery; Chemical Products; Miscellaneous Manufacturing; Paper Products; Nonmetallic Mineral Products; Transportation Equipment; Electrical Equipment, Appliances & Components; and Fabricated Metal Products. The two

industries reporting a decline in new orders in September are: Printing & Related Support Activities; and Wood Products.

New Orders % Higher % Same % Lower Net Index

Sep 2021	36.6	54.3	9.1	+27.5	66.7
Aug 2021	38.0	52.8	9.2	+28.8	66.7
Jul 2021	34.7	62.0	3.3	+31.4	64.9
Jun 2021	42.1	49.7	8.2	+33.9	66.0

Production

The Production Index registered 59.4 percent in September, 0.6 percentage point lower than the August reading of 60 percent, indicating growth for the 16th consecutive month. “All of the top six industries — Petroleum & Coal Products; Transportation Equipment; Chemical Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; and Computer & Electronic Products, in that order — expanded at strong to moderate levels. Raw materials continued to be a constraint to production growth, as manufacturing inventories reached their highest levels in this cycle. Staffing levels on the factory floor remain an obstacle, with direct labor turnover and retirements becoming more prevalent,” 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 14 industries reporting growth in production during the month of September — listed in order — are: Printing & Related Support Activities; Furniture & Related Products; Petroleum & Coal Products; Textile Mills; Machinery; Nonmetallic Mineral Products; Transportation Equipment; Chemical Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; Primary Metals; Computer & Electronic Products; Electrical Equipment, Appliances & Components; and Miscellaneous Manufacturing. The two industries reporting a decrease in September are Apparel, Leather & Allied Products; and Plastics & Rubber Products.

Production % Higher % Same % Lower Net Index

Sep 2021	31.6	53.1	15.3	+16.3	59.4
Aug 2021	31.9	54.5	13.5	+18.4	60.0
Jul 2021	31.1	59.9	9.1	+22.0	58.4
Jun 2021	39.1	49.3	11.6	+27.5	60.8

Employment

ISM[®]'s Employment Index registered 50.2 percent in September, 1.2 percentage points above the August reading of 49 percent. “The Employment Index returned to expansion territory after one month below 50 percent. Of the six big manufacturing sectors, two (Computer & Electronic Products; and Fabricated Metal Products) expanded. Survey panelists’ companies are still struggling to meet labor-management

plans, but there were modest signs of progress compared to previous months: Less than 5 percent of comments noted improvements regarding employment, compared to none in August. An overwhelming majority of panelists indicate their companies are hiring or attempting to hire — 85 percent of Employment Index comments were about seeking additional staffing. Nearly half (47 percent) of those respondents expressed difficulty in filling positions, an increase from August. The increasing frequency of comments on turnover rates and retirements continued a trend that began in August,” 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 six industries reporting employment growth in September — in the following order — are: Electrical Equipment, Appliances & Components; Furniture & Related Products; Computer & Electronic Products; Primary Metals; Fabricated Metal Products; and Machinery. The six industries reporting a decrease in employment in September — listed in order — are: Textile Mills; Petroleum & Coal Products; Paper Products; Plastics & Rubber Products; Food, Beverage & Tobacco Products; and Miscellaneous Manufacturing. Six industries reported no change in employment in September compared to August.

	Employment % Higher	% Same	% Lower	Net	Index
Sep 2021	17.0	65.7	17.3	-0.3	50.2
Aug 2021	20.3	58.2	21.5	-1.2	49.0
Jul 2021	26.1	57.8	16.0	+10.1	52.9
Jun 2021	26.6	54.1	19.3	+7.3	49.9

Supplier Deliveries*

The delivery performance of suppliers to manufacturing organizations was slower in September, as the Supplier Deliveries Index registered 73.4 percent, 3.9 percentage points higher than the 69.5 percent reported in August. All six top manufacturing industries (Fabricated Metal Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Petroleum & Coal Products; Chemical Products; and Transportation Equipment, in that order) reported slowing deliveries. “Deliveries slowed at a faster rate compared to the previous month, reversing a three-month improvement trend. The index continues to reflect suppliers’ difficulties in meeting panelist companies’ demand, including (1) ongoing supplier hiring challenges, (2) extended raw materials lead times at all tiers, (3) increasing levels of input material shortages, (4) stubbornly high prices, and (5) inconsistent transportation availability,” says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The 17 industries that reported slower supplier deliveries in September — in the following order — are: Apparel, Leather & Allied Products; Textile Mills; Paper Products; Machinery; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Furniture & Related Products; Petroleum & Coal Products; Plastics & Rubber Products; Chemical Products; Wood Products; Transportation Equipment; Electrical

Equipment, Appliances & Components; and Primary Metals. No industries reported faster supplier deliveries in September.

	Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Sep 2021	50.0	46.8	3.2	+46.8	73.4	
Aug 2021	42.7	53.7	3.6	+39.1	69.5	
Jul 2021	48.1	48.8	3.1	+45.0	72.5	
Jun 2021	53.5	43.2	3.3	+50.2	75.1	

Inventories

The Inventories Index registered 55.6 percent in September, 1.4 percentage points higher than the 54.2 percent reported for August. “Manufacturing Inventories are clearly in expansion territory due to (1) panelists’ companies accepting more raw materials inventory than they may use to reduce production shortages, (2) work-in-process inventory accounts growing due to increasing part shortages, and (3) growth of finished goods inventory as some panelists’ companies are held back from delivering due to customers’ throughput challenges. The Petroleum & Coal Products and Chemical Products industries contributed to manufacturing inventory gains due to the impacts of shutdowns caused by Hurricane Ida. This is the highest level of inventories expansion since October 2010, when the index registered 56.1 percent,” 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 September — in the following order — are: Printing & Related Support Activities; Apparel, Leather & Allied Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Paper Products; Transportation Equipment; Chemical Products; Machinery; Computer & Electronic Products; and Fabricated Metal Products. The four industries reporting a decrease in inventories in September are: Nonmetallic Mineral Products; Wood Products; Primary Metals; and Food, Beverage & Tobacco Products.

	Inventories	% Higher	% Same	% Lower	Net	Index
Sep 2021	29.7	51.4	18.9	+10.8	55.6	
Aug 2021	25.4	60.5	14.2	+11.2	54.2	
Jul 2021	21.6	53.7	24.7	-3.1	48.9	
Jun 2021	20.7	59.9	19.4	+1.3	51.1	

Customers' Inventories*

ISM®’s Customers’ Inventories Index registered 31.7 percent in September, 1.5 percentage points higher than the 30.2 percent reported for August, indicating that customers’ inventory levels were considered too low. “Customers’ inventories are too low for the 60th consecutive month, a positive for future

production growth. For 14 straight months, the Customers' Inventories Index has been at historically low levels," says Fiore.

The only industry reporting higher customers' inventories in September is Petroleum & Coal Products. The 16 industries reporting customers' inventories as too low during September — listed in order — are: Apparel, Leather & Allied Products; Textile Mills; Printing & Related Support Activities; Primary Metals; Wood Products; Machinery; Food, Beverage & Tobacco Products; Miscellaneous Manufacturing; Computer & Electronic Products; Chemical Products; Plastics & Rubber Products; Paper Products; Electrical Equipment, Appliances & Components; Transportation Equipment; Fabricated Metal Products; and Furniture & Related Products.

Customers' Inventories % Reporting % Too High % About Right % Too Low Net Index						
Sep 2021	73	11.9	39.6	48.5	-36.6	31.7
Aug 2021	75	5.6	49.0	45.3	-39.7	30.2
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

Prices*

The ISM® Prices Index registered 81.2 percent, an increase of 1.8 percentage points compared to the August reading of 79.4 percent, indicating raw materials prices increased for the 16th consecutive month, at a faster rate in September. "Aluminum, basic chemicals, copper, corrugate and packaging materials, electronic components, energy, some plastics and plastic products, freight, and steels continue to remain at elevated prices due to product scarcity, with the index reversing prior month softening," 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 September, 17 of 18 industries reported paying increased prices for raw materials, in the following order: Apparel, Leather & Allied Products; Textile Mills; Printing & Related Support Activities; Paper Products; Plastics & Rubber Products; Machinery; Miscellaneous Manufacturing; Furniture & Related Products; Nonmetallic Mineral Products; Computer & Electronic Products; Fabricated Metal Products; Transportation Equipment; Food, Beverage & Tobacco Products; Primary Metals; Chemical Products; Electrical Equipment, Appliances & Components; and Wood Products. The only industry reporting a decline in prices in September is Petroleum & Coal Products.

Prices % Higher % Same % Lower Net Index					
Sep 2021	69.5	23.4	7.1	+62.4	81.2
Aug 2021	62.8	33.3	3.9	+58.9	79.4
Jul 2021	73.8	23.8	2.4	+71.4	85.7
Jun 2021	84.8	14.5	0.7	+84.1	92.1

Backlog of Orders*

ISM[®]'s Backlog of Orders Index registered 64.8 percent in September, a 3.4-percentage point decrease compared to the 68.2 percent reported in August, indicating order backlogs expanded for the 15th straight month. "Backlogs expanded at a lower rate in September compared to August, indicating production was able to keep up with continuing strong new order levels. However, backlogs remain at historically high levels. Other than the current run above 60 percent which began this past February, the last time the Backlog of Orders Index was at this level was April 2004 (66.5 percent). Of the six big industry sectors, five (Food, Beverage & Tobacco Products; Chemical Products; Transportation Equipment; Computer & Electronic Products; and Fabricated Metal Products) reported that backlogs expanded strongly," says Fiore.

The 14 industries reporting growth in order backlogs in September, in the following order, are: Apparel, Leather & Allied Products; Furniture & Related Products; Primary Metals; Machinery; Food, Beverage & Tobacco Products; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Paper Products; Plastics & Rubber Products; Chemical Products; Electrical Equipment, Appliances & Components; Transportation Equipment; Computer & Electronic Products; and Fabricated Metal Products. No industry reported lower backlogs in September compared to August.

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

Sep 2021	90	39.0	51.6	9.4	+29.6	64.8
Aug 2021	91	44.5	47.5	8.0	+36.5	68.2
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

New Export Orders*

ISM[®]'s New Export Orders Index registered 53.4 percent in September, down 3.2 percentage points compared to the August reading of 56.6 percent. "The New Export Orders Index grew for the 15th consecutive month, at a slower rate compared to August. Of the six big industry sectors, three (Food, Beverage & Tobacco Products; Chemical Products; and Computer & Electronic Products) expanded. New export orders were a contributor to the growth in the New Orders Index," says Fiore.

The seven industries reporting growth in new export orders in September — in the following order — are: Paper Products; Primary Metals; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Chemical Products; Computer & Electronic Products; and Machinery. The three industries reporting a decrease in new export orders in September are Plastics & Rubber Products; Fabricated Metal Products; and Transportation Equipment. Six industries reported no change in exports in September compared to August.

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

Sep 2021	75	14.1	78.6	7.3	+6.8	53.4
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New Export Orders % Reporting % Higher % Same % Lower Net Index

Aug 2021	75	17.9	77.5	4.6	+13.3	56.6
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

Imports*

ISM[®]'s Imports Index registered 54.9 percent in September, an increase of 0.6 percentage point compared to August's figure of 54.3 percent. "Imports expanded for the 15th consecutive month, at a slightly faster rate compared to August, 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 potential instability with import level projections. Imports will continue to be challenged through the end of 2021 and likely through the first half of 2022," says Fiore.

The nine industries reporting growth in imports in September — in the following order — are: Nonmetallic Mineral Products; Petroleum & Coal Products; Computer & Electronic Products; Miscellaneous Manufacturing; Furniture & Related Products; Fabricated Metal Products; Food, Beverage & Tobacco Products; Transportation Equipment; and Machinery. The four industries reporting a decrease in imports in September are: Paper Products; Electrical Equipment, Appliances & Components; Plastics & Rubber Products; and Chemical Products.

Imports % Reporting % Higher % Same % Lower Net Index

Sep 2021	87	20.0	69.8	10.2	+9.8	54.9
Aug 2021	86	17.5	73.6	8.8	+8.7	54.3
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

***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 September by eight days to 154 days. Average lead time for production materials in September increased by one day to 92 days, the highest figure since ISM[®] began collecting this data in 1987. Average lead time for Maintenance, Repair and Operating (MRO) Supplies was unchanged in September at 45 days, a tie (with April 2021, June 2021 and August 2021) for the highest figure since ISM[®] began collecting this data in 1987.

Percent Reporting

Capital Expenditures Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days

Sep 2021	20	5	8	15	30	22	154
Aug 2021	23	4	9	14	30	20	146
Jul 2021	23	5	6	14	32	20	148
Jun 2021	23	5	8	16	28	20	144

Percent Reporting**Production Materials Hand-to-Mouth 30 Days 60 Days 90 Days 6 Months 1 Year + Average Days**

Sep 2021	10	20	29	22	11	8	92
Aug 2021	12	19	27	22	13	7	91
Jul 2021	12	21	28	19	15	5	86
Jun 2021	11	23	27	19	14	6	88

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

Sep 2021	26	38	20	11	4	1	45
Aug 2021	28	38	16	13	4	1	45
Jul 2021	26	38	21	11	4	0	42
Jun 2021	30	33	20	12	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 September 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.

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The next **Manufacturing ISM[®] Report On Business[®]** featuring October 2021 data will be released at 10:00 a.m. ET on Monday, November 1, 2021.

*Unless the New York Stock Exchange is cl