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March 2018 Manufacturing ISM[®] Report On Business[®]

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New Orders, Production, and Employment Growing

Supplier Deliveries Slowing at Slower Rate; Backlog Same

Raw Materials Inventories Growing; Customers' Inventories Too Low

Prices Increasing at Faster Rate; Exports and Imports Growing

(Tempe, Arizona) — (Tempe, Arizona) — Economic activity in the manufacturing sector expanded in March, and the overall economy grew for the 107th consecutive month, 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 March PMI[®] registered 59.3 percent, a decrease of 1.5 percentage points from the February reading of 60.8 percent. The New Orders Index registered 61.9 percent, a decrease of 2.3 percentage points from the February reading of 64.2 percent. The Production Index registered 61 percent, a 1 percentage point decrease compared to the February reading of 62 percent. The Employment Index registered 57.3 percent, a decrease of 2.4 percentage points from the February reading of 59.7 percent. The Supplier Deliveries Index registered

60.6 percent, a 0.5 percentage point decrease from the February reading of 61.1 percent. The Inventories Index registered 55.5 percent, a decrease of 1.2 percentage points from the February reading of 56.7 percent. The Prices Index registered 78.1 percent in March, a 3.9 percentage point increase from the February reading of 74.2 percent, indicating higher raw materials prices for the 25th consecutive month. Comments from the panel reflect continued expanding business strength. Demand remains robust, with the New Orders Index at 60 or above for the 11th straight month, and the Customers' Inventories Index at its lowest level since July 2011. The Backlog of Orders Index continued a 14-month expansion with its highest reading since May 2004, when it registered 63 percent. Consumption, described as production and employment, continues to expand, with indications that labor and skill shortages are affecting production output. Inputs, expressed as supplier deliveries, inventories and imports, were negatively impacted by weather conditions; Asian holidays; lead time extensions; steel and aluminum disruptions across many industries; supplier labor issues; and transportation difficulties due to driver and equipment shortages. Export orders remained strong, supported by a weaker U.S. currency. The Prices Index is at its highest level since April 2011, when it registered 82.6 percent. In March, price increases occurred across 17 of 18 industry sectors. Demand remains robust, but the nation's employment resources and supply chains are still struggling to keep up."

Of the 18 manufacturing industries, 17 reported growth in March, in the following order: Fabricated Metal Products; Plastics & Rubber Products; Computer & Electronic Products; Paper Products; Printing & Related Support Activities; Nonmetallic Mineral Products; Transportation Equipment; Petroleum & Coal Products; Wood Products; Machinery; Chemical Products; Textile Mills; Electrical Equipment, Appliances & Components; Furniture & Related Products; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; and Primary Metals. The only industry reporting a decrease during the period is Apparel, Leather & Allied Products.

What respondents are saying...

- "Supply constraints, extended lead times, capacity constraints [and the like], particularly in the electronics components markets, continue to frustrate and drain needed resources, have delayed production schedules and, in some cases, caused missed or delayed sales opportunities." (Computer & Electronic Products)
- "International demand is strong for our products in all regions. We are seeing constraints in multiple chemical supply chains due to increased global demand. We are concerned about the impact of tariff and trade wars on demand, but at this time, [there are] no signals that global demand is slowing." (Chemical Products)
- "Production targets continue to be a struggle due to shortages of globally sourced components. Many subtier components are in short supply for multiple OEMs." (Transportation Equipment)
- "In the U.S., we continue to struggle with finding carriers and drivers for shipments." (Food, Beverage & Tobacco Products)

- “Much concern in the industry regarding the steel and aluminum tariffs recently [imposed]. This is causing panic buying, driving the near-term prices higher and [leading to] inventory shortages for non-contract customers.” (Machinery)
- “New tariffs are causing concern across the supply chain. Full impact will take a few weeks to reveal itself.” (Miscellaneous Manufacturing)
- “Significant price increases in the steel commodity due to 232 [the tariffs]. The price increases will begin to impact our company’s performance.” (Primary Metals)
- “Overall, incoming orders are picking up, and supplier pricing is increasing in some commodities.” (Textile Mills)
- “Hiring continues to slowly increase from February into March and capital spending was allowed a small increase. Oil market conditions have improved and continue to stabilize.” (Petroleum & Coal Products)

Manufacturing at a Glance

March 2018

Index	Series Index Mar	Series Index Feb	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
PMI[®]	59.3	60.8	-1.5	Growing	Slower	19
New Orders	61.9	64.2	-2.3	Growing	Slower	27
Production	61.0	62.0	-1.0	Growing	Slower	19
Employment	57.3	59.7	-2.4	Growing	Slower	18
Supplier Deliveries	60.6	61.1	-0.5	Slowing	Slower	18
Inventories	55.5	56.7	-1.2	Growing	Slower	3
Customers’ Inventories	42.0	43.7	-1.7	Too Low	Faster	18
Prices	78.1	74.2	+3.9	Increasing	Faster	25
Backlog of Orders	59.8	59.8	0.0	Growing	Same	14
New Export Orders	58.7	62.8	-4.1	Growing	Slower	25
Imports	59.7	60.5	-0.8	Growing	Slower	14

Index	Series Index Mar	Series Index Feb	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
OVERALL ECONOMY				Growing	Slower	107
Manufacturing Sector				Growing	Slower	19

Manufacturing ISM® Report On Business® data is seasonally adjusted for the New Orders, Production, Employment and Supplier Deliveries Indexes.

*Number of months moving in current direction.

Commodities reported up/down in price and in short supply

Commodities Up in Price

Commodities Up in Price Aluminum (17); Caustic Soda (9); Cobalt; Copper (5); Corrugate (18); Freight (2); Resin Based Products (2); Steel; Steel — Cold Rolled (3); Steel — Fabricated & Machined Parts (2); Steel — Galvanized (3); Steel — Hot Rolled (16); and Steel — Scrap (4).

Commodities Down in Price

None (2).

Commodities in Short Supply

Capacitors (9); Resistors (5); and Silicone.

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

Manufacturing Index Summaries

PMI®

Manufacturing expanded in March as the PMI® registered 59.3 percent, a decrease of 1.5 percentage points from the February reading of 60.8 percent. “This indicates strong growth in manufacturing for the 19th consecutive month, led by continued expansion in new orders, production activity, employment and inventories, with suppliers continuing to struggle delivering to demand,” 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 43.2 percent, over a period of time, generally indicates an expansion of the overall economy. Therefore, the March PMI[®] indicates growth for the 107th consecutive month in the overall economy and the 19th straight month of growth in the manufacturing sector. “The past relationship between the PMI[®] and the overall economy indicates that the PMI[®] for March (59.3 percent) corresponds to a 4.9 percent increase in real gross domestic product (GDP) on an annualized basis.”

The Last 12 Months

Month	PMI[®]
Mar 2018	59.3
Feb 2018	60.8
Jan 2018	59.1
Dec 2017	59.3
Nov 2017	58.2
Oct 2017	58.5
Month	PMI[®]
Sep 2017	60.2
Aug 2017	59.3
Jul 2017	56.5
Jun 2017	56.7
May 2017	55.5
Apr 2017	55.3

Average for 12 months - 58.2

High - 60.8

Low - 55.3

New Orders

ISM[®]'s New Orders Index registered 61.9 percent in March, which is a decrease of 2.3 percentage points when compared to the 64.2 percent reported for February, indicating growth in new orders for the 27th consecutive month. "New orders expansion continues at a strong pace — slower compared to February's reading, but still at or above 60 percent for the 11th straight month. Customer Inventories remain too low, and backlog expansion maintained high levels," says Fiore. A New Orders Index above 52.4 percent, over time, is generally consistent with an increase in the Census Bureau's series on manufacturing orders (in constant 2000 dollars).

Fifteen of 18 industries reported growth in new orders in March, listed in the following order: Wood Products; Nonmetallic Mineral Products; Computer & Electronic Products; Paper Products; Transportation Equipment; Plastics & Rubber Products; Chemical Products; Printing & Related Support Activities; Fabricated Metal Products; Primary Metals; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; and Machinery. The only industry reporting a decrease in new orders in March compared to February is Apparel, Leather & Allied Products.

New Orders	% Higher	% Same	% Lower	Net	Index
Mar 2018	43.3	48.0	8.6	+34.7	61.9
Feb 2018	40.6	50.9	8.5	+32.1	64.2
Jan 2018	35.2	54.3	10.5	+24.7	65.4
Dec 2017	35.3	56.5	8.1	+27.2	67.4

Production

ISM[®]'s Production Index registered 61 percent in March, which is a decrease of 1 percentage point when compared to the 62 percent reported for February, indicating growth in production for the 19th consecutive month. "Production expansion continues, with the index at 10 straight months over 60 percent. Activity appears to be stabilizing at high rates as the spring/summer selling season approaches. However, labor constraints and supply chain disruptions will continue to prevent or limit maximum production potential," says Fiore. An index above 51.5 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 March — listed in order — are: Printing & Related Support Activities; Plastics & Rubber Products; Paper Products; Computer & Electronic Products; Fabricated Metal Products; Transportation Equipment; Petroleum & Coal Products; Chemical Products; Primary Metals; Machinery; Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; Electrical Equipment, Appliances & Components; and Miscellaneous Manufacturing.

The two industries reporting a decrease in production in March compared to February are: Apparel, Leather & Allied Products; and Textile Mills.

Production	% Higher	% Same	% Lower	Net	Index
Mar 2018	36.1	55.7	8.2	+27.9	61.0
Feb 2018	35.5	54.9	9.6	+25.9	62.0
Jan 2018	32.8	56.2	11.0	+21.8	64.5
Dec 2017	30.8	60.7	8.5	+22.3	65.2

Employment

ISM[®]'s Employment Index registered 57.3 percent in March, a decrease of 2.4 percentage points when compared to the February reading of 59.7 percent. This indicates growth in employment in March for the 18th consecutive month. "Employment expansion remains strong, with many companies struggling to hire skilled workers and indirect personnel to replace natural attrition, and to some extent, an increase in turnover. Many respondents see the labor market as a constraint to production," 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 12 reporting employment growth in March — listed in order — are: Paper Products; Furniture & Related Products; Textile Mills; Miscellaneous Manufacturing; Fabricated Metal Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Machinery; Transportation Equipment; Computer & Electronic Products; Plastics & Rubber Products; and Chemical Products. The only industry reporting a decrease in employment in March compared to February is Food, Beverage & Tobacco Products.

Employment	% Higher	% Same	% Lower	Net	Index
Mar 2018	22.9	66.3	10.8	+12.2	57.3
Feb 2018	28.4	61.8	9.8	+18.7	59.7
Jan 2018	17.6	70.6	11.8	+5.8	54.2
Dec 2017	20.3	71.6	8.2	+12.1	58.1

Supplier Deliveries

The delivery performance of suppliers to manufacturing organizations was slower in March, as the Supplier Deliveries Index registered 60.6 percent. This is 0.5 percentage point lower than the 61.1 percent reported for February. “This is the 18th straight month of slowing supplier deliveries, and that continues to be a constraint to production growth. Lead-time extensions in many areas, including steel; supplier labor shortages; and transportation delays will continue to restrict production output for the foreseeable future,” says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The 13 industries reporting slower supplier deliveries in March — listed in order — are: Textile Mills; Machinery; Fabricated Metal Products; Nonmetallic Mineral Products; Computer & Electronic Products; Furniture & Related Products; Food, Beverage & Tobacco Products; Electrical Equipment, Appliances & Components; Chemical Products; Plastics & Rubber Products; Petroleum & Coal Products; Transportation Equipment; and Paper Products. The only industry reporting faster supplier deliveries in March compared to February is Primary Metals.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Mar 2018	28.4	65.9	5.7	+22.7	60.6
Feb 2018	26.2	70.4	3.4	+22.8	61.1
Jan 2018	23.5	71.3	5.2	+18.3	59.1
Dec 2017	19.0	74.6	6.3	+12.7	57.2

Inventories*

The Inventories Index registered 55.5 percent in March, which is a decrease of 1.2 percentage points when compared to the 56.7 percent reported for February, indicating raw materials inventories grew in March. “Suppliers were not able to maintain desired inventory expansion levels consistent with production demands. Broad supplier lead-time extensions and freight uncertainties will continue to impact inventory accounts,” says Fiore. An Inventories Index greater than 43 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 March — listed in order — are: Apparel, Leather & Allied Products; Plastics & Rubber Products; Printing & Related Support Activities; Fabricated Metal Products; Transportation Equipment; Nonmetallic Mineral Products; Petroleum & Coal Products; Computer & Electronic Products; and Chemical Products. The two industries reporting lower inventories in March are: Primary Metals; and Paper Products. Seven industries reported no change in raw materials inventories in March compared to February.

Inventories	% Higher	% Same	% Lower	Net	Index
Mar 2018	22.1	66.7	11.1	+11.0	55.5
Feb 2018	23.8	66.0	10.3	+13.5	56.7
Jan 2018	24.4	55.7	19.9	+4.5	52.3
Dec 2017	18.0	60.9	21.1	-3.0	48.5

Customers' Inventories*

ISM[®]'s Customers' Inventories Index registered 42 percent in March, which is 1.7 percentage points lower than the 43.7 percent reported for February, indicating that customers' inventory levels were still considered too low in March. "Customers' inventory levels remain too low for the 18th consecutive month and are at their lowest level since July 2011, when the index registered 40.4. This month's low level, coupled with continued strong expansion in backlogs, indicates strong demand will continue for the foreseeable future in spite of the slowing in new orders expansion," says Fiore.

The only manufacturing industry reporting customers' inventories as too high during the month of March is Miscellaneous Manufacturing. The 10 industries reporting customers' inventories as too low during March — listed in order — are: Wood Products; Primary Metals; Machinery; Electrical Equipment, Appliances & Components; Computer & Electronic Products; Plastics & Rubber Products; Paper Products; Transportation Equipment; Fabricated Metal Products; and Chemical Products. Seven industries reported no change in customers' inventories in March compared to February.

Customers' Inventories	% Reporting	% Too High	% About Right	% Too Low	Net	Index
Mar 2018	80	7.8	68.5	23.7	-16.0	42.0
Feb 2018	50	5.1	77.3	17.7	-12.6	43.7
Jan 2018	58	9.4	72.5	18.1	-8.7	45.6
Dec 2017	54	6.8	72.3	20.9	-14.1	42.9

Prices*

The ISM[®] Prices Index registered 78.1 percent in March, an increase of 3.9 percentage points from the February level of 74.2 percent, indicating an increase in raw materials prices for the 25th consecutive month. In March, 57.1 percent of respondents reported paying higher prices, 0.8 percent reported paying lower prices, and 42.1 percent of supply executives reported paying the same prices as in

February. The Prices Index is at its highest level since April 2011, when it registered 82.6 percent. “The increases in prices across industry sectors are inhibiting the panel from reporting all commodities up in price. Therefore, the commodities list doesn’t represent the total market activity because prices are changing every day. The Business Survey Committee noted price increases continue in metals (all steels, steel components, aluminum and copper), corrugate and parts made from plastics. Shortages continue in electronics,” says Fiore. A Prices Index above 52.4 percent, over time, is generally consistent with an increase in the Bureau of Labor Statistics (BLS) Producer Price Index for Intermediate Materials.

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

Prices	% Higher	% Same	% Lower	Net	Index
Mar 2018	57.1	42.1	0.8	+56.2	78.1
Feb 2018	51.0	46.4	2.7	+48.3	74.2
Jan 2018	46.6	52.1	1.3	+45.3	72.7
Dec 2017	40.4	55.8	3.9	+36.5	68.3

Backlog of Orders*

ISM[®]'s Backlog of Orders Index registered 59.8 percent in March, which is the same as reported in February, indicating growth in order backlogs for the 14th consecutive month. “Backlog expansion continued during the period, with the index at the same reading as February and the highest level since May 2004, when it registered 63 percent. Strong backlog, near-seven-year lows in customer inventory levels and continued strong new order expansion indicates that production requirements should remain robust through Q2,” says Fiore.

The 11 industries reporting growth in order backlogs in March — listed in order — are: Wood Products; Textile Mills; Nonmetallic Mineral Products; Paper Products; Computer & Electronic Products; Fabricated Metal Products; Transportation Equipment; Machinery; Chemical Products; Primary Metals; and Plastics & Rubber Products. The three industries reporting a decrease in order backlogs during March are: Petroleum & Coal Products; Furniture & Related Products; and Food, Beverage & Tobacco Products.

Backlog of Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
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Backlog of Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Mar 2018	87	32.1	55.4	12.5	+19.7	59.8
Feb 2018	88	31.8	56.0	12.2	+19.6	59.8
Jan 2018	89	27.8	56.8	15.4	+12.5	56.2
Dec 2017	89	25.6	58.6	15.9	+9.7	54.9

New Export Orders*

ISM[®]'s New Export Orders Index registered 58.7 percent in March, a decrease of 4.1 percentage points when compared to the 62.8 percent reported for February, indicating growth in new export orders for the 25th consecutive month. "All six big industry sectors continued to expand export activity during the period. Exports remained strong, with many survey respondents commenting on the currency advantage," says Fiore.

The 11 industries reporting growth in new export orders in March — listed in order — are: Wood Products; Petroleum & Coal Products; Nonmetallic Mineral Products; Electrical Equipment, Appliances & Components; Food, Beverage & Tobacco Products; Chemical Products; Machinery; Transportation Equipment; Computer & Electronic Products; Fabricated Metal Products; and Miscellaneous Manufacturing. The two industries reporting a decrease in new export orders in March are Primary Metals; and Plastics & Rubber Products.

New Export Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Mar 2018	80	22.6	72.0	5.3	+17.3	58.7
Feb 2018	79	27.9	69.8	2.3	+25.6	62.8
Jan 2018	79	20.7	78.2	1.1	+19.6	59.8
Dec 2017	78	18.4	78.5	3.1	+15.3	57.6

Imports*

ISM[®]'s Imports Index registered 59.7 percent in March, a decrease of 0.8 percentage point when compared to the 60.5 percent reported for February, indicating that imports grew in March for the 14th consecutive month. "Imports continued to expand in order to support production demand, but at slightly slower expansion rates. Many comments reflected the negative impact of the Asian holiday

period, concerns about tariffs and difficulties in moving containers from ports to using locations,” says Fiore.

The 12 industries reporting growth in imports during the month of March — listed in order — are: Nonmetallic Mineral Products; Petroleum & Coal Products; Computer & Electronic Products; Printing & Related Support Activities; Transportation Equipment; Fabricated Metal Products; Electrical Equipment, Appliances & Components; Food, Beverage & Tobacco Products; Chemical Products; Miscellaneous Manufacturing; Machinery; and Plastics & Rubber Products. The four industries that reported a decrease in imports during March compared to February are: Furniture & Related Products; Apparel, Leather & Allied Products; Primary Metals; and Paper Products.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Mar 2018	84	26.1	67.1	6.7	+19.4	59.7
Feb 2018	82	24.5	71.9	3.5	+21.0	60.5
Jan 2018	81	22.5	71.6	5.8	+16.7	58.4
Dec 2017	83	19.3	74.4	6.3	+13.0	56.5

*The Inventories, 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 in March by six days, to 139 days. Average lead time for Production Materials decreased by one day, to 63 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies increased by one day, to 34 days. “Capital expenditure lead time decreased six days during this period. Reported production material lead times decreased one day, contrary to many comments from panelists about lead times being extended across broad categories of materials. The April report will likely reflect continued extensions of production material lead times,” says Fiore.

Percent Reporting

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Mar 2018	22	5	12	15	29	17	139
Feb 2018	21	6	11	17	23	22	145
Jan 2018	18	6	11	18	25	22	150

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Dec 2017	19	9	11	17	25	19	139

Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Mar 2018	13	37	23	18	6	3	63
Feb 2018	12	37	27	14	7	3	64
Jan 2018	11	40	25	16	6	2	60
Dec 2017	12	38	25	19	4	2	59

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Mar 2018	39	37	17	4	3	0	34
Feb 2018	33	42	17	6	2	0	33
Jan 2018	33	42	15	8	2	0	34
Dec 2017	33	41	15	8	3	0	36

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 March 2018.

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. Beginning in January 2018, 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 Supplier Deliveries) 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 43.2 percent, over a period of time, indicates that the overall economy, or gross domestic product (GDP), is generally expanding; below 43.2 percent, it is generally declining. The distance from 50 percent or 43.2 percent is indicative of the strength 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 ONLY report on information for the current month. 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.

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