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November 2018 Manufacturing ISM® Report On Business®

PMI[®] at 59.3%

New Orders, Production, and Employment Growing

Supplier Deliveries Slowing at Slower Rate; Backlog Growing

Raw Materials Inventories Growing; Customers' Inventories Too Low

Prices Increasing at Slower Rate; Exports and Imports Growing

(Tempe, Arizona) — Economic activity in the manufacturing sector expanded in November, and the overall economy grew for the 115th 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 November PMI[®] registered 59.3 percent, an increase of 1.6 percentage points from the October reading of 57.7 percent. The New Orders Index registered 62.1 percent, an increase of 4.7 percentage points from the October reading of 57.4 percent. The Production Index registered 60.6 percent, a 0.7 percentage-point increase compared to the October reading of 59.9 percent. The Employment Index registered 58.4 percent, an increase of 1.6 percentage points from the October reading of 56.8 percent. The Supplier Deliveries Index registered 62.5 percent, a 1.3-percentage point decrease from the October reading of 63.8 percent. The Inventories Index registered 52.9 percent, an increase of 2.2 percentage points from the October reading of 50.7 percent. The Prices Index registered 60.7 percent, a 10.9-percentage point decrease

from the October reading of 71.6 percent, indicating higher raw materials prices for the 33rd consecutive month.

"Comments from the panel reflect continued expanding business strength. Demand remains strong, with the New Orders Index rebounding to above 60 percent, the Customers' Inventories Index declining and remaining too low, and the Backlog of Orders Index steady. Consumption strengthened, with production and employment continuing to expand, both at higher levels compared to October. Inputs — expressed as supplier deliveries, inventories and imports — gained as a result of inventory growth. Supplier delivery easing improved factory consumption as well as inventory growth, and import expansion was relatively stable. Lead-time extensions continue, while steel and aluminum prices are declining. Supplier labor issues and transportation difficulties are at more manageable levels, but they continue to limit production potential.

"The expansion of new export orders was stable and at a recent historical low. However, four of six major industries contributed, down from five in October. Prices pressure continues, but at notably lower levels than in prior periods. The manufacturing community continues to expand, with November adding positively to the three-month rolling PMI[®] average," says Fiore.

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

WHAT RESPONDENTS ARE SAYING

"Shortages, longer lead times and capacity constraints [particularly in the electronic components marketplace] and tariffs continue to strain the supply chain and disrupt normal business practices and activities." (Computer & Electronic Products)

"Seeing a number [of] areas of slowdown that are concerning: truck market loosening [and] ISO depots full of empty containers, all signs of decreasing business activity." (Chemical Products)

"Production continues at increased levels." (Transportation Equipment)

"Labor shortages in our area are affecting production volumes." (Food, Beverage & Tobacco Products)

"Trade tariffs and commodity increases have greatly affected our ability to remain competitive in the market." (Machinery)

"Business [orders] steady. Many customers [moving] orders up due to price increases [from commodity costs and tariffs]." (Furniture & Related Products)

"Business remains strong. Tariffs impact is fully reflected in Q3 results, and initiatives are underway to move work out of China into other low-cost countries." (Miscellaneous Manufacturing)

"A lack of experienced workers is having an impact on production, which impacts sourcing due to the skills gap in the manufacturing trades; particularly computer numeric controlled machinists, but also assemblers and welders. The challenge is meeting customer-delivery requirements for new and repaired equipment." (Fabricated Metal Products)

"Steel tariffs continue to put upward pressure on downstream materials (even when sourcing steel domestically). Long-haul trucking market seems to be normalizing after the implementation of the electronic logging requirements. Oil volatility is also beginning to make its way through downstream materials." (Petroleum & Coal Products)

"Continuing to increase imports in order to receive material in by the end of the year to avoid potential 25-percent tariffs." (Nonmetallic Mineral Products)

Manufacturing at a Glance November 2018

Index	Series Index Nov	Series Index Oct	Percentage Point Change	Direction	Rate of Change	Trend* (Months)
PMI®	59.3	57.7	+1.6	Growing	Faster	27
New Orders	62.1	57.4	+4.7	Growing	Faster	35
Production	60.6	59.9	+0.7	Growing	Faster	27
Employment	58.4	56.8	+1.6	Growing	Faster	26
Supplier Deliveries	62.5	63.8	-1.3	Slowing	Slower	26
Inventories	52.9	50.7	+2.2	Growing	Faster	11
Customers' Inventories	41.5	43.3	-1.8	Too Low	Faster	26
Prices	60.7	71.6	-10.9	Increasing	gSlower	33
Backlog of Orders	56.4	55.8	+0.6	Growing	Faster	22
New Export Orders	52.2	52.2	0.0	Growing	Same	33
Imports	53.6	54.3	-0.7	Growing	Slower	22
OVERALL ECONOM	Y			Growing	Faster	115

Index	Series Index	Series Index Series Index Percentage Point		Direction	Rate of	Trend*
	Nov	Oct	Change	Direction	Change	(Months)
Manufacturing Sect	tor			Growing	Faster	27

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

Aluminum* (25); Capacitors; Electrical Components; Electronic Components (4); Hydraulic Components; Methanol (2); Nylon (6); Plastic-Based Products; Resistors (2); Scrap Metal (2); Steel* (3); Steel — Stainless (8); and Steel-Based Products (7).

Commodities Down in Price

Aluminum* (2); Caustic Soda (2); Copper Products; Steel* (3); Steel — Cold Rolled (2); and Steel — Hot Rolled (3).

Commodities in Short Supply

Capacitors (17); Electrical Components; Electronic Components (7); Printed Circuit Board Components (2); Resistors (13); Silicone; and Steel-Based Products (2).

The number of consecutive months the commodity is listed is indicated after each item. *Indicates both up and down in price.

November Manufacturing Index Summaries

PMI®

Manufacturing expanded in November, as the PMI[®] registered 59.3 percent, an increase of 1.6 percentage points from the October reading of 57.7 percent. "This indicates growth in manufacturing for the 27th consecutive month, led by strong new orders, production output and continued slowing supplier delivery performance," 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 November PMI[®] indicates growth for the 115th consecutive month in the overall economy and the 27th straight month of growth in the manufacturing sector. "The past

relationship between the PMI[®] and the overall economy indicates that the PMI[®] for November (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®
Nov 2018	59.3
Oct 2018	57.7
Sep 2018	59.8
Aug 2018	61.3
Jul 2018	58.1
Jun 2018	60.2
Month	PMI®
May 2018	58.7
Apr 2018	57.3
Mar 2018	59.3
Feb 2018	60.8
Jan 2018	59.1
Dec 2017	59.3
Average for 12 months - 59.2 High - 61.3 Low - 57.3	

New Orders

ISM[®]'s New Orders Index registered 62.1 percent in November, which is an increase of 4.7 percentage points when compared to the 57.4 percent reported for October, indicating growth in new orders for the 35th consecutive month. "Customer demand expansion reversed two consecutive months of softening, with the index returning above 60 percent and recording its highest value since August 2018, when it registered 65.1 percent," 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).

Eleven of 18 industries reported growth in new orders in November, in the following order: Furniture & Related Products; Computer & Electronic Products; Miscellaneous Manufacturing; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Paper Products; Textile Mills; Machinery; Chemical Products; Transportation Equipment; and Food, Beverage & Tobacco Products. The four industries reporting a decrease in new orders in November are: Nonmetallic Mineral Products; Printing & Related Support Activities; Petroleum & Coal Products; and Fabricated Metal Products.

New Orders	% Higher	% Same	% Lower	Net	Index
Nov 2018	31.0	55.0	14.0	+17.0	62.1
Oct 2018	27.2	54.5	18.3	+8.9	57.4
Sep 2018	31.4	57.7	10.9	+20.5	61.8
Aug 2018	35.4	54.3	10.3	+25.1	65.1

Production

ISM[®]'s Production Index registered 60.6 percent in November, which is an increase of 0.7 percentage point when compared to the 59.9 percent reported for October, indicating growth in production for the 27th consecutive month. "Production expansion continued in November, and at higher expansion rates compared to October. Transportation variables, labor constraints and tariffs appear to be less impactful, but lead-time expansions persist," 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 11 industries reporting growth in production during the month of November — listed in order — are: Plastics & Rubber Products; Apparel, Leather & Allied Products; Computer & Electronic Products; Paper Products; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing; Machinery; Transportation Equipment; Chemical Products; Food, Beverage & Tobacco Products; and Primary Metals. The three industries reporting a decrease in production in November are: Printing & Related Support Activities; Nonmetallic Mineral Products; and Fabricated Metal Products.

Production	% Higher	% Same	% Lower	Net	Index
Nov 2018	30.6	56.8	12.6	+18.0	60.6
Oct 2018	28.2	60.7	11.2	+17.0	59.9
Sep 2018	33.6	56.7	9.6	+24.0	63.9

Production	% Higher	% Same	% Lower	Net	Index
Aug 2018	35.3	53.8	10.9	+24.4	63.3

Employment

ISM[®]'s Employment Index registered 58.4 percent in November, an increase of 1.6 percentage points when compared to the October reading of 56.8 percent. This indicates growth in employment in November for the 26th consecutive month. "Employment continued to expand, supporting production growth. Respondents continued to note labor-market issues as a constraint to their suppliers' production capability," 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 10 reporting employment growth in November — listed in order — are: Computer & Electronic Products; Furniture & Related Products; Paper Products; Chemical Products; Transportation Equipment; Petroleum & Coal Products; Miscellaneous Manufacturing; Food, Beverage & Tobacco Products; Plastics & Rubber Products; and Machinery. The four industries reporting a decrease in employment in November are: Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Primary Metals; and Fabricated Metal Products.

Employment	% Higher	% Same	% Lower	Net	Index
Nov 2018	22.7	69.1	8.2	+14.5	58.4
Oct 2018	22.5	67.2	10.3	+12.2	56.8
Sep 2018	26.1	62.9	11.0	+15.1	58.8
Aug 2018	26.6	63.6	9.8	+16.8	58.5

Supplier Deliveries

The delivery performance of suppliers to manufacturing organizations slowed in November, as the Supplier Deliveries Index registered 62.5 percent. This is 1.3 percentage points lower than the 63.8 percent reported for October. "This is the 26th straight month of slowing supplier deliveries and indicates supply chains' difficulty in keeping up with production demand. Lead times continue to extend, supply chain labor issues continue to restrict performance, and transportation issues are continuing to limit supplier execution. However, levels are more manageable than in prior periods," says Fiore. A reading below 50 percent indicates faster deliveries, while a reading above 50 percent indicates slower deliveries.

The 11 industries reporting slower supplier deliveries in November — listed in order — are: Computer & Electronic Products; Machinery; Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; Plastics & Rubber Products; Electrical Equipment, Appliances & Components; Transportation Equipment; Miscellaneous Manufacturing; Fabricated Metal Products; Chemical Products; and Paper Products. The only industry reporting faster supplier deliveries in November is Primary Metals. Six industries reported no change in supplier deliveries in November.

Supplier Deliveries	% Slower	% Same	% Faster	Net	Index
Nov 2018	25.9	70.2	3.9	+22.0	62.5
Oct 2018	30.4	66.9	2.7	+27.7	63.8
Sep 2018	28.3	67.1	4.6	+23.7	61.1
Aug 2018	32.6	62.9	4.5	+28.1	64.5

Inventories*

The Inventories Index registered 52.9 percent in November, an increase of 2.2 percentage points from the 50.7 percent reported for October. "Inventories expanded for the 11th consecutive month, keeping pace with production and growing slightly as a result of improved supplier deliveries," 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 November — listed in order — are: Wood Products; Textile Mills; Apparel, Leather & Allied Products; Computer & Electronic Products; Petroleum & Coal Products; Paper Products; Electrical Equipment, Appliances & Components; Fabricated Metal Products; and Machinery. The five industries reporting a decrease in inventories in November are: Printing & Related Support Activities; Nonmetallic Mineral Products; Furniture & Related Products; Plastics & Rubber Products; and Miscellaneous Manufacturing.

Inventories	% Higher	% Same	% Lower	Net	Index
Nov 2018	23.4	59.0	17.6	+5.8	52.9
Oct 2018	18.8	63.6	17.5	+1.3	50.7
Sep 2018	20.6	65.4	14.0	+6.6	53.3
Aug 2018	25.2	60.4	14.5	+10.7	55.4

Customers' Inventories*

ISM[®]'s Customers' Inventories Index registered 41.5 percent in November, which is 1.8 percentage points lower than the 43.3 percent reported for October, indicating that customers' inventory levels were considered too low. "Customers' inventory levels are too low for the 26th consecutive month, reflecting a positive outlook for future production output," says Fiore.

The only industry reporting customers' inventories as too high during the month of November is Electrical Equipment, Appliances & Components. The 11 industries reporting customers' inventories as too low during November — listed in order — are: Apparel, Leather & Allied Products; Nonmetallic Mineral Products; Primary Metals; Paper Products; Food, Beverage & Tobacco Products; Computer & Electronic Products; Fabricated Metal Products; Machinery; Chemical Products; Miscellaneous Manufacturing; and Plastics & Rubber Products.

Customers' Inventories	% Reporting	% Too High	% About Right	% Too Low	Net	Index
Nov 2018	79	8.9	65.1	26.0	-17.1	41.5
Oct 2018	79	10.1	66.4	23.5	-13.4	43.3
Sep 2018	79	6.0	69.0	25.0	-19.0	40.5
Aug 2018	82	7.8	66.5	25.7	-17.9	41.0

Prices*

The ISM[®] Prices Index registered 60.7 percent in November, a decrease of 10.9 percentage points from the October reading of 71.6 percent, indicating an increase in raw materials prices for the 33rd consecutive month. "The price increases across all industry sectors continue, but at sharply lower levels compared to prior months. This is the lowest month of price expansion since June 2017, when the index registered 53 points. The Business Survey Committee noted that price increases are continuing to soften and/or decline in metals (all steels, copper and aluminum). Increases continue for methanol, freight, labor, electrical and electronic components, printed circuit board assemblies and products manufactured primarily from steel. Shortages continue in electrical and most electronic components, and fabricated and machined components. Freight, aluminum, steel and caustic soda prices are down," 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.

Thirteen of the 18 industries reported paying increased prices for raw materials in November, in the following order: Apparel, Leather & Allied Products; Machinery; Miscellaneous Manufacturing; Chemical Products; Food, Beverage & Tobacco Products; Textile Mills; Computer & Electronic Products; Paper Products; Transportation Equipment; Primary Metals; Nonmetallic Mineral Products; Electrical

Equipment, Appliances & Components; and Plastics & Rubber Products. The only industry reporting a decrease in prices for raw materials in November is Petroleum & Coal Products.

Prices	% Higher	% Same	% Lower	Net	Index
Nov 2018	32.0	57.3	10.7	+21.3	60.7
Oct 2018	51.1	41.0	7.9	+43.2	71.6
Sep 2018	42.3	49.1	8.6	+33.7	66.9
Aug 2018	51.1	42.0	6.8	+44.3	72.1

Backlog of Orders*

ISM[®]'s Backlog of Orders Index registered 56.4 percent in November, which is 0.6 percentage point higher than the 55.8 percent reported in October, indicating growth in order backlogs for the 22nd consecutive month. "Backlogs continued to grow at three-month rolling average levels and represent significant future production demand and are a positive indicator for Q1 2019," says Fiore.

The 10 industries reporting growth in order backlogs in November — listed in order — are: Furniture & Related Products; Apparel, Leather & Allied Products; Computer & Electronic Products; Nonmetallic Mineral Products; Paper Products; Food, Beverage & Tobacco Products; Electrical Equipment, Appliances & Components; Machinery; Chemical Products; and Transportation Equipment. The four industries reporting a decrease in order backlogs during November are: Printing & Related Support Activities; Plastics & Rubber Products; Miscellaneous Manufacturing; and Fabricated Metal Products.

Backlog of Orders*	% Reporting	% Higher	% Same	% Lower	Net	Index
Nov 2018	88	27.7	57.5	14.9	+12.8	56.4
Oct 2018	89	26.9	57.8	15.3	+11.6	55.8
Sep 2018	89	26.7	57.9	15.4	+11.3	55.7
Aug 2018	87	30.3	54.4	15.3	+15.0	57.5

New Export Orders*

ISM[®]'s New Export Orders Index registered 52.2 percent in November, unchanged from the October reading, indicating growth in new export orders for the 33rd consecutive month. "The index remained stable during the period, but at levels not seen since November 2016, when the index registered 51.8

points. Four of the six big industry sectors contributed to the expansion, down from five in October," says Fiore.

The eight industries reporting growth in new export orders in November — listed in order — are: Textile Mills; Miscellaneous Manufacturing; Nonmetallic Mineral Products; Chemical Products; Computer & Electronic Products; Plastics & Rubber Products; Food, Beverage & Tobacco Products; and Machinery. The three industries reporting a decrease in new export orders in November are: Printing & Related Support Activities; Fabricated Metal Products; and Transportation Equipment. Six industries reported no change in new export orders in November.

New Export Orders	% Reporting	% Higher	% Same	% Lower	Net	Index
Nov 2018	81	12.9	78.6	8.4	+4.5	52.2
Oct 2018	80	12.3	79.7	8.0	+4.3	52.2
Sep 2018	80	19.4	73.3	7.3	+12.1	56.0
Aug 2018	79	20.7	69.1	10.2	+10.5	55.2

Imports*

ISM[®]'s Imports Index registered 53.6 percent in November, a decrease of 0.7 percentage point when compared to the 54.3 percent reported for October, indicating that imports grew in November for the 22nd consecutive month. "Imports expansion softened to its lowest level since June 2017, when the index registered 53.5 percent," says Fiore.

The 11 industries reporting growth in imports during the month of November — listed in order — are: Furniture & Related Products; Petroleum & Coal Products; Textile Mills; Nonmetallic Mineral Products; Fabricated Metal Products; Computer & Electronic Products; Miscellaneous Manufacturing; Electrical Equipment, Appliances & Components; Machinery; Food, Beverage & Tobacco Products; and Chemical Products. The five industries reporting a decrease in imports during November are: Printing & Related Support Activities; Paper Products; Plastics & Rubber Products; Primary Metals; and Transportation Equipment.

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Nov 2018	83	18.7	69.8	11.5	+7.2	53.6
Oct 2018	86	17.6	73.5	8.9	+8.7	54.3
Sep 2018	85	19.4	70.2	10.4	+9.0	54.5

Imports	% Reporting	% Higher	% Same	% Lower	Net	Index
Aug 2018	87	17.2	73.6	9.3	+7.9	53.9

*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 by two days in November to 150 days. Average lead time for Production Materials increased by one day to 68 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased by two days to 33 days.

Percent Reporting

Capital Expenditures	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Nov 2018	19	5	9	22	22	23	150
Oct 2018	20	5	8	19	25	23	152
Sep 2018	19	7	10	19	23	22	147
Aug 2018	19	8	7	22	23	21	144

Production Materials	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days	
Nov 2018	9	35	30	15	8	3	68	
Oct 2018	13	32	26	18	8	3	67	
Sep 2018	12	34	28	15	7	4	68	
Aug 2018	11	36	27	14	8	4	69	

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Nov 2018	37	39	15	6	3	0	33
Oct 2018	37	39	14	7	2	1	35

MRO Supplies	Hand-to-Mouth	30 Days	60 Days	90 Days	6 Months	1 Year +	Average Days
Sep 2018	38	36	16	7	3	0	34
Aug 2018	41	37	15	4	2	1	33

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 November 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, Customersâ€[™] 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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