ISM REPORT ON BUSINESS® MANUFACTURING DECEMBER 2016 Analysis by Bradley for Supply Management

Analysis by Bradley J. Holcomb, CPSM, CPSD, chair of the Institute for Supply Management® Manufacturing Business Survey Committee.

conomic activity in the manufacturing sector expanded in December, and the overall economy grew for the 91st consecutive month, say the nation's supply executives in the latest Manufacturing ISM® Report On Business®.

The December PMI® registered 54.7 percent. The New Orders Index registered 60.2 percent, an increase of 7.2 percentage points from the November reading of 53 percent. The Production Index registered 60.3 percent, 4.3 percentage

PMI[®] @ 54.7%

an increase of 11 percentage points from the November reading of 54.5 percent. The PMI®, New Orders, Production and Employment Indexes all registered new highs for the year 2016, and the forward-looking comments from the panel are largely positive. Of the 18 manufacturing industries, 11 are reporting

growth in December in the following order: Petroleum & Coal Products; Metals; Miscellaneous Primary Manufacturing‡; Food, Beverage & Tobacco Products; Apparel, Leather & Allied Products; Paper Products; Machinery; Electrical Equipment,

Appliances & Components; Computer & Electronic Products; Fabricated Metal Products; and Chemical Products.

‡Miscellaneous Manufacturing (products such as medical equipment and supplies. jewelry, sporting goods, toys and office supplies).

points higher than the November reading of 56 percent. The Employment Index registered 53.1 percent, an increase of 0.8 percentage point from the November reading of 52.3 percent. Inventories of raw materials registered 47 percent, a decrease of 2 percentage points from the November reading of 49 percent. The Prices Index registered 65.5 percent in December,

MANUFACTURING AT A GLANCE

Index	Dec Index	Nov Index	% Point Change	Direction	Rate of Change	Trend* (months)
PMI [®]	54.7	53.2	+1.5	Growing	Faster	4
New Orders	60.2	53.0	+7.2	Growing	Faster	4
Production	60.3	56.0	+4.3	Growing	Faster	4
Employment	53.1	52.3	+0.8	Growing	Faster	3
Supplier Deliveries	52.9	55.7	-2.8	Slowing	Slower	8
Inventories	47.0	49.0	-2.0	Contracting	Faster	18
Customers' Inventories	49.0	49.0	0.0	Too Low	Same	3
Prices	65.5	54.5	+11.0	Increasing	Faster	10
Backlog of Orders	49.0	49.0	0.0	Contracting	Same	6
New Export Orders	56.0	52.0	+4.0	Growing	Faster	10
Imports	50.5	50.5	0.0	Growing	Same	3
OVERALL ECONOMY				Growing	Faster	91
Manufacturing Sector				Growing	Faster	4

*Number of months moving in current direction. Manufacturing ISM® Report On Business® data is seasonally adjusted for the New Orders, Production, Employment and Supplier Deliveries Indexes.



PMI[®]

Manufacturing expanded in December, as the PMI® registered 54.7 percent, an increase of 1.5 percentage points from the November reading of 53.2 percent, indicating growth in manufacturing for the fourth consecutive month and the highest reading of the year. A reading above 50 percent indicates that the manufacturing economy is generally expanding; below 50 percent indicates that it is generally contracting. In addition, if the PMI® for December (54.7 percent) is annualized, it corresponds to a 3.6 percent increase in real GDP annually.

COMMODITIES REPORTED

Commodities Up in Price: Aluminum (2); Brass; #1 Bundle Scrap; #1 Busheling Scrap; Copper (2); Corrugated (3); Corrugated Boxes (2); Methanol (3); Natural Gas; Nickel; Petroleum Fuels; Scrap Steel (2); Stainless Steel (9); Steel (12); Steel – Carbon Sheet; Steel - Cold Rolled (2); Steel - Hot Rolled; and Titanium Dioxide.

Commodities Down in Price: Ethylene; HDPE Resin; and Plastic Resins (2).

Commodities in Short Supply: Electronic Components.

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

ISM® Report On Business®

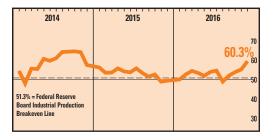
manufacturing

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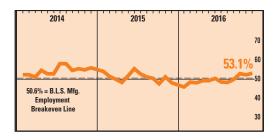
New Orders

ISM's New Orders Index registered 60.2 percent. The 12 industries reporting growth in new orders in December — listed in order — are: Apparel, Leather & Allied Products; Petroleum & Coal Products; Electrical Equipment, Appliances & Components; Miscellaneous Manufacturing†; Primary Metals; Paper Products; Computer & Electronic Products; Food, Beverage & Tobacco Products; Machinery; Chemical Products; Fabricated Metal Products; and Transportation Equipment.



Production

ISM's Production Index registered 60.3 percent. The 10 industries reporting growth in production during the month of December — listed in order — are: Petroleum & Coal Products; Apparel, Leather & Allied Products; Miscellaneous Manufacturing‡; Food, Beverage & Tobacco Products; Machinery; Paper Products; Chemical Products; Computer & Electronic Products; Fabricated Metal Products; and Electrical Equipment, Appliances & Components.



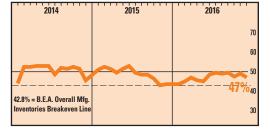
Employment

ISM's Employment Index registered 53.1 percent. Of the 18 manufacturing industries, the nine industries reporting employment growth in December — listed in order — are: Textile Mills; Printing & Related Support Activities; Nonmetallic Mineral Products; Miscellaneous Manufacturing‡; Primary Metals; Paper Products; Machinery; Computer & Electronic Products; and Chemical Products.



Supplier Deliveries

The delivery performance of suppliers to manufacturing organizations was slower in December, as the Supplier Deliveries Index registered 52.9 percent. The six industries reporting slower supplier deliveries in December — listed in order — are: Fabricated Metal Products; Transportation Equipment; Electrical Equipment, Appliances & Components; Food, Beverage & Tobacco Products; Computer & Electronic Products; and Machinery.



Inventories

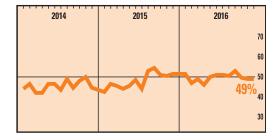
The Inventories Index registered 47 percent. The five industries reporting higher inventories in December are: Primary Metals; Food, Beverage & Tobacco Products; Petroleum & Coal Products; Fabricated Metal Products; and Machinery.

[‡]Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).

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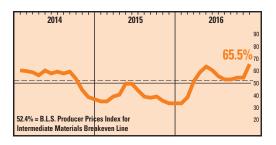
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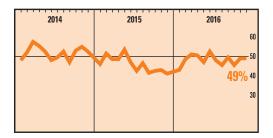
Customers' Inventories

ISM's Customers' Inventories Index registered 49 percent. The five manufacturing industries reporting customers' inventories as being too high during the month of December are: Paper Products; Furniture & Related Products; Transportation Equipment; Food, Beverage & Tobacco Products; and Fabricated Metal Products.



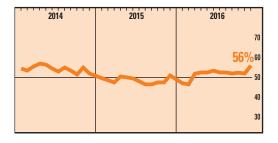
Prices

The ISM Prices Index registered 65.5 percent. Of the 18 manufacturing industries, the 14 that reported paying increased prices for its raw materials in December — listed in order — are: Fabricated Metal Products; Primary Metals; Electrical Equipment, Appliances & Components; Furniture & Related Products; Nonmetallic Mineral Products; Paper Products; Petroleum & Coal Products; Plastics & Rubber Products; Machinery; Miscellaneous Manufacturing‡; Chemical Products; Transportation Equipment; Computer & Electronic Products; and Food, Beverage & Tobacco Products.



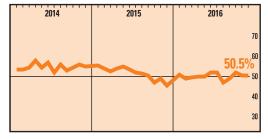
Backlog of Orders

ISM's Backlog of Orders Index registered 49 percent. The six industries reporting growth in order backlogs in December — listed in order — are: Fabricated Metal Products; Primary Metals; Paper Products; Machinery; Computer & Electronic Products; and Electrical Equipment, Appliances & Components.



New Export Orders

ISM's New Export Orders Index registered 56 percent. The 11 industries reporting growth in new export orders in December — listed in order — are: Petroleum & Coal Products; Miscellaneous Manufacturing‡; Nonmetallic Mineral Products; Food, Beverage & Tobacco Products; Electrical Equipment, Appliances & Components; Paper Products; Chemical Products; Computer & Electronic Products; Fabricated Metal Products; Machinery; and Transportation Equipment.



Imports

ISM's Imports Index registered 50.5 percent. The five industries reporting growth in imports during the month of December are: Plastics & Rubber Products; Primary Metals; Furniture & Related Products; Miscellaneous Manufacturing‡; and Machinery.

[‡]Miscellaneous Manufacturing (products such as medical equipment and supplies, jewelry, sporting goods, toys and office supplies).