

Marquette-ISM Report on Manufacturing October 2017- Early Release

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Final Version (includes ISM National Results for October 2017)

*The Marquette-ISM Report on Manufacturing was prepared by **Gwendolyn Davis**, a graduate student in Applied Economics at Marquette University, and distributed by **Beth Krey**, Associate Director of the Center for Supply Chain Management.*

Please direct data questions and requests for media commentary to Dr. Fisher.

This report should not be confused with the ISM National Report published by the Institute of Supply Management. While a reasonable attempt has been made to remain consistent with the national report, the contents of this report reflect only information pertinent to the southeast Wisconsin and northern Illinois region. This report is not used in the calculation of the national report.

Summary

Milwaukee-area PMI	October 2017	September 2017	August 2017
Seasonally adjusted	63.61	60.24	55.41

(Milwaukee, Wisconsin) – October's Index registered at 63.61, an increase from the 60.24 in September. October's Index indicates positive territory.

What respondents are saying in October 2017:

- Lead times and commodity availability are still recovering from recent hurricanes.
- Commodity prices have continued to rise, unclear if they are long or short term changes.
- Lead times are changing with little warning, impacting business.
- Expecting growth in sales for 2018 as incoming orders remain steady.
- Strong European economy and infrastructure growth creating positive business outlook.

Important: See explanatory notes on the survey and diffusion index at the end of this report.

MANUFACTURING AT A GLANCE: October 2017*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Oct-17	Sep-17		
PMI	63.61	60.24	3.4	growing
New Orders	63.27	54.30	9.0	growing
Production	66.82	60.52	6.3	growing
Employment	55.12	63.67	-8.6	growing
Supplier Deliveries	80.67	78.60	2.1	slower
Inventories	52.17	44.12	8.1	growing
Customers' Inventories *	28.95	28.57	0.4	declining
Prices *	71.74	82.35	-10.6	growing
Backlog of Orders *	57.50	40.00	17.5	growing
Exports *	60.71	58.33	2.4	growing
Imports *	67.86	66.67	1.2	growing

(*) The indices are seasonally adjusted *except for* the Customers' Inventories, Prices, Backlog of Orders, Exports, and Imports Indexes, which do not meet the accepted criteria for seasonal adjustments.

What respondents are saying in October 2017:

- Plastics, foam, polyurethanes, zinc and adhesives prices have increased due to hurricanes.
- Off-shore sourcing has been necessary due to unreliability of domestic suppliers.
- Long lead times and price increases are limiting business recovery.
- Key commodity prices are locking in at higher levels for 2018.
- Production forecasting has been inaccurate due to unexpected shortages.

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **August 2017, September 2017, and October 2017.**

	Diffusion Index Aug-17	Diffusion Index Sep-17	Diffusion Index Oct-17	Direction	Comments
Blue Collar	50.3	61.2	57.3	growing	-
White Collar	53.3	60.6	50.7	growing	-

Note: These have been calculated based on the seasonally adjusted (SA) Blue and White Collar indices.

What respondents are saying in October 2017:

- Persistent challenges in hiring blue collar workers.
- Tightening labor market is causing capacity issues within the supply chain.
- Labor has been supplier's primary constraint.

Buying Policy

Average commitment lead-time for Capital Expenditures remained steady at 130 days. Average lead-time for Production Materials decreased from 56 days to 50 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 28 days to 18 days.

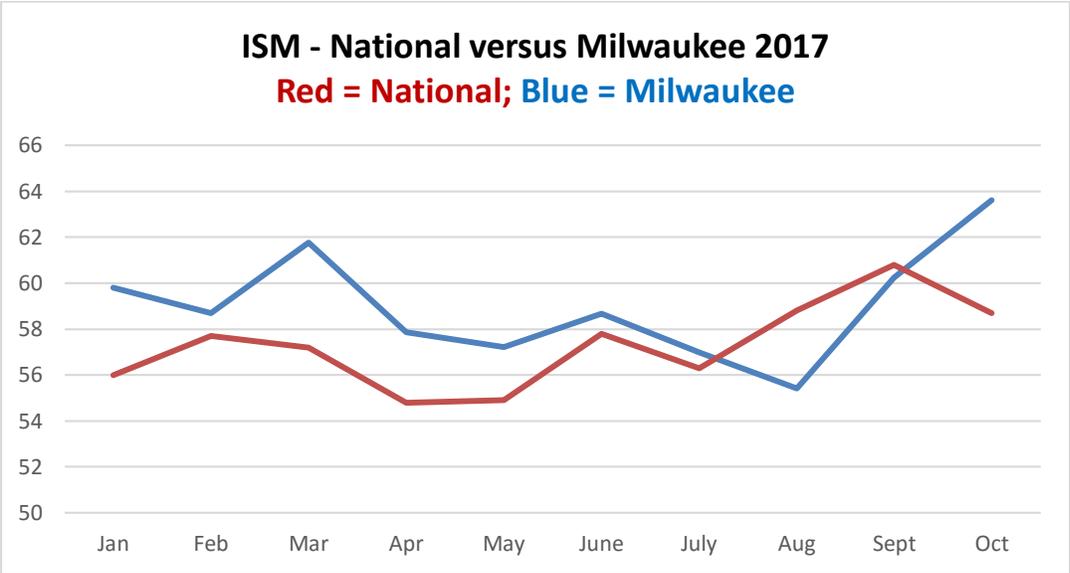
Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with September in terms of market conditions. Approximately 43.48% of respondents expect positive conditions, 43.48% expect conditions to remain the same and 13.04% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Oct-17	43.48%	43.48%	13.04%	65.22%
Sep-17	35.29%	47.06%	17.65%	58.82%
Aug-17	41.18%	47.06%	11.76%	64.71%

Milwaukee versus the Nation –

2017 Graph



Insights on the ISM PMI from the National Organization:

ISM *Manufacturing Report On Business*[®] Background

In February 1982, the PMI was developed by the U.S. Department of Commerce (DOC) and ISM. The index, based on analytical work by the DOC, adjusts five components of the Institute's monthly survey — new orders, production, employment, supplier deliveries and inventories — for normal seasonal variations, applies equal weights to each and then calculates them into a single monthly index number.

An update of research originally done by Theodore S. Torda, the late economist for the DOC, shows a close parallel between growth in real Gross Domestic Product (GDP) and the PMI. The index can explain about 60 percent of the annual variation in GDP, with a margin of error that averaged $\pm .48$ percent during the last ten years. George McKittrick, an economist at the DOC, said "Not only does the PMI track well with the overall economy, but the indication provided by ISM data about how widespread changes are, complements analogous government series that show size and direction of change."

In January 1989, the Supplier Deliveries Index from the *Report* became a standard element of the DOC's Bureau of Economic Analysis Index of Leading Economic Indicators. The data was incorporated into the index from June 1976 forward. In January 1996, The Conference Board began compiling this index.

What Is a Diffusion Index?

Diffusion indexes have the properties of leading indicators and are convenient summary measures showing the prevailing direction of change. The percent response to the "Better," "Same" or "Worse" question is difficult to compare to prior periods. Therefore, the percentages are "diffused" for this purpose. A diffusion index takes those indicating "Better" and half of those indicating "Same" and adds the percentages. This effectively measures the bias toward a positive (above 50 percent) or negative index (below 50 percent). For example, if the response is 20 percent "Better," 70 percent "Same," and 10 percent "Worse," then the diffusion index would be 55 percent (20% + [0.50 x 70%]). The data for each question is converted to a diffusion index and then seasonally adjusted.

For each index, a reading above 50 percent indicates expansion of an index, while a reading below 50 percent indicates it is generally declining. And a reading of 50 percent indicates "no change" from the previous month. Supplier Deliveries is an exception. A Supplier Deliveries Index above 50 percent indicates slower deliveries, and below 50 percent indicates faster deliveries.

(<https://www.instituteforsupplymanagement.org/files/ISMREPORT/ROBBroch08.pdf>)