

Marquette-ISM Report on Manufacturing January 2018- Early Release

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Preliminary Version (does not include ISM National Results for January 2018)
*****EMBARGOED until 9 a.m. Eastern*****

*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	January 2018	December 2017	November 2017
Seasonally adjusted	63.40	65.57	59.62

(Milwaukee, Wisconsin) – January's Index registered at 63.40, an increase from 65.57 in December. January's Index indicates positive territory.

What respondents are saying in January 2018:

- Upward trends in short term demand
- Increased volatility in demand
- Electronic component allocation and extended lead times has a direct impact on our business. I see this as a long term issue for our organization.
- Transportation capacity is tight – finding dry trucks is hard – reefers are worse

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

(*) 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 December 2017:

- Transportation issues lengthen lead times
- Both zinc and resin are increasing

MANUFACTURING AT A GLANCE: January 2018*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Jan-18	Dec-17		
PMI	63.40	65.57	-2.2	growing
New Orders	60.34	88.33	-28.0	growing
Production	68.86	72.65	-3.8	growing
Employment	61.48	58.67	2.8	growing
Supplier Deliveries	76.32	65.33	11.0	slower
Inventories	50.00	42.86	7.1	neutral
Customers' Inventories *	33.33	32.14	1.2	declining
Prices *	87.50	82.14	5.4	growing
Backlog of Orders *	50.00	73.08	-23.1	neutral
Exports *	53.33	62.50	-9.2	growing
Imports *	65.38	68.75	-3.4	growing

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **November 2017, December 2017, and January 2018.**

	Diffusion Index Nov-17	Diffusion Index Dec-17	Diffusion Index Jan-18	Direction	Comments
Blue Collar	58.3	58.7	62.0	growing	-
White Collar	58.3	51.3	58.9	growing	-

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

What respondents are saying in January 2017:

- Labor shortages continue into the new year
- Challenges in finding talent

Buying Policy

Average commitment lead-time for Capital Expenditures increased from 99 days to 130 days. Average lead-time for Production Materials decreased from 52 days to 45 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 23 days to 21 days.

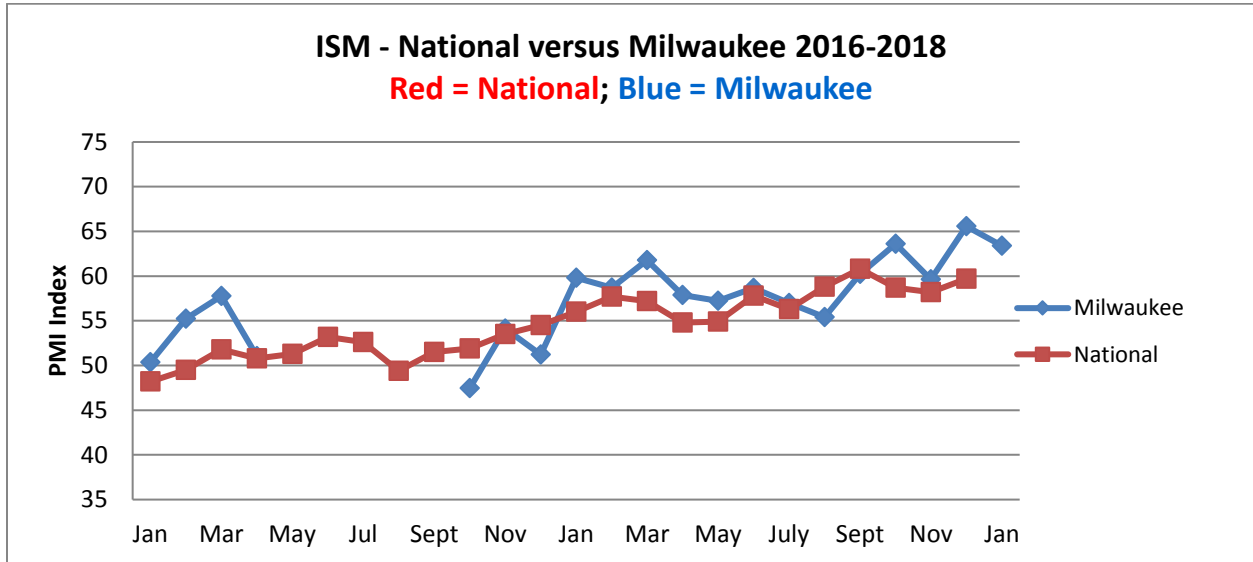
Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with November in terms of market conditions. Approximately 50% of respondents expect positive conditions, 42.86% expect conditions to remain the same and 7.14% of the respondents expect conditions to worsen within the next six months.

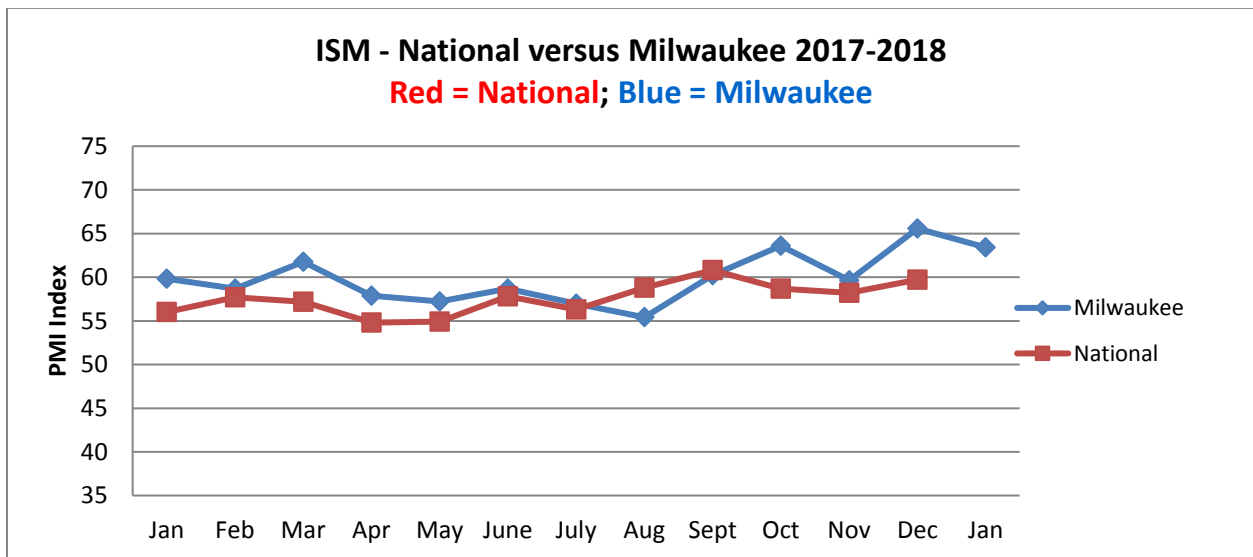
	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Jan-18	65.00%	20.00%	15.00%	75.00%
Dec-17	50.00%	42.86%	7.14%	71.43%
Nov-17	46.67%	53.33%	0.00%	73.33%

Milwaukee versus the Nation –

Jan 2016 – Jan 2018 Graph



2017-2018 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 ($20\% + [0.50 \times 70\%]$). 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>)