

**Marquette-ISM Report on Manufacturing  
February 2019- Early Release**

Contact: Dr. Douglas Fisher  
Director, Center for Supply Chain Management  
Marquette University  
(414) 288-3995  
[douglas.fisher@marquette.edu](mailto:douglas.fisher@marquette.edu)

Released: February 28<sup>th</sup>, 2019

*The Marquette-ISM Report on Manufacturing was prepared by **Gwendolyn Davis**, a graduate student in Applied Economics at Marquette University, and distributed by **Melanie Roepke**, 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	February 2019	January 2019	December 2018
Seasonally adjusted	55.09	58.78	52.87

(Milwaukee, Wisconsin) – February’s Index registered at 55.09, a decline from 58.78 in January. February’s index continues to indicate positive territory.

**What respondents are saying in February 2019:**

- Demand reductions which may be pushed into long-term demand planning.
- Supply issues including allocation, long lead times, and rising prices.
- New orders are improving from late 2018, but still slower than Q2 and Q3 of 2018.
- Major pushouts of demand into next quarter - unclear if this is really just delaying demand reductions long term.
- Vendor deliveries are starting to improve and price increases are beginning to level off.

*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.

<b>MANUFACTURING AT A GLANCE: February 2019*</b>				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Feb-19	Jan-19		
PMI	55.09	58.78	-3.7	growing
New Orders	42.52	44.16	-1.6	declining
Production	55.31	57.84	-2.5	growing
Employment	49.80	56.32	-6.5	declining
Supplier Deliveries	65.30	74.04	-8.7	slower
Inventories	62.50	61.54	1.0	growing
Customers' Inventories *	46.43	36.36	10.1	declining
Prices *	68.75	69.23	-0.5	growing
Backlog of Orders *	46.43	36.36	10.1	declining
Exports *	45.45	38.89	6.6	declining
Imports *	61.11	68.75	-7.6	growing

**What respondents are saying in February 2019:**

- Lead times and supplier deliveries are improving due to lower backlogs.
- Implementations of new business initiatives are improving lead times.
- Opening up capacity to receive stock from off-shore sources.
- Some projects that were quoted awhile back are finally turning into orders.
- New export orders (units) - Brazil, Turkey, EU down

## Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **December 2018, January 2019, and February 2019.**

	Diffusion Index Dec-18	Diffusion Index Jan-19	Diffusion Index Feb-19	Direction	Comments
Blue Collar	52.0	56.3	49.8	-	-
White Collar	58.5	56.3	52.9	growing	-

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

## What respondents are saying in February 2019:

- Seems as though the economy is cooling after a peak.
- Running production at high levels.

## Buying Policy

Average commitment lead-time for Capital Expenditures decreased from 151 days to 111 days. Average lead-time for Production Materials decreased from 58 days to 46 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 30 days to 20 days.

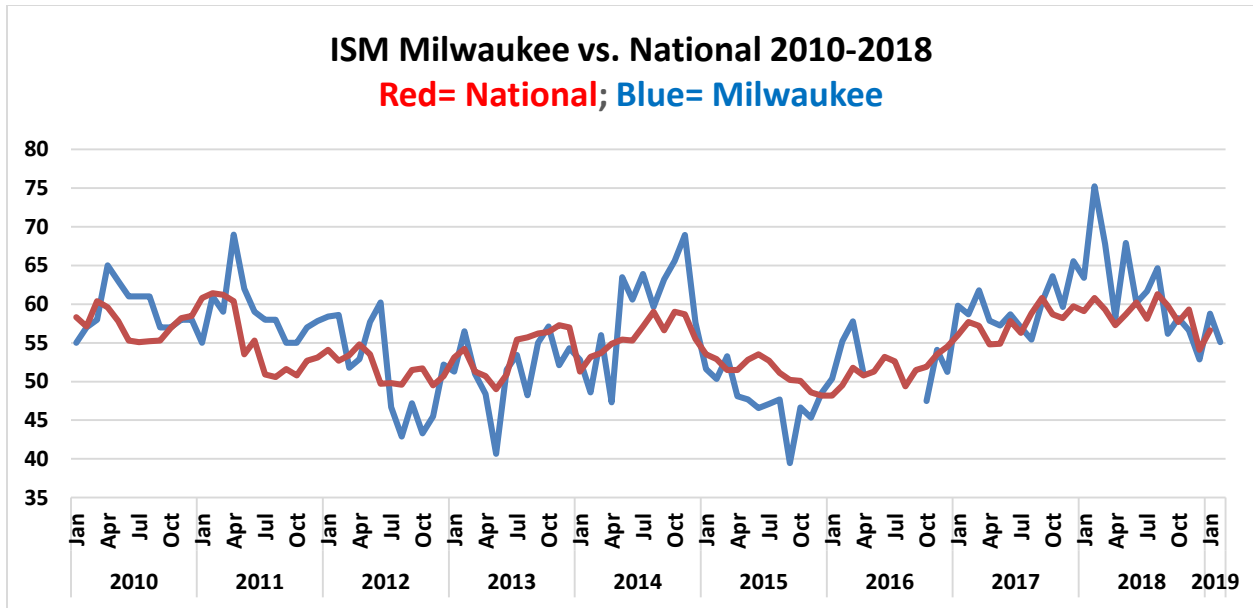
## Six- Month Outlook on Business Conditions

In this outlook, there is an downward shift in positive expectations compared with January in terms of market conditions. Approximately 31.25% of respondents expect positive conditions, 43.75% expect conditions to remain the same and 25% of the respondents expect conditions to worsen within the next six months.

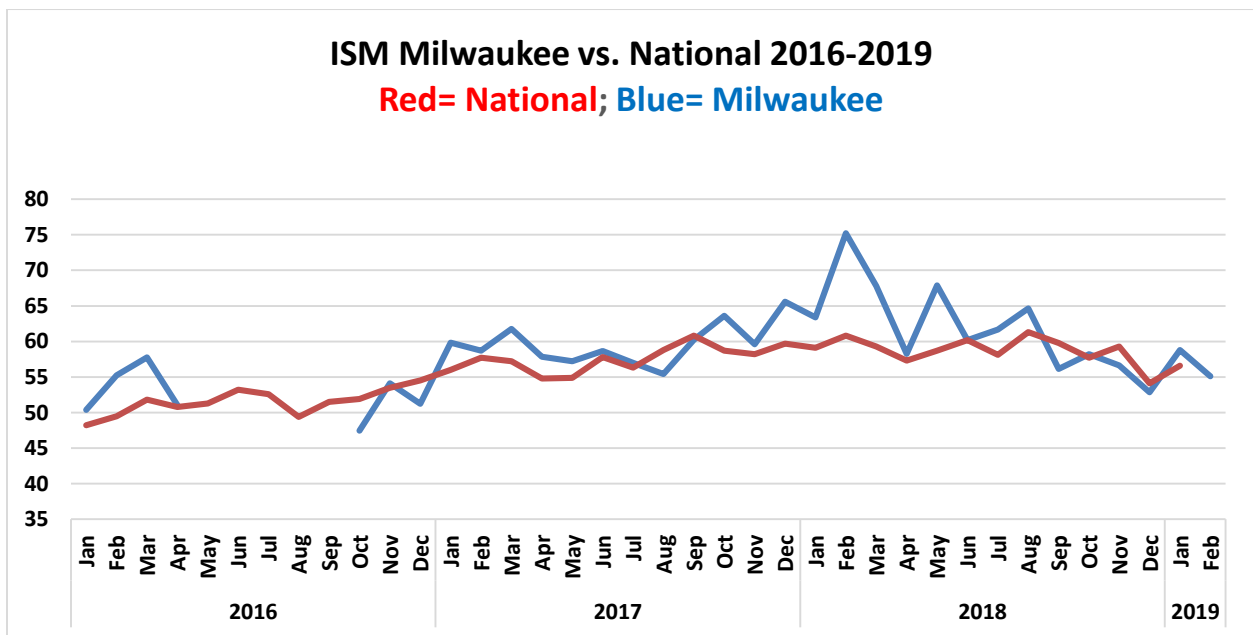
	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Feb-19	31.25%	43.75%	25.00%	53.13%
Jan-19	41.67%	41.67%	16.67%	62.50%
Dec-18	37.50%	31.25%	31.25%	53.13%

Milwaukee versus the Nation –

January 2010 – February 2019 Graph



January 2016- February 2019 Graph



## Insights on the ISM PMI from the National Organization:

### ISM *Manufacturing Report On Business*<sup>®</sup> 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>)