

Marquette ISM® Report on Manufacturing
September 2019- Early Release

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

Please direct data questions and requests for media commentary to Bill Lee.

This report should not be confused with the Report On Business®, PMI®, NMI®, published by the Institute of Supply Management® (ISM®). 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	September 2019	August 2019	July 2019
Seasonally adjusted	45.41	47.29	46.44

(Milwaukee, Wisconsin) – September’s Index registered at 45.41, a decrease from 47.29 in August. September’s index indicates negative territory.

What respondents are saying in September 2019:

- Demand for products is slowing and some are now seeing reductions in customer demand extending into 2020
- Import prices have increased since August due to tariffs
- European customers reducing orders due to economy

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

MANUFACTURING AT A GLANCE: September 2019*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Sep-19	Aug-19		
PMI	45.41	47.29	-1.9	declining
New Orders	47.45	43.80	3.6	declining
Production	42.82	43.48	-0.7	declining
Employment	41.13	45.56	-4.4	declining
Supplier Deliveries	49.80	61.29	-11.5	faster
Inventories	45.83	42.31	3.5	declining
Customers' Inventories *	25.00	40.91	-15.9	declining
Prices *	54.17	53.85	0.3	increasing
Backlog of Orders *	31.82	36.36	-4.5	declining
Exports *	43.75	31.25	12.5	declining
Imports *	41.67	50.00	-8.3	declining

(*) 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 September 2019:

- Some companies expressed a positive outlook for future orders from products currently in the R&D pipeline
- Delayed customer orders have created large gaps in the supply chain

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **September 2019, August 2019, and July 2019.**

	Diffusion Index Sep-19	Diffusion Index Aug-19	Diffusion Index Jul-19	Direction	Comments
Blue Collar	45.2	57.0	60.7	declining	-
White Collar	41.1	41.8	49.4	declining	-

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

What respondents are saying in September 2019:

Comments this month are mixed:

- Blue Collar employment levels are steady due to owner's desire to retain an effective work team
- Others are reviewing options for temporary layoff of Blue-Collar workers.

Buying Policy

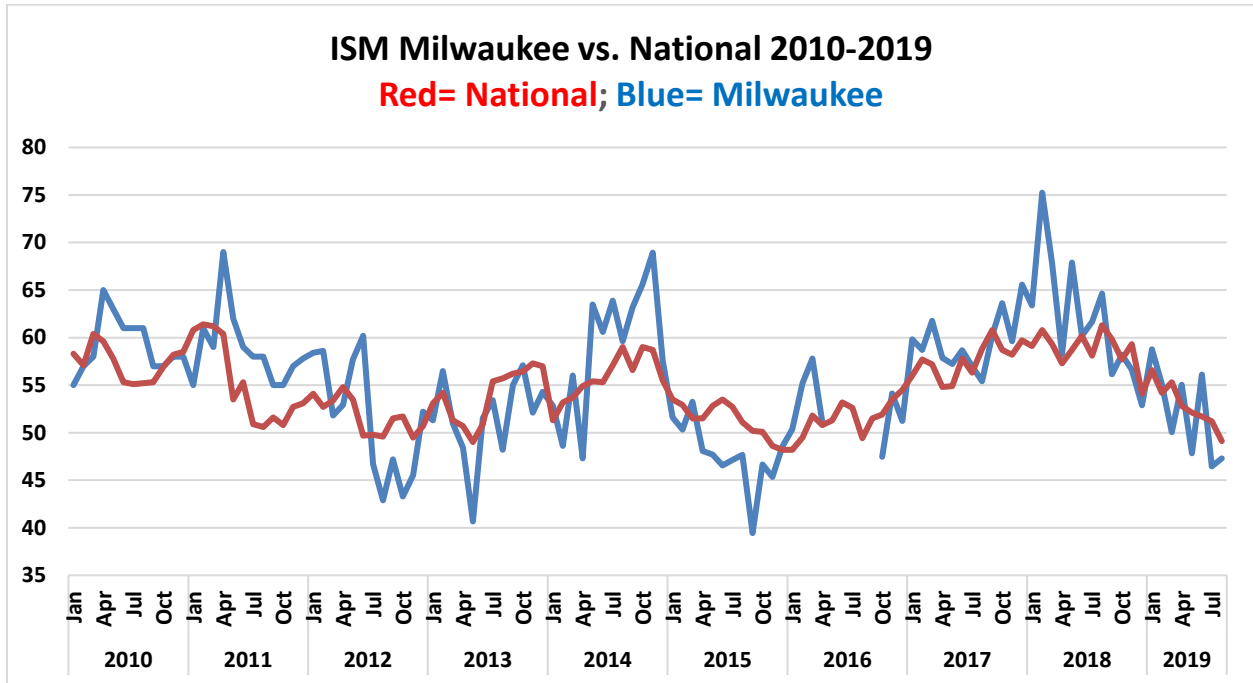
Average commitment lead-time for Capital Expenditures increased from 108 days to 110 days. Average lead-time for Production Materials decreased from 59 to 49 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 20 days to 14 days.

Six- Month Outlook on Business Conditions

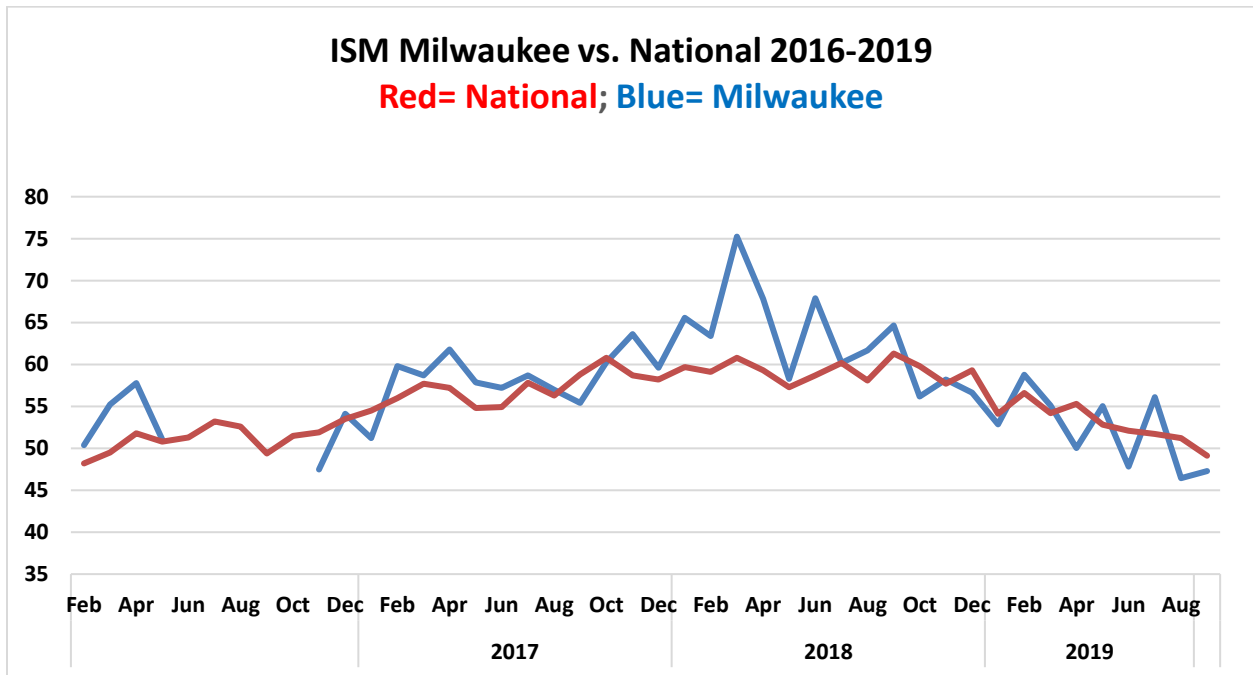
In this outlook, there is an upward shift in positive expectations compared with August in terms of market conditions. Approximately 33% of respondents expect positive conditions, 42% expect conditions to remain the same and 25% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Sep-19	33.33%	41.67%	25.00%	54.17%
Aug-19	23.08%	53.85%	23.08%	50.00%
Jul-19	21.43%	57.14%	21.43%	50.00%

**Milwaukee versus the Nation –
January 2010 – September 2019 Graph**



January 2016- September 2019 Graph



Insights on the ISM® PMI® from Institute for Supply Management®:

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>