Marquette ISM® Report on Manufacturing
January 2020- 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 Marko Bastl.

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	January 2020	December 2019	November 2019
Seasonally adjusted	52.33	45.10	42.12

(Milwaukee, Wisconsin) – January's Index registered at 52.33, an increase from 45.10 in December. January's index indicates positive territory.

What respondents are saying in January 2020:
- Due to uncertainty regarding tariffs, companies are beginning to source from countries other than China
- Cautiously optimistic for 2020
- Increasing lead times and increased turnover due to companies reorganizing
- Plans for more aggressive pricing to increase sales

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

MANUFACTURING AT A GLANCE: January 2020*				
Index	Series Index Jan-20	Series Index Dec-19	Percentage Point Change	Direction
PMI	52.33	45.10	7.2	growing
New Orders	45.29	42.63	2.7	declining
Production	57.81	45.34	12.5	growing
Employment	46.27	37.74	8.5	declining
Supplier Deliveries	62.25	46.87	15.4	slower
Inventories	50.00	52.94	-2.9	neutral
Customers' Inventories *	34.62	32.14	2.5	declining
Prices *	62.50	55.88	6.6	growing
Backlog of Orders *	39.29	36.67	2.6	declining
Exports *	33.33	35.00	-1.7	declining
Imports *	50.00	45.00	5.0	neutral

(*) 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 January 2020:

- Increasing inventories due to cancelled orders in Q4 2019
- Supplier deliveries have increased due to increase in supplier business
- Prices are higher than this time last year, but have not increased from last month
- Reorganizing production to accommodate a surge of backlog orders
- Lead time of production materials are about two weeks longer than normal

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **January 2020, December 2019, and November 2019.**

	Diffusion Index Jan-20	Diffusion Index Dec-19	Diffusion Index Nov-19	Direction	Comments
Blue Collar	49.4	43.6	29.0	declining	-
White Collar	49.4	40.6	37.7	declining	-

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

What respondents are saying in January 2020:

- Increased overtime to reduced staffing
- Continued difficulty finding employee replacements
- Increasing number of interviews
- Suppliers are having difficulty filling open roles

Buying Policy

Average commitment lead-time for Capital Expenditures decreased from 116 days to 106 days. Average lead-time for Production Materials increased from 44 to 59 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 21 to 22 days.
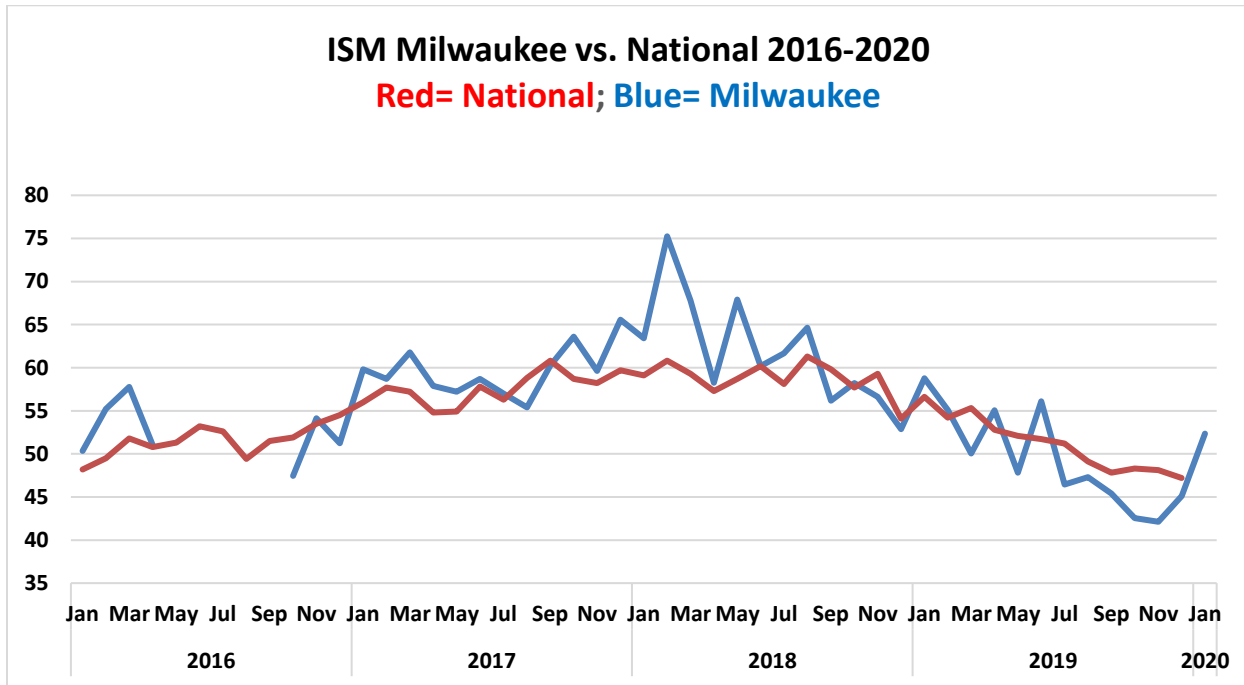
Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with November in terms of market conditions. Approximately 38% of respondents expect positive conditions, 50% expect conditions to remain the same and 13% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Jan-20	37.50%	50.00%	12.50%	62.50%
Dec-19	35.29%	52.94%	11.76%	61.76%
Nov-19	31.25%	37.50%	31.25%	50.00%

Milwaukee versus the Nation –
January 2010 – January 2020 Graph

ISM Milwaukee vs. National 2010-2020
Red= National; Blue= Milwaukee
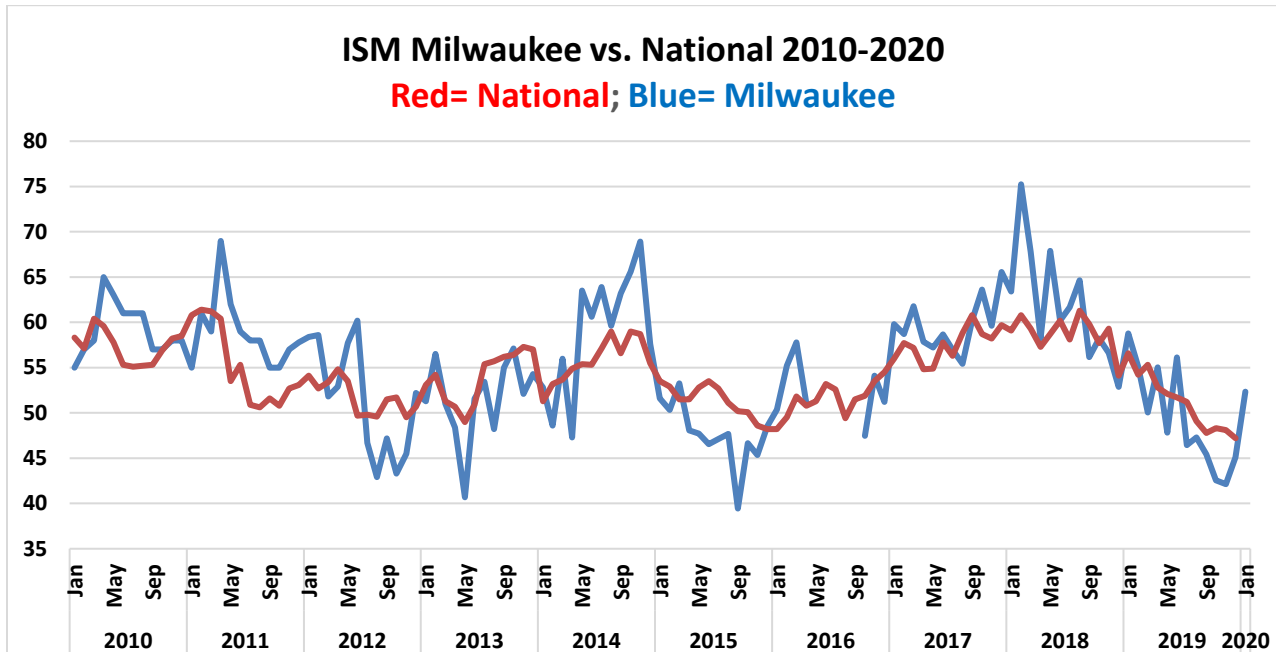
January 2016 – January 2020 Graph

ISM Milwaukee vs. National 2016-2020
Red= National; Blue= Milwaukee

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 ± .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)