

Marquette ISM® Report on Manufacturing
March 2021

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The Marquette-ISM Report on Manufacturing was prepared by Owen Liebelt, 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 Dr. Manoj Babu.

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	March 2021	February 2021	January 2021
Seasonally adjusted	66.48	61.07	*

(Milwaukee, Wisconsin) – March Index registered at 66.48, an increase from 61.07 in February. March's index indicates positive territory.

***(N/A): This observation has been omitted due to insufficient sample size (surveys returned)**

What respondents are saying in March 2021:

- We keep getting notices from suppliers that prices are increasing. There are also many item's lead times that are very long.
- Material costs are up 10%-35%, while plastic costs are increasing. Lower availability due to cold weather in TX. Distributors are saying that they are having trouble keeping stock with lead times, while customers are ready to order.
- Lead-times on imports are in a bottlenecked condition at ports and rail yards causing lead times to surge.

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

MANUFACTURING AT A GLANCE: March 2021*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Mar-21	Feb-21		
PMI	66.48	61.07	5.4	growing
New Orders	87.63	66.67	21.0	growing
Production	70.71	65.66	5.1	growing
Employment	64.76	50.92	13.8	growing
Supplier Deliveries	83.07	88.27	-5.2	declining
Inventories	26.25	33.85	-7.6	declining
Customers' Inventories *	15.38	20.59	-5.2	declining
Prices *	93.33	85.00	8.3	growing
Backlog of Orders *	80.00	68.42	11.6	growing
Exports *	61.11	57.69	3.4	growing
Imports *	83.33	53.57	29.8	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 March 2021:

- Imported parts have experienced 4–6-week additional delays.
- International freight is much slower than 12 months ago.
- All international shipments are 2-5 weeks late.
- Increased activity in raw materials.
- Supplier agreements have been very helpful keeping lead times down.
- Inbound logistic delays and shortages of electronic components and plastic resin
- Short term stress on supply base and internal operations causing a more conservative outlook on inventory management.

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **March 2021, February 2021, and January 2021.**

	Diffusion Index Mar-21	Diffusion Index Feb-21	Diffusion Index Jan-21	Direction	Comments
Blue Collar	64.8	53.5	*	growing	-
White Collar	57.9	45.8	*	growing	-

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

*(N/A): This observation has been omitted due to insufficient sample size (surveys returned)

What respondents are saying in March 2021:

- Cannot find enough employees.
- Meeting capacity limits, and overworked employees.
- Increase in orders and delays in parts has created a snowball effect without employees present.
- Blue collar employment increased to keep up with increase customer demand.
- White collar employment needing more technical professionals, i.e. engineers and logistics experts
- Supplier deliveries are faster but still large delays exist.

Buying Policy

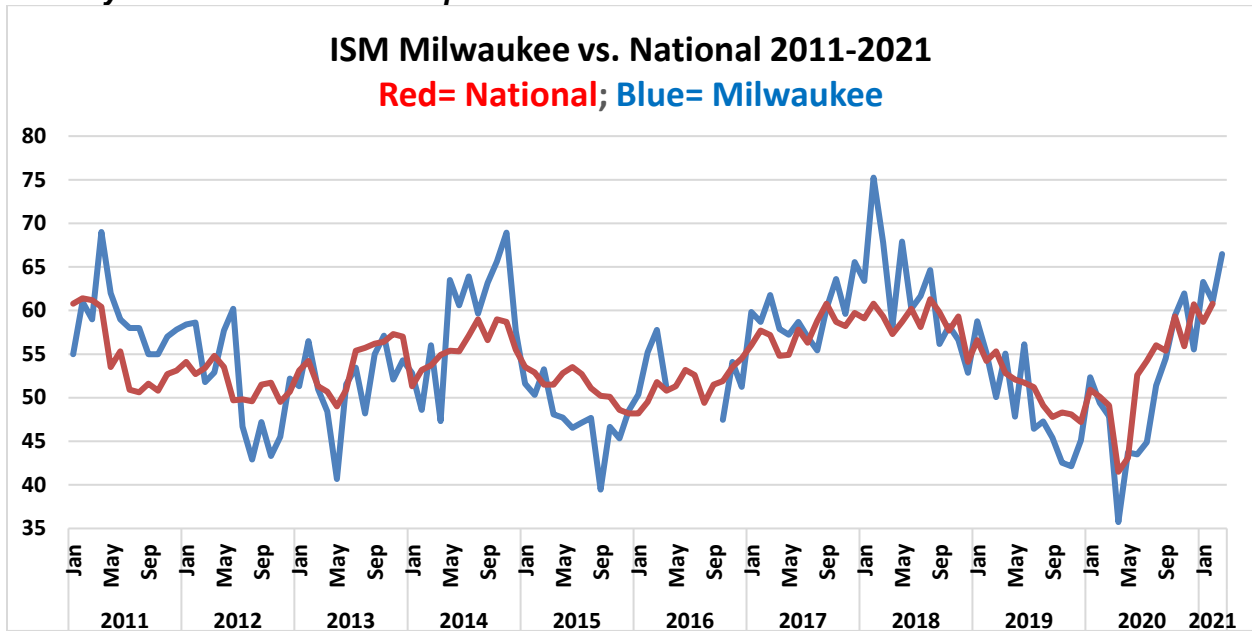
Average commitment lead-time for Capital Expenditures increased from 128 to 129 days. Average lead-time for Production Materials increased from 48 to 76 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 32 to 31 days.

Six- Month Outlook on Business Conditions

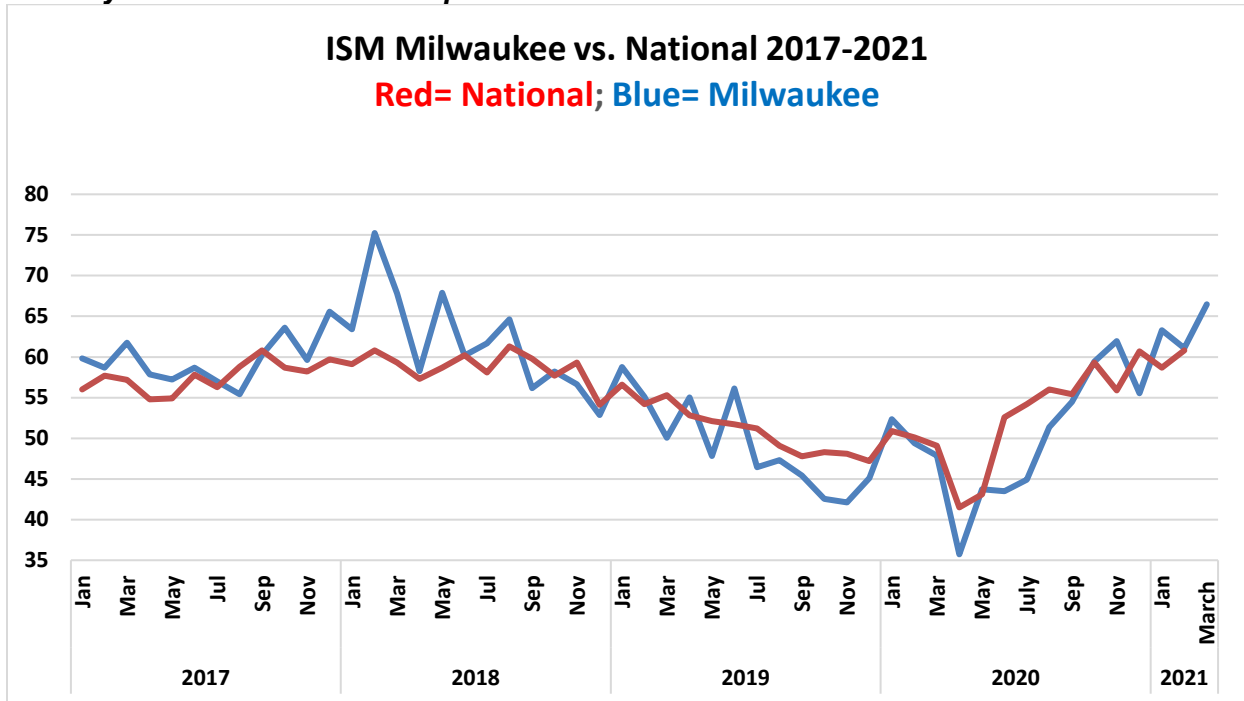
In this outlook, there is an upward shift in negative expectations compared with February and December in terms of market conditions. Approximately 47% of respondents expect positive conditions, 33% expect conditions to remain the same and 20% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
21-Mar	46.67%	33.33%	20.00%	63.33%
21-Feb	40.00%	50.00%	10.00%	65.00%
20-Dec	50.00%	36.36%	13.64%	68.18%

**Milwaukee versus the Nation –
January 2011 – March 2021 Graph**



January 2017 – March 2021 Graph



Please note that these graphs do contain our estimate of the PMI to continue with this time trend 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.ismworld.org/supply-management-news-and-reports/reports/ism-report-on-business/>