

Marquette ISM® Report on Manufacturing May 2021- Early Release

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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. 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	May 2021	April 2021	March 2021
Seasonally adjusted	64.49	63.69	66.48

(Milwaukee, Wisconsin) – May Index registered at 64.49, an increase from 63.69 in April. May's index indicates positive territory.

What respondents are saying in May 2021:

- Raw materials pricing and lead times increasing.
- Severe delays with supply deliveries with imported product are causing issues in the Supply Chain, and this is with adjustments made earlier this year.
- Lead times on parts are extremely long, one being up to 52 weeks. Parts that we used to be able to obtain easily are now hard to find. We're seeing pricing increases, and it changes constantly, this impacts previously quoted prices to our customers.

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

MANUFACTURING AT A GLANCE: May 2021*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	May-21	Apr-21		
PMI	64.49	63.69	0.8	growing
New Orders	69.00	77.89	-8.9	growing
Production	53.58	49.80	3.8	growing
Employment	55.27	61.70	-6.4	growing
Supplier Deliveries	91.63	88.57	3.1	declining
Inventories	52.99	40.49	12.5	growing
Customers' Inventories *	15.38	25.00	-9.6	declining
Prices *	97.06	97.06	0.0	growing
Backlog of Orders *	82.35	73.53	8.8	growing
Exports *	59.09	66.67	-7.6	growing
Imports *	66.67	70.00	-3.3	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. **Note:** A reading above 50 percent indicates that the manufacturing economy is generally expanding (**growing**); below 50 percent indicates that it is generally contracting (**declining**). Supplier Deliveries is the one exception, where it is the reversed relationship. Above 50 percent indicates declining, below 50 percent indicates growing.

What respondents are saying in May 2021:

- International shortages are causing greater safety stock due to supply chain instability.
- Fabrication lead times continue to be 8 weeks plus and electronics have a great deal of variability in their lead times.
- Inflation is causing the prices of scrap metal, steel, copper, plastic, and general dunnage to drop.
- Building safety stock due to supply interruptions and backorder delays.

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

	Diffusion Index May-21	Diffusion Index Apr-21	Diffusion Index Mar-21	Direction	Comments
Blue Collar	49.5	62.4	64.8	declining	-
White Collar	58.2	52.9	57.9	growing	-

Note: These have been calculated based on the seasonally adjusted (SA) Blue and White Collar indices. A reading above 50 percent indicates that the manufacturing economy is generally expanding (**growing**); below 50 percent indicates that it is generally contracting (**declining**).

What respondents are saying in May 2021:

- Manpower shortages cannot find candidates for open roles, and competition for other companies paying more are causing human capital issues.
- Even with new CDC guidelines, worker shortages continue causing production delays.

Buying Policy

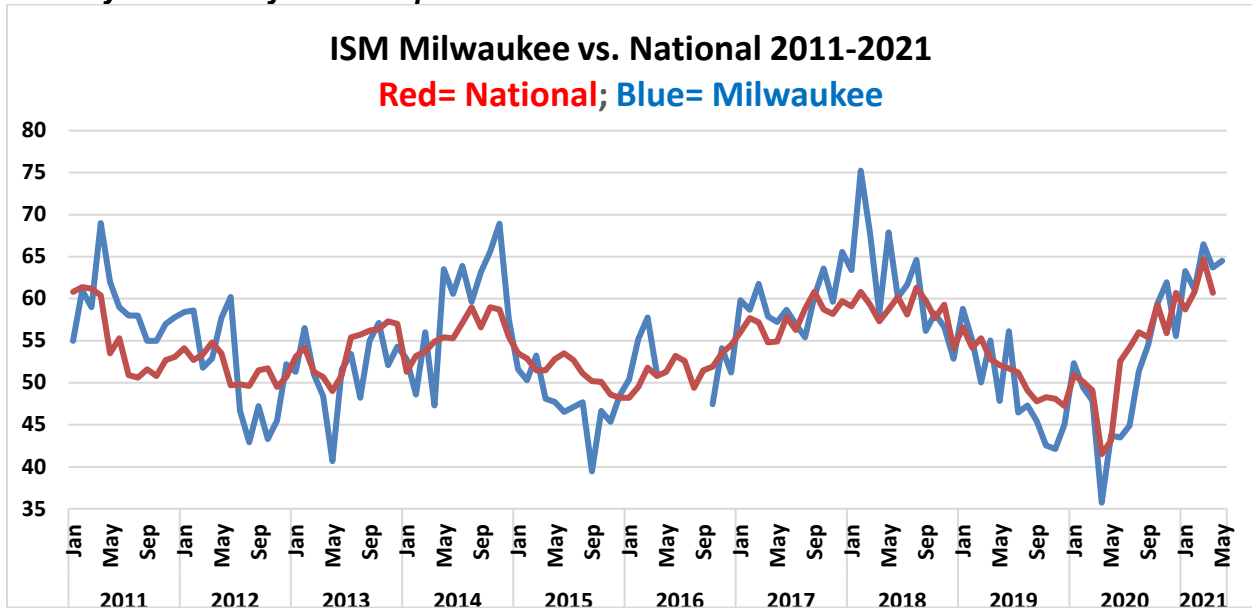
Average commitment lead-time for Capital Expenditures increased from 119 to 121 days. Average lead-time for Production Materials decreased from 63 to 57 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 32 to 23 days.

Six- Month Outlook on Business Conditions

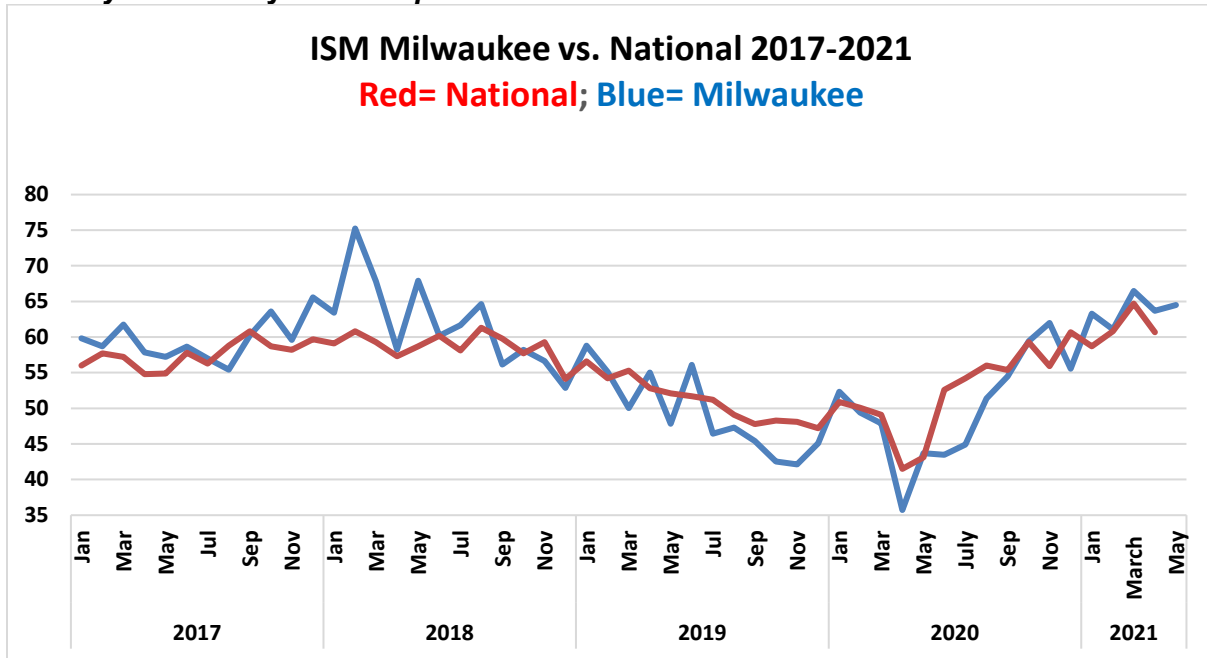
In this outlook, there is a downward shift in negative expectations compared with April and March in terms of market conditions. Approximately 41% of respondents expect positive conditions, 47% expect conditions to remain the same and 12% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
21-May	41.18%	47.06%	11.76%	64.71%
21-Apr	46.67%	40.00%	13.33%	66.67%
21-Mar	46.67%	33.33%	20.00%	63.33%

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



January 2017 – May 2021 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/>