

Marquette ISM® Report on Manufacturing
June 2021- Early Release

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The Marquette-ISM Report on Manufacturing was prepared by Owen Liebelt and Onamica Dhar, graduate students 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	June 2021	May 2021	April 2021
Seasonally adjusted	62.62	64.49	63.69

(Milwaukee, Wisconsin) – June’s Index registered at 62.62, a decrease from 64.49 in May. June’s index indicates positive territory.

What respondents are saying in June 2021:

- There appears to be a higher risk for bullwhip effects if/when the market stalls due to COVID.
- Even Supply Chain Agreements are being tested with imbalances in the market.
- Electronics components lead times are increasing as chip shortages pile up and general components become harder to find with greater lead times.

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

MANUFACTURING AT A GLANCE: June 2021*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Jun-21	May-21		
PMI	62.62	64.49	-1.9	growing
New Orders	78.82	69.00	9.8	growing
Production	47.71	53.58	-5.9	declining
Employment	49.61	55.27	-5.7	declining
Supplier Deliveries	86.54	91.63	-5.1	declining
Inventories	50.40	52.99	-2.6	growing
Customers' Inventories *	25.00	15.38	9.6	declining
Prices *	93.33	97.06	-3.7	growing
Backlog of Orders *	67.86	82.35	-14.5	growing
Exports *	56.25	59.09	-2.8	growing
Imports *	66.67	66.67	0.0	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 June 2021:

- International freight continues to push delays increasing lead times and causing logistical issues.
- Fabrication lead times continue to be at 8 weeks plus and electronic components are seeing a bullwhip effect occur due to confusion in purchasing and cancellations due to increased lead times after initial purchase.
- Expect worsening condition throughout July and August from products coming from India.
- We are building even greater safety stocks than pre-covid due to forecasted supply interruptions.

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

	Diffusion Index Jun-21	Diffusion Index May-21	Diffusion Index Apr-21	Direction	Comments
Blue Collar	49.6	49.5	62.4	declining	-
White Collar	49.6	58.2	52.9	declining	-

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 June 2021:

- Companies are struggling to hire more workers either to fill open roles for new orders or to replace employees let go during the pandemic.
- Shortage of both workers and components.
- International delays have caused domestic shipment delays and backorders throughout the production process.

Buying Policy

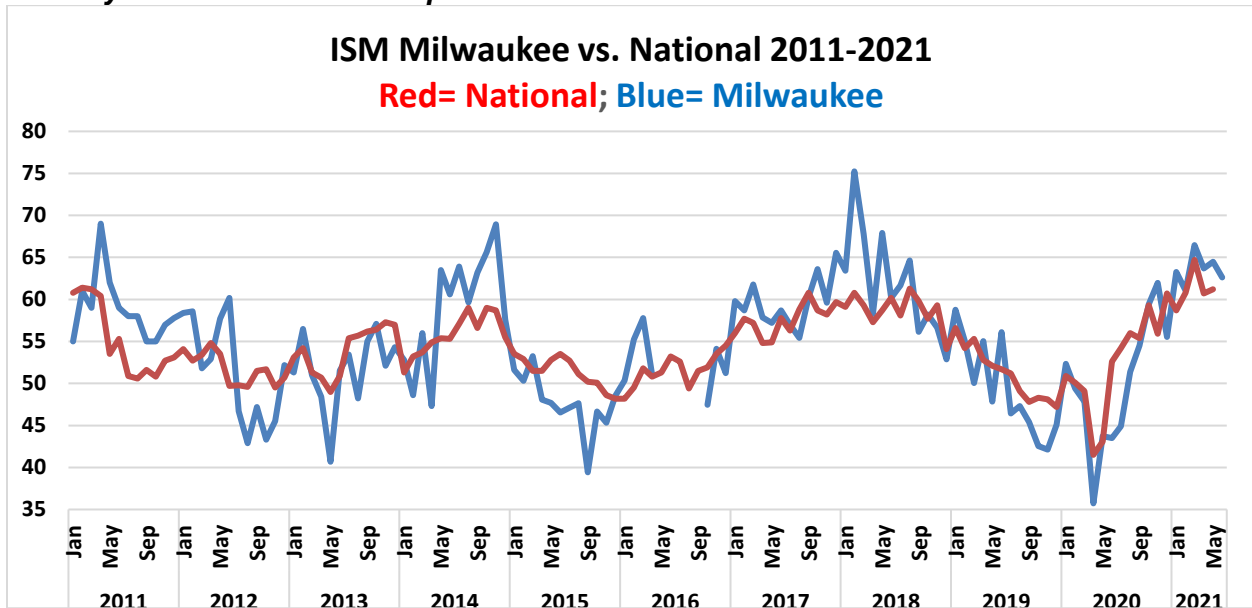
Average commitment lead-time for Capital Expenditures increased from 119 to 146 days. Average lead-time for Production Materials increased from 67 to 82 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 23 to 31 days.

Six- Month Outlook on Business Conditions

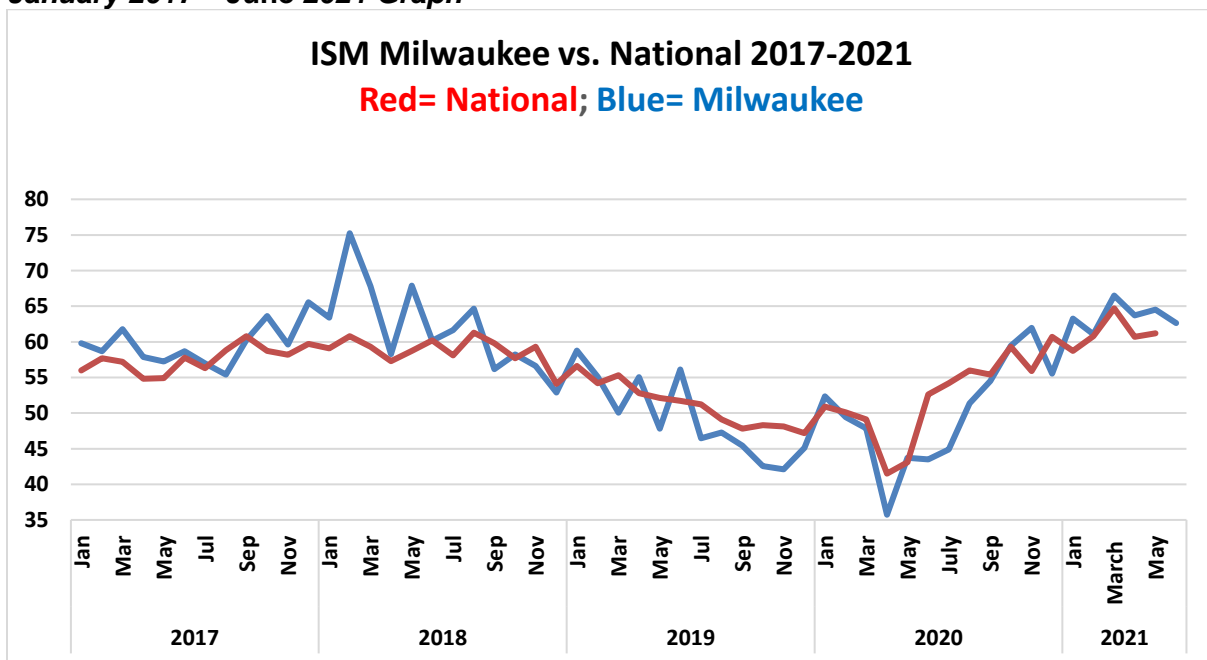
In this outlook, there is a downward shift in negative expectations compared with May and April in terms of market conditions. Approximately 46% of respondents expect positive conditions, 46% expect conditions to remain the same and 8% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
21-Jun	46.15%	46.15%	7.69%	69.23%
21-May	41.18%	47.06%	11.76%	64.71%
21-Apr	46.67%	40.00%	13.33%	66.67%

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



January 2017 – June 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/>