

**Marquette ISM® Report on Manufacturing
April 2022**

Contact: Dr. Marko Bastl
Associate Professor of Supply Chain Management
Director, Center for Supply Chain Management
Marquette University
(414) 288-6866
Marko.Bastl@marquette.edu

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*The Marquette-ISM Report on Manufacturing was prepared by **Onamica Dhar**, 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	April 2022	March 2022	February 2022
Seasonally adjusted	52.86	53.81	60.72

(Milwaukee, Wisconsin) –April’s Index registered at 52.86, a decrease from 53.81 in March. April’s index indicates positive territory.

What are respondents saying in April 2022:

- COVID-19 and Ukrainian crisis are still a major issue for business.
- Long lead times are still a major problem.
- Exports and imports situation is not improving.
- Supply chain system still needs to improve.
- Market is gradually improving.

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

MANUFACTURING AT A GLANCE: April 2022*				
Index	Series	Series	Percentage Point Change	Direction
	Index	Index		
	Apr-22	Mar-22		
PMI	52.86	53.81	-0.9	growing
New Orders	46.04	49.58	-3.5	declining
Production	37.70	40.60	-2.9	declining
Employment	49.41	49.41	0.0	declining
Supplier Deliveries	85.30	83.87	1.4	declining
Inventories	45.83	45.56	0.3	declining
Customers' Inventories *	31.82	22.22	9.6	declining
Prices *	96.43	100.00	-3.6	growing
Backlog of Orders *	60.71	58.33	2.4	growing
Exports *	50.00	40.00	10.0	growing
Imports *	35.00	41.67	-6.7	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. **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 are respondents saying in April 2022:

- Inflation and rising materials prices are an ongoing issue.
- Restricted labor supply is still a persistent problem.
- Chip shortage is still a major problem
- International shipments remain a major issue.

We have collected input on Blue and White Collar Employment. The indices are below for **April 2022, March 2022, and February 2022.**

	Diffusion Index Apr-22	Diffusion Index Mar-22	Diffusion Index Feb-22	Direction	Comments
Blue Collar	45.9	53.2	64.1	declining	-
White Collar	42.3	45.6	58.6	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 are respondents saying in April 2022:

- Firms want to hire more employees
- Labor shortages are still a major problem.
- Blue collar labor shortage is very high.
- Laborer changes job frequently.

Buying Policy

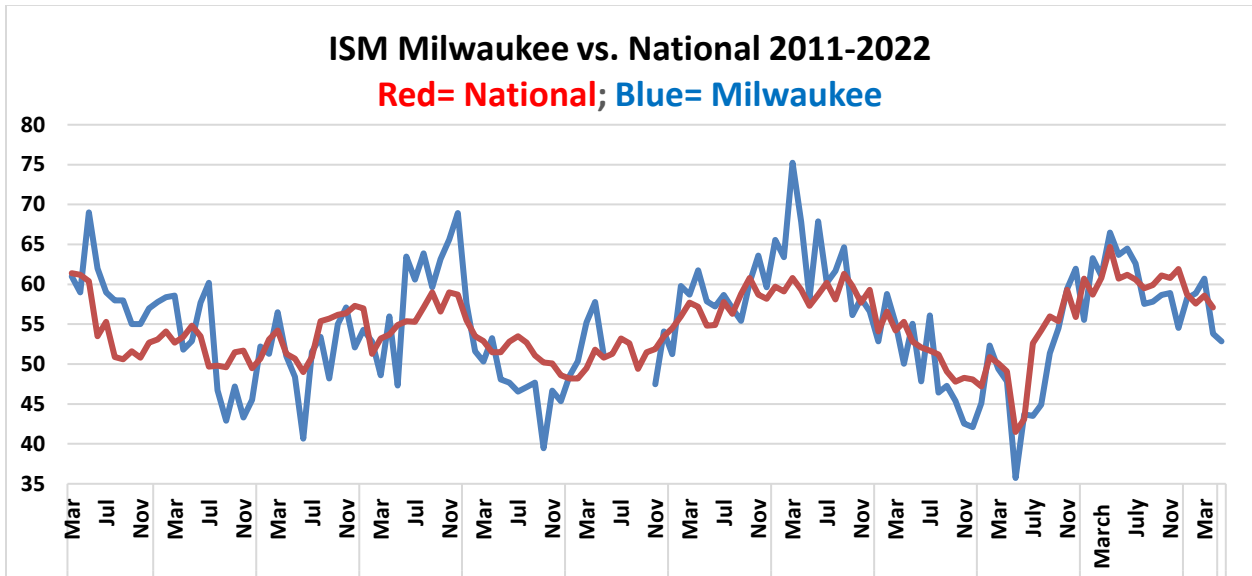
Average commitment lead-time for Capital Expenditures decreased from 203 to 122 days. Average lead-time for Production Materials decreased from 132 to 78 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies decreased from 52 to 43 days.

Six- Month Outlook on Business Conditions

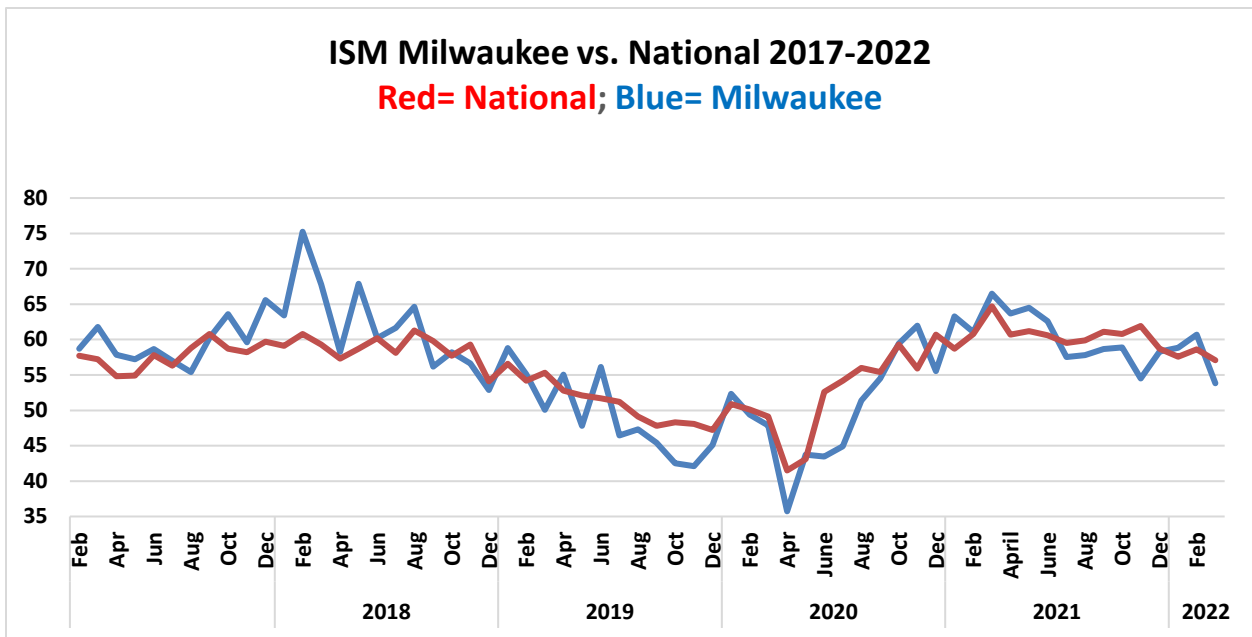
In this outlook, there is a downward shift in positive expectations compared with March and February in terms of market conditions. Approximately 21% of respondents expect positive conditions, 29% expect conditions to remain the same and 50% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
22-Apr	21.43%	28.57%	50.00%	35.71%
22-Mar	38.46%	30.77%	30.77%	53.85%
22-Feb	33.33%	33.33%	33.33%	50.00%

**Milwaukee versus the Nation –
January 2011 – April 2022 Graph**



January 2017 –April 2022 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/>