



**Center for Supply Chain Management** 

Marquette ISM<sup>®</sup> Report on Manufacturing January 2022- Early Release

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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<sup>®</sup>, PMI<sup>®</sup>, NMI<sup>®</sup>, published by the Institute of Supply Management<sup>®</sup> (ISM<sup>®</sup>). 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 2022	December 2021	November 2021
Seasonally adjusted	52.86	58.28	54.52

(Milwaukee, Wisconsin) –January's Index registered at 52.86, a decrease from 58.28 in December. January's index indicates positive territory.

#### What are respondents saying in January 2022:

- Lead time is still high.
- Exports and imports face problems.
- Little improvement in supply chain system so far, and it needs an improvement.
- Global chip shortage is hampering production of electronic goods.
- New COVID variants causing new threat for business.

MANUFACTURING AT A GLANCE: January 2022*				
	Series	Series	Percentage	
Index	Index	Index	Point	Direction
	Jan-22	Dec-21	Change	
РМІ	52.86	58.28	-5.4	growing
New Orders	48.87	56.03	-7.2	declining
Production	52.69	48.63	4.1	growing
Employment	48.57	49.33	-0.8	declining
Supplier Deliveries	74.17	82.46	-8.3	declining
Inventories	40.00	54.98	-15.0	declining
Customers' Inventories *	29.17	33.33	-4.2	declining
Prices *	90.00	91.67	-1.7	growing
Backlog of Orders *	56.67	55.88	0.8	growing
Exports *	58.33	43.75	14.6	growing
Imports *	57.14	54.55	2.6	growing

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

(\*) 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 growing.

#### What are respondents saying in January 2022:

- Still needed higher inventories.
- Higher transportation costs affect export and import.
- Inflation increases the price of goods and services.
- Chip shortage is hampering production.

We have collected input on Blue and White Collar Employment. The indices are below for January 2022, December 2021, and November 2021.

	Diffusion Index	Diffusion Index	Diffusion Index	Direction	Comments
	Jan-22	Dec-21	Nov-21		
Blue Collar	52.3	58.2	36.4	growing	-
White Collar	48.8	46.2	50.4	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 January 2022:

- Labor shortage is still a major problem.
- Employers are trying to hire employees.
- Labor demand increases in local businesses.

## **Buying Policy**

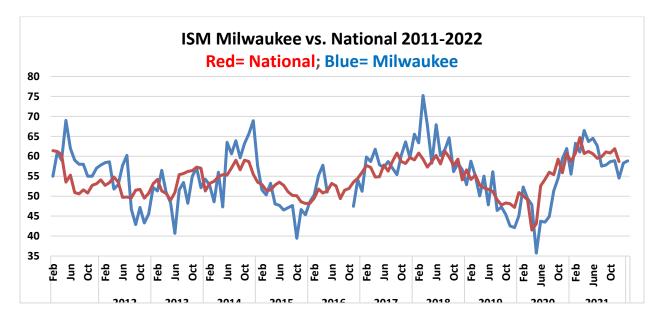
Average commitment lead-time for Capital Expenditures increased from 133 to 1487 days. Average lead-time for Production Materials decreased from 104 to 81 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 45 to 55 days.

#### Six- Month Outlook on Business Conditions

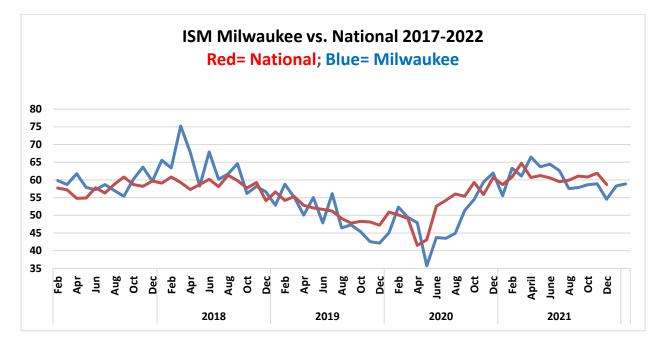
In this outlook, there is a downward shift in positive expectations compared with January and December in terms of market conditions. Approximately 27% of respondents expect positive conditions, 40% expect conditions to remain the same and 33% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
22-Jan	26.67%	40.00%	33.33%	46.67%
21-Dec	<b>29.41%</b>	29.41%	41.18%	44.12%
21-Nov	11.76%	64.71%	23.53%	44.12%

# Milwaukee versus the Nation – January 2011 – January 2022 Graph



January 2017 – January 2022 Graph



# Insights on the ISM<sup>®</sup> PMI<sup>®</sup> from Institute for Supply Management®:

## ISM® Manufacturing Report on Business<sup>®</sup> Background

In February 1982, the PMI<sup>®</sup> 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<sup>®</sup> 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/