



Center for Supply Chain Management

Marquette ISM[®] Report on Manufacturing November 2021- 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[®], 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 | November 2021 | October 2021 | September 2021 |
|---------------------|---------------|--------------|----------------|
| Seasonally adjusted | 54.52 | 55.90 | 58.66 |

(Milwaukee, Wisconsin) –November's Index registered at 54.52, a decrease from 55.90 in October. November's index indicates positive territory.

What are respondents saying in November 2021:

- Chip shortage is a major problem.
- Transportation cost still high and it has negative impact on profit.
- Lead time remain a major issue.
- Logistics problem hamper businesses.
- Price of raw material still high.
- Covid-19 is still a major threat for business.

| MANUFACTURING AT A GLANCE: October 2021* | | | | |
|--|--------|--------|------------|-----------|
| | Series | Series | Percentage | |
| Index | Index | Index | Point | Direction |
| | Nov-21 | Oct-21 | Change | |
| РМІ | 54.52 | 55.90 | -1.4 | growing |
| New Orders | 60.65 | 64.93 | -4.3 | growing |
| Production | 40.59 | 50.66 | -10.1 | declining |
| Employment | 44.80 | 41.09 | 3.7 | declining |
| Supplier Deliveries | 89.42 | 89.42 | 0.0 | declining |
| Inventories | 37.15 | 33.40 | 3.8 | declining |
| Customers' Inventories * | 28.57 | 21.43 | 7.1 | declining |
| Prices * | 100.00 | 97.22 | 2.8 | growing |
| Backlog of Orders * | 64.71 | 76.47 | -11.8 | growing |
| Exports * | 50.00 | 54.55 | -4.5 | growing |
| Imports * | 55.56 | 45.45 | 10.1 | 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 November 2021:

- Higher transportation cost affects export and Import.
- Chip shortage decreases production.
- Price of goods and services increases.
- Uncertainty in distribution system.

We have collected input on Blue and White Collar Employment. The indices are below for **November 2021**, **October 2021**, and **September 2021**.

| | Diffusion Index | Diffusion Index | Diffusion Index | Direction | Comments |
|--------------|-----------------|--------------------|--------------------|-----------|----------|
| | Nov-21 | Oct-21 | Sep-21 | | |
| Blue Collar | 36.4 | 41.1 | 55.7 | declining | - |
| White Collar | 50.4 | 38.4 | 53.0 | 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 are respondents saying in November 2021:

- Labor shortage still a major problem.
- Hourly wage compensation increases.
- Labor demand increases in local businesses.

Buying Policy

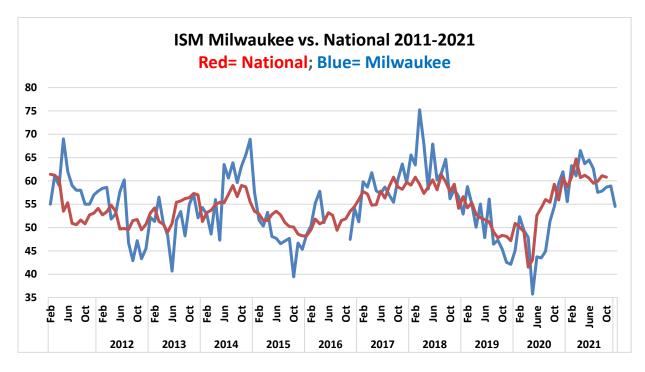
Average commitment lead-time for Capital Expenditures decreased from 166 to 163 days. Average lead-time for Production Materials decreased from 113 to 83 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 40 to 49 days.

Six- Month Outlook on Business Conditions

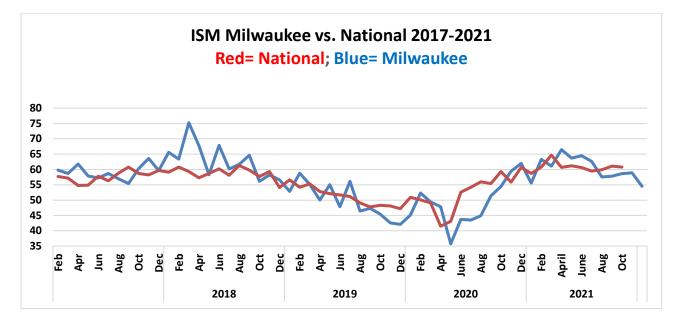
In this outlook, there is a downward shift in negative expectations compared with November and October in terms of market conditions. Approximately 12% of respondents expect positive conditions, 65% expect conditions to remain the same and 24% of the respondents expect conditions to worsen within the next six months.

| | Expect Positive Conditions | Expect Same Conditions | Expect Worse Conditions | Diffusion Index |
|--------|-------------------------------|---------------------------|----------------------------|--------------------|
| 21-Nov | 11.76% | 64.71% | 23.53% | 44.12% |
| 21-Oct | 23.53 | 47.06% | 29.41% | 47.06% |
| 21-Sep | 31.58% | 47.37% | 21.05% | 55.26% |

Milwaukee versus the Nation – January 2011 – November 2021 Graph



January 2017 – November 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 ± .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/