



Center for Supply Chain Management

Marquette ISM[®] Report on Manufacturing June 2020

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The Marquette-ISM Report on Manufacturing was prepared by **Katie Ozanich**, a graduate student in Applied Economics at Marquette University, and distributed by **Kelly Wesolowski**, Associate Director of the Center for Supply Chain Management.

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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 2020 | May 2020 | April 2020 |
|---------------------|-----------|----------|------------|
| Seasonally adjusted | 43.49 | 43.72 | 35.73 |

(Milwaukee, Wisconsin) – June's Index registered at 43.49, a decrease from 43.72 in May. June's index indicates negative territory.

What respondents are saying in June 2020:

- Economy has bottomed out and business is slowly increasing as customers begin returning to work
- Consensus of customers is that the worst is yet to come
- Demand reductions are beginning to level off but there is not a reliable demand forecast for the remaining of 2020
- Expect an 18 month recovery of the market in the United States, and an even longer recovery time for Europe, India, and Brazil
- Expect slow improvement three months from now
- Slow recovery from COVID-19 but still down 35% overall

| MANUFACTURING AT A GLANCE: June 2020* | | | | |
|---------------------------------------|---------|--------|------------|-----------|
| | Series | Series | Percentage | |
| Index | Index | Index | Point | Direction |
| | June-20 | May-20 | Change | |
| PMI | 43.49 | 43.72 | -0.2 | declining |
| New Orders | 35.58 | 29.11 | 6.5 | declining |
| Production | 48.18 | 30.83 | 17.3 | declining |
| Employment | 30.85 | 33.93 | -3.1 | declining |
| Supplier Deliveries | 71.59 | 74.70 | -3.1 | slower |
| Inventories | 31.25 | 50.00 | -18.8 | declining |
| Customers' Inventories * | 42.31 | 34.62 | 7.7 | declining |
| Prices * | 53.13 | 53.13 | 0.0 | growing |
| Backlog of Orders * | 30.00 | 28.57 | 1.4 | declining |
| Exports * | 37.50 | 33.33 | 4.2 | declining |
| Imports * | 25.00 | 38.89 | -13.9 | declining |

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.

What respondents are saying in June 2020:

- Wood products are experiencing shortages therefore the price has gone up 20 to 30%
- Electronic components are seeing longer lead times
- Customer inventories are too low
- COVID-19 is still affecting production levels, customer orders, and employment levels
- Supplier deliveries from India and Europe are slow
- There are significant increases in airfreight costs
- New projects and R&D are slowing
- Broken chain supply and a lack of steel production will cause all manufacturing to suffer once inventory runs out

Blue and White-Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for June 2020, May 2020, and April 2020.

| | Diffusion Index Jun-20 | Diffusion Index May-20 | Diffusion Index Apr-20 | Direction | Comments |
|--------------|------------------------------|------------------------------|------------------------------|-----------|----------|
| Blue Collar | 30.8 | 37.0 | 32.9 | declining | - |
| White Collar | 33.9 | 33.9 | 30.2 | declining | - |

Note: These have been calculated based on the seasonally adjusted (SA) Blue and White Collar indices.

What respondents are saying in June 2020:

- Did not replace an employee who found another job
- Suppliers are keeping labor levels low which is causing slow delivery times
- Still working from home in the short term
- Voluntary layoffs still in place as management is continuing to determine adequate staff levels

Buying Policy

Average commitment lead-time for Capital Expenditures decreased from 109 to 83 days. Average lead-time for Production Materials increased from 50 to 57 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 18 to 21 days.

Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with May in terms of market conditions. Approximately 50% of respondents expect positive conditions, 25% expect conditions to remain the same and 25% of the respondents expect conditions to worsen within the next six months.

| | Expect Positive Conditions | Expect Same Conditions | Expect Worse Conditions | Diffusion Index |
|--------|----------------------------------|---------------------------|----------------------------|--------------------|
| Jun-20 | 50.00% | 25.00% | 25.00% | 62.50% |
| May-20 | 35.71% | 42.86% | 21.43% | 57.14% |
| Apr-20 | 23.53% | 29.41% | 47.06% | 38.24% |

Milwaukee versus the Nation – January 2011 – June 2020 Graph



January 2017 – June 2020 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.instituteforsupplymanagement.org/files/ISMREPORT/ROBBroch08.pdf)