MARQUETTE UNIVERSITY | BUSINESS
Center for Supply Chain Management

ISM institute for supply management
ISM—Milwaukee, Inc.

# Marquette-ISM Report on Manufacturing
## May 2017- Final Release


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***Final Version (includes ISM National Results for May 2017)***

*The Marquette-ISM Report on Manufacturing was prepared by **Phyo T Aung**, a graduate student in Applied Economics at Marquette University, and distributed by **Beth Krey**, Associate Director of the Center for Supply Chain Management.*

*Please direct data questions and requests for media commentary to Dr. Fisher.*

*This report should not be confused with the ISM National Report published by the Institute of Supply Management. 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 | May 2017 | April 2017 | March 2017 |
|---|---|---|---|
| Seasonally adjusted | 57.22 | 57.87 | 61.77 |

(Milwaukee, Wisconsin) – May's Index registered at 57.22, a slight decrease from April's 57.87. May's Index remains solidly in positive territory.

**What respondents are saying in May 2017:**

- Pricing increases on Kraft liner board for packaging went up 9%---pricing is predicted to go up again in the next several months.
- Polyurethane pricing seems to be calm for the moment as lead times seem to be stabilizing for time being.
- Raw material lead times seem to be stabilizing with suppliers for availability.
- Lead times were all over the spectrum and are now close to being in the normal range prior to qtr1.

- Consistent Quality and on-time delivery -- bigger impact today than previously
- Business is still good, but not strengthening
- We are picking up in all sectors that we serve.
- It is becoming clear however, that steel supplies are not keeping up with demand, thus artificially curtailing the market.
- Very strong quarter - customers showing strong demand in Q3, but unclear what market factors support continued demand
- Plastics commodity pricing. I believe this may be a long-term issue due to lack of investment by large resin producers.

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

| MANUFACTURING AT A GLANCE: MAY 2017* | | | | |
|---|---|---|---|---|
| Index | Series Index May-17 | Series Index Apr-17 | Percentage Point Change | Direction |
| PMI | 57.22 | 57.87 | -0.6 | growing |
| New Orders | 62.77 | 59.78 | 3.0 | growing |
| Production | 65.43 | 55.46 | 10.0 | growing |
| Employment | 65.57 | 63.73 | 1.8 | growing |
| Supplier Deliveries | 49.16 | 62.38 | -13.2 | slower |
| Inventories | 43.18 | 48.00 | -4.8 | declining |
| Customers' Inventories * | 30.00 | 38.10 | -8.1 | declining |
| Prices * | 72.73 | 76.00 | -3.3 | growing |
| Backlog of Orders * | 57.50 | 54.55 | 3.0 | growing |
| Exports * | 63.33 | 52.78 | 10.6 | growing |
| Imports * | 60.71 | 61.11 | -0.4 | 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.

**What respondents are saying in May 2017:**

- Shortage of raw materials.
- April was very slow for business.
- Hiring freeze.
- Raw materials improving slightly.
- April OTD was bad.
- Lead times are stabilizing.
- Steel price increased.

**Blue and White-Collar Employment:**

We have collected input on Blue and White Collar Employment. The indices are below for **March 2017, April 2017 and May 2017.**

| | Diffusion Index Mar-17 | Diffusion Index April-17 | Diffusion Index May-17 | Direction | Comments |
|---|---|---|---|---|---|
| **Blue Collar** | 65.3 | 61.9 | 65.7 | growing | - |
| **White Collar** | 55.4 | 54.4 | 57.0 | growing | - |

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

**What respondents are saying in May 2017:**

- Expect to see the more employments options in survey.
- Expected ongoing spending/projects in infrastructure increase.
- Most in our chain are predicting a continued uptick.
- Optimism from sales that they will catch up to bookings targets.
- Add constraints to manpower lack of qualified candidates to hire reason for capacity.

**Buying Policy**

Average commitment lead-time for Capital Expenditures increased from 99 days to 118 days. Average lead-time for Production Materials increased from 34 days to 41 days. Average lead-time for Maintenance, Repair and Operating (MRO) Supplies increased from 14 days to 24 days.

**Six- Month Outlook on Business Conditions**

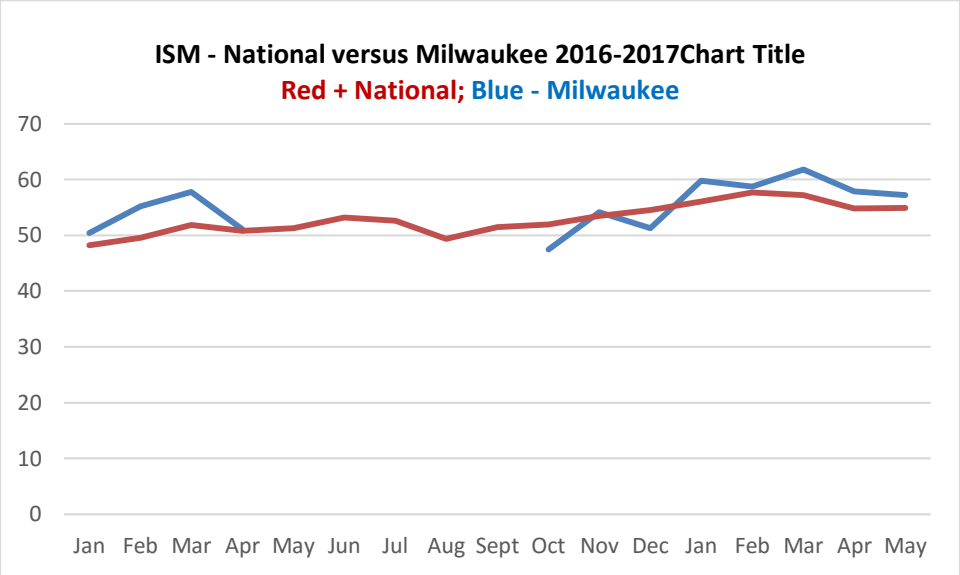
In this outlook, there is an upward shift in positive expectations compared with March in terms of market conditions. Approximately 48% of respondents expect positive conditions, 48% expect conditions to remain the same and 4% of the respondents expect conditions to worsen within the next six months.

| | Expect Positive Conditions | Expect Same Conditions | Expect Worse Conditions | Diffusion Index |
|---|---|---|---|---|
| **May-17** | **50.00%** | **36.36%** | **13.64%** | **68.18%** |
| **Apr-17** | **48.00%** | **48.00%** | **4.00%** | **72.00%** |
| **Mar-17** | **50.00%** | **36.36%** | **13.64%** | **68.18%** |

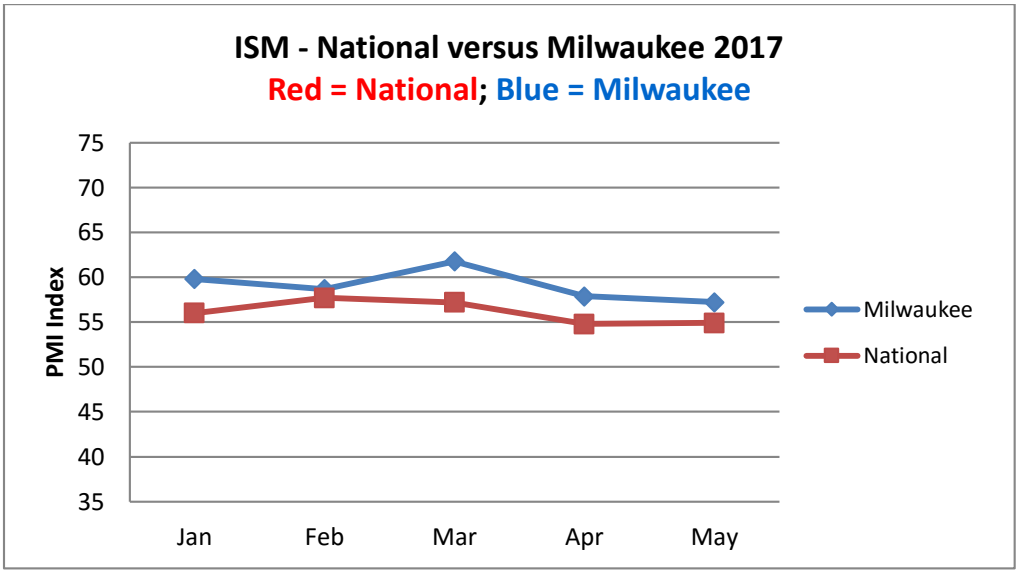
**Milwaukee versus the Nation –**

***2016 Graph***

***Jan,2016-May,2017 Graph***




***2017 graph***



**Insights on the ISM PMI from the National Organization:**

**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 x 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)