

Marquette-ISM Report on Manufacturing March 2015- Final Release

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*The Marquette-ISM Report on Manufacturing was prepared by **Chris Bango**, a graduate student in Applied Economics at Marquette University, and distributed by **Beth Krey**, Assistant 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	March 2015	February 2015	January 2015
Seasonally adjusted	53.25	50.32	51.60

(Milwaukee, Wisconsin) – March's Index registered at 53.25, which is above the 50-level indicating positive territory. This places the index above 50 for seventeen of the past nineteen months.

What respondents are saying in March 2015:

- The industry has been starting to experience an increase in sales.
- New orders are now starting to come in. It will take several weeks before they hit production.
- Companies are attempting to utilize a Kanban method in order to achieve Just In Time production.

- Prices have increased for some products but the majority has stayed relatively the same. The price increases have been a result of it being a new year. A key note is that US scrap metal prices have been falling.

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

MANUFACTURING AT A GLANCE: March 2015*				
Index	Series Index Mar-2015	Series Index Feb-2015	Percentage Point Change	Direction
PMI	53.25	50.32	2.9	growing
New Orders	54.42	41.70	12.7	growing
Production	52.72	45.51	7.2	growing
Employment	46.14	58.13	-12.0	declining
Supplier Deliveries	60.02	59.20	0.8	slower
Inventories	52.94	47.06	5.9	growing
Customers' Inventories *	46.88	61.76	-14.9	declining
Prices *	32.35	38.24	-5.9	declining
Backlog of Orders *	50.00	38.24	11.8	growing
Exports *	45.83	53.85	-8.0	declining
Imports *	54.55	43.33	11.2	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 March 2015:

- There have been late vendor shipments even with sufficient lead times. Along with that, there have been vendor part quality problems. This is a concern for the long term as companies are still trying to find good quality suppliers.
- The biggest issue being faced is a lack of quality service vendors. The problems with vendors tends to be either they do not have enough personnel or have the wrong personnel in place. This causes orders to be lost or delayed, billing to be incorrect, and communication to be non-existent.
- The rise and fall of natural gas and oil prices has not significantly impacted products that use them as cost drivers (i.e. transportation & airline prices are NOT going down in spite of slumping oil prices).
- The West Coast ports have opened.

Blue and White Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **January 2015, February 2015, and March 2015.**

	Diffusion Index Jan-15	Diffusion Index Feb-15	Diffusion Index Mar-2015	Direction	Comments
Blue Collar	57.3	46.5	51.9	growing	-
White Collar	45.8	58.1	46.1	declining	-

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

What respondents are saying in March 2015:

- There have continued to be employees on layoff but as the amount of orders increases, the layoffs will be reduced.
- The planned site consolidations are being completed.

COMMODITIES REPORTED UP/DOWN IN PRICE and IN SHORT SUPPLY

As an addition to the report, we have calculated commodity price indexes. We look forward to continuing to do so going forward. Below we have shown **January 2015, and February 2015, and March 2015.**

Category	January 2015 Diffusion index	February 2015 Diffusion index	March 2015 Diffusion index	change in percentage point
Aluminum	31.82%	40.00%	27.78%	-12.2
Brass	16.67%	37.50%	50.00%	12.5
Caustic Soda	75.00%	50.00%	25.00%	-25.0
Chemicals	28.57%	37.50%	41.67%	4.2
Copper	12.50%	37.50%	25.00%	-12.5
Copper Based Products	16.67%	25.00%	37.50%	12.5
Cocoa Powder	50.00%	-	-	-
Corn	0.00%	0.00%	0.00%	0.0
Corrugated Containers	50.00%	50.00%	50.00%	0.0
Diesel	0.00%	66.67%	60.00%	-6.7
Electronic Components	50.00%	75.00%	75.00%	0.0
Gasoline	0.00%	58.33%	71.43%	13.1

High Density Polyethylene	40.00%	50.00%	50.00%	0.0
Natural Gas	41.67%	25.00%	40.00%	15.0
Nickel	33.33%	25.00%	0.00%	-25.0
PET	25.00%	0.00%	-	-
Plastic Resins	21.43%	20.00%	41.67%	21.7
Polyester	25.00%	37.50%	50.00%	12.5
Polyethylene	37.50%	37.50%	50.00%	12.5
Resins	20.00%	16.67%	50.00%	33.3
Soybean Oil	-	0.00%	-	-
Stainless Steel	43.75%	50.00%	35.71%	-14.3
Starch	-	-	-	-
Steel	22.22%	35.00%	25.00%	-10.0
Steel Products	37.50%	44.44%	20.00%	-24.4
Sulfur	-	-	-	-
Tin Plate	25.00%	50.00%	0.00%	-50.0
Titanium Dioxide	50.00%	25.00%	50.00%	25.0
Wheat	0.00%	-	-	-
Beef/Pork	50.00%	0.00%	0.00%	0.0

Buying Policy

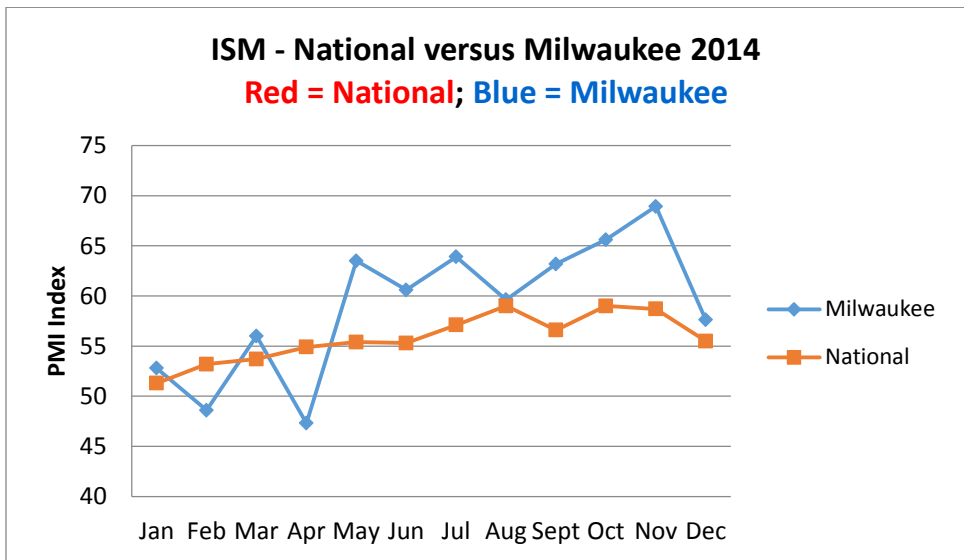
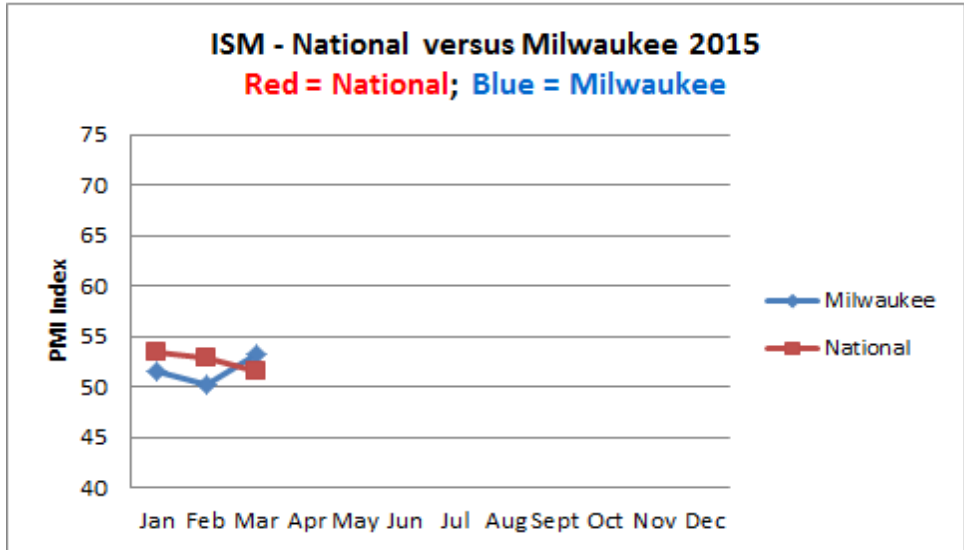
Average commitment lead time for Capital Expenditures decreased by 33 days to 89 days. Average lead time for Production Materials decreased by 7 days to 43 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies increased by 2 days to 23 days.

Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with February in terms of market conditions. Approximately 53.3% of respondents expect positive conditions, 40% expect conditions to remain the same and 6.7% expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Mar-15	53.3%	40.0%	6.7%	73.3%
Feb-15	33.3%	53.3%	13.3%	60.0%
Jan-15	37.5%	43.8%	18.8%	59.4%

Milwaukee versus the Nation – (for graphs of 2010, 2011, 2012, and 2013 see Dec 2013's and Dec 2012's reports)



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 $\pm .48$ 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.

<http://www.ism.ws/files/ISMReport/ROBBroch08.pdf>