

Marquette-ISM Report on Manufacturing April 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**, 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	April 2015	March 2015	February 2015
Seasonally adjusted	48.08	53.25	50.32

(Milwaukee, Wisconsin) – April's Index registered at 48.08, which is below the 50-level indicating negative territory. This places the index at above 50 for only seventeen of the past twenty months.

What respondents are saying in April 2015:

- Several new orders have been coming in recently. The issue is that customers want their product(s) right away, however, [our] products are custom made and need to be engineered. The primary delay is that parts need to be purchased to complete these orders.

- Business conditions have been a bit worse than last year due to lagging sales. The biggest issue still is finding viable suppliers with superior customer service. There appears to be a lack of caring by businesses that the companies are dealing with.
- Scrap steel prices have been falling fast.
- Efforts have been made to start marketing more export business.

Orders are coming in strong but this will not hit our production for several weeks.

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

MANUFACTURING AT A GLANCE: April 2015*				
Index	Series Index April-2015	Series Index March-2015	Percentage Point Change	Direction
PMI	48.08	53.25	-5.2	declining
New Orders	57.42	54.42	3.0	growing
Production	45.13	52.72	-7.6	declining
Employment	52.62	46.14	6.5	growing
Supplier Deliveries	38.57	60.02	-21.5	faster
Inventories	46.67	52.94	-6.3	declining
Customers' Inventories *	46.43	46.88	-0.4	declining
Prices *	36.67	32.35	4.3	declining
Backlog of Orders *	46.67	50.00	-3.3	declining
Exports *	40.91	45.83	-4.9	declining
Imports *	54.17	54.55	-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 April 2015:

- There have been unplanned customer order pullouts.
- Orders are coming in strong but this will not have an effect on production for several weeks.
- The West Coast congestion has been clearing. Consequently, shipments that were once caught on the West Coast have begun flowing in now.
- Backlogs have increased due to the increase in orders.

Blue and White Collar Employment:

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

	Diffusion Index Feb-15	Diffusion Index Mar-15	Diffusion Index Apr-2015	Direction	Comments
Blue Collar	46.5	51.9	52.6	growing	-
White Collar	58.1	46.1	44.6	declining	-

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

What respondents are saying in April 2015:

- Interviews are being scheduled due to an increase in the amount of orders.

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 **February 2015, and March 2015, and April 2015.**

Category	February 2015 Diffusion index	March 2015 Diffusion index	April 2015 Diffusion index	change in percentage point
Aluminum	40.00%	27.78%	31.25%	3.5
Brass	37.50%	50.00%	66.67%	16.7
Caustic Soda	50.00%	25.00%	50.00%	25.0
Chemicals	37.50%	41.67%	50.00%	8.3
Copper	37.50%	25.00%	70.00%	45.0
Copper Based Products	25.00%	37.50%	83.33%	45.8
Cocoa Powder	-	-	-	-
Corn	0.00%	0.00%	50.00%	50.0
Corrugated Containers	50.00%	50.00%	50.00%	0.0
Diesel	66.67%	60.00%	70.00%	10.0
Electronic Components	75.00%	75.00%	50.00%	-25.0
Gasoline	58.33%	71.43%	66.67%	-4.8
High Density Polyethylene	50.00%	50.00%	25.00%	-25.0
Natural Gas	25.00%	40.00%	30.00%	-10.0

Nickel	25.00%	0.00%	25.00%	25.0
PET	0.00%	-	50.00%	-
Plastic Resins	20.00%	41.67%	37.50%	-4.2
Polyester	37.50%	50.00%	50.00%	0.0
Polyethylene	37.50%	50.00%	25.00%	-25.0
Resins	16.67%	50.00%	50.00%	0.0
Soybean Oil	0.00%	-	-	-
Stainless Steel	50.00%	35.71%	40.00%	4.3
Starch	-	-	-	-
Steel	35.00%	25.00%	18.75%	-6.3
Steel Products	44.44%	20.00%	31.25%	11.3
Sulfur	-	-	-	-
Tin Plate	50.00%	0.00%	50.00%	50.0
Titanium Dioxide	25.00%	50.00%	50.00%	0.0
Wheat	-	-	-	-
Beef/Pork	0.00%	0.00%	0.00%	0.0

Buying Policy

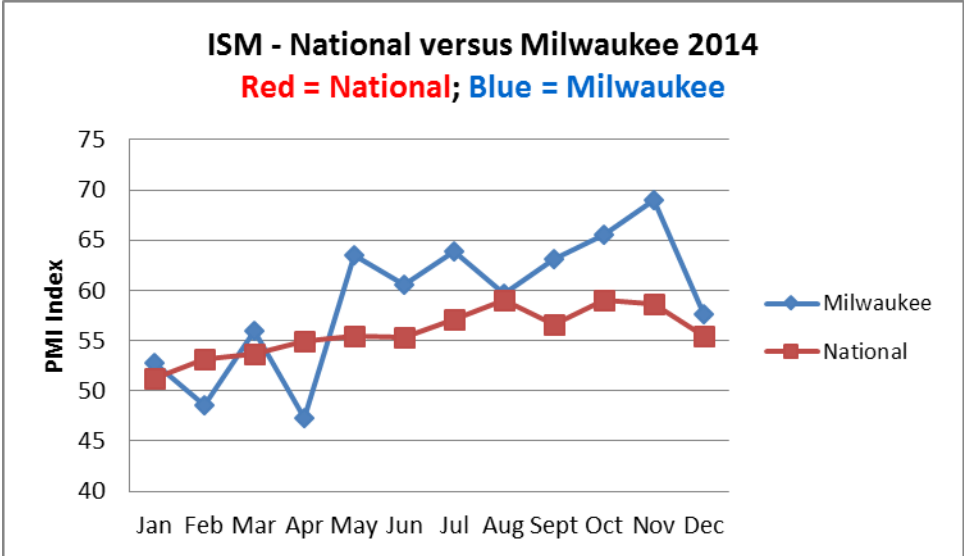
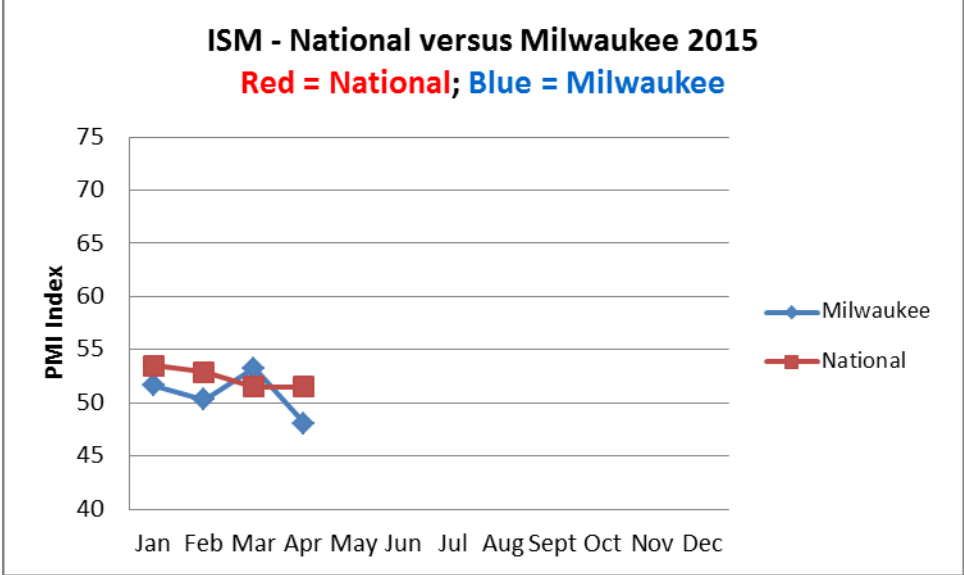
Average commitment lead time for Capital Expenditures increased by 7 days to 96 days. Average lead time for Production Materials decreased by 9 days to 34 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased by 10 days to 13 days.

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 46.2% of respondents expect positive conditions, 53.8% expect conditions to remain the same and none of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Apr-15	46.2%	53.8%	0.0%	73.1%
Mar-15	53.3%	40.0%	6.7%	73.3%
Feb-15	33.3%	53.3%	13.3%	60.0%

Milwaukee versus the Nation – (for graphs of 2010, 2011, 2012, and 2013 see the Dec 2013 and Dec 2012 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>