

Marquette-ISM Report on Manufacturing October 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	October 2015	September 2015	August 2015
Seasonally adjusted	46.66	39.44	47.67

(Milwaukee, Wisconsin) –October’s Index registered at 46.66, which is below the 50-level indicating negative territory for the seventh straight month. This places the index at or above 50 for only seventeen of the past twenty six months.

What respondents are saying in October 2015:

- There has been continued concern over the lack of quality vendors that lead to long term issue concerns such as poor customer service and lower inventory.
- The continuing slowdown in the energy sector, specifically oil and gas, has caused a severe slowdown in the sales of materials used in fracking which is a significant part of some companies’ total sales.
- There are still plans to institute a Kanban system.

- There are expectations that manufacturing will be down in the Midwest in the coming six months.

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

MANUFACTURING AT A GLANCE: October 2015*				
Index	Series Index Oct-2015	Series Index Sep-2015	Percentage Point Change	Direction
PMI	46.66	39.44	7.2	declining
New Orders	46.67	35.51	11.2	declining
Production	48.87	35.29	13.6	declining
Employment	51.44	41.88	9.6	growing
Supplier Deliveries	46.66	53.28	-6.6	faster
Inventories	41.37	31.25	10.1	declining
Customers' Inventories *	53.57	53.33	0.2	growing
Prices *	23.33	21.88	1.5	declining
Backlog of Orders *	40.00	37.50	2.5	declining
Exports *	33.33	40.91	-7.6	declining
Imports *	50.00	54.55	-4.5	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 October 2015:

- There has been a substantial increase in the number of orders.
- Due to the increase in the number of orders, there is also need to add some capacity in production.
- There have been continued low incoming orders.

Blue and White Collar Employment:

We have collected input on Blue and White Collar Employment. The indices are below for **August 2015, September 2015, and October 2015.**

	Diffusion Index Aug-2015	Diffusion Index Sep-2015	Diffusion Index Oct-2015	Direction	Comments
Blue Collar	54.3	45.1	41.4	declining	-
White Collar	50.7	58.0	55.1	growing	-

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

What respondents are saying in October 2015:

- N/A

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 **August 2015, and September 2015, and October 2015.**

Category	August 2015 Diffusion index	September 2015 Diffusion index	October 2015 Diffusion index	change in percentage point
Aluminum	21.43%	5.56%	28.57%	23.0
Brass	12.50%	25.00%	33.33%	8.3
Caustic Soda	50.00%	25.00%	25.00%	0.0
Chemicals	35.71%	50.00%	30.00%	-20.0
Copper	14.29%	16.67%	33.33%	16.7
Copper Based Products	16.67%	33.33%	33.33%	0.0
Cocoa Powder	50.00%	-	-	-
Corn	0.00%	-	0.00%	-
Corrugated Containers	50.00%	42.86%	50.00%	7.1
Diesel	50.00%	10.00%	50.00%	40.0
Electronic Components	50.00%	50.00%	50.00%	0.0
Gasoline	66.67%	0.00%	25.00%	25.0
High Density Polyethylene	25.00%	50.00%	25.00%	-25.0
Natural Gas	41.67%	33.33%	25.00%	-8.3

Nickel	0.00%	0.00%	0.00%	0.0
PET	-	50.00%	50.00%	0.0
Plastic Resins	41.67%	37.50%	40.00%	2.5
Polyester	37.50%	50.00%	25.00%	-25.0
Polyethylene	50.00%	16.67%	33.33%	16.7
Resins	50.00%	25.00%	33.33%	8.3
Soybean Oil	-	-	-	-
Stainless Steel	50.00%	25.00%	30.00%	5.0
Starch	50.00%	-	-	-
Steel	50.00%	25.00%	22.22%	-2.8
Steel Products	50.00%	21.43%	35.71%	14.3
Sulfur	-	-	-	-
Tin Plate	33.33%	50.00%	50.00%	0.0
Titanium Dioxide	0.00%	50.00%	33.33%	-16.7
Wheat	-	0.00%	0.00%	0.0
Beef/Pork	50.00%	50.00%	50.00%	0.0

Buying Policy

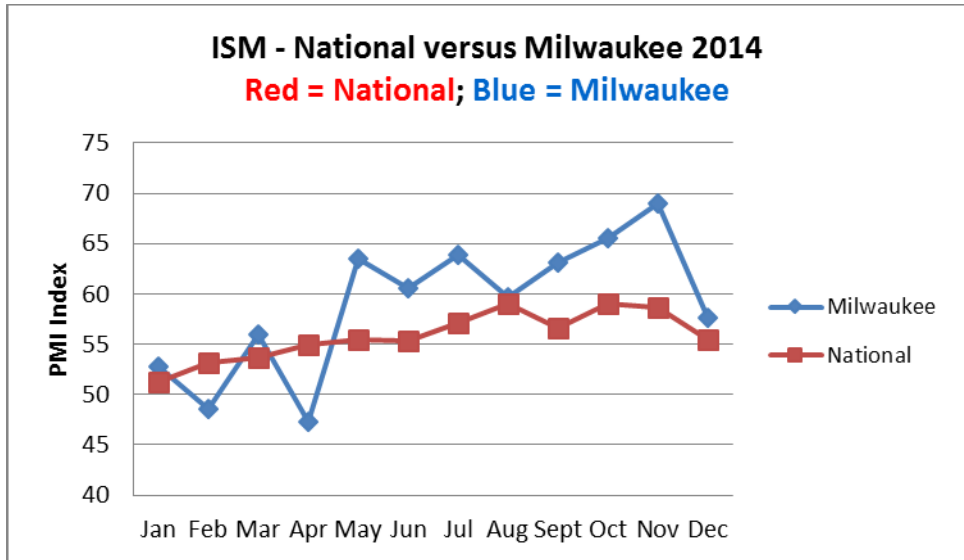
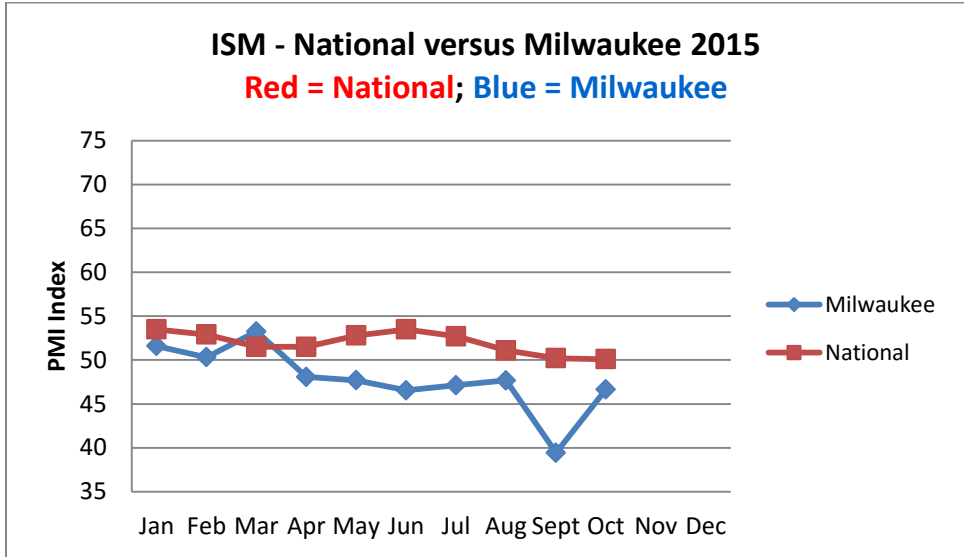
Average commitment lead time for Capital Expenditures increased by 11 days to 102 days. Average lead time for Production Materials decreased by 9 days to 31 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased by 9 days to 14 days.

Six- Month Outlook on Business Conditions

In this outlook, there is a downward shift in positive expectations compared with September in terms of market conditions. Approximately 21.4% of respondents expect positive conditions, 57.1% expect conditions to remain the same and 21.4% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Oct-15	21.4%	57.1%	21.4%	50.0%
Sep-15	38.5%	38.5%	23.1%	57.7%
Aug-15	38.5%	53.8%	7.7%	65.4%

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