

## Marquette-ISM Report on Manufacturing August 2015- Final Release

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### ***Final Version (includes ISM National Results for August, 2015)***

*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	August 2015	July 2015	June 2015
Seasonally adjusted	47.67	47.12	46.55

(Milwaukee, Wisconsin) – August’s Index registered at 47.67, which is below the 50-level indicating negative territory for the fifth straight month. For 2015, the Index has been positive only in the first quarter.

### **What respondents are saying in August 2015:**

- Business seems to be hit or miss with busy weeks being followed by slow weeks.
- There is continued pessimism for long term outlook.
- There are plans to institute a Kanban system as well as some plans to shut them down.
- Suppliers’ deliveries times are still bad.
- Customers have little confidence in order books resulting in uncertainty about what the future will hold, but there is still some optimism.

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

<b>MANUFACTURING AT A GLANCE: August 2015*</b>				
<b>Index</b>	<b>Series Index Aug-2015</b>	<b>Series Index July-2015</b>	<b>Percentage Point Change</b>	<b>Direction</b>
<b>PMI</b>	47.67	47.12	0.6	declining
<b>New Orders</b>	47.52	46.08	1.4	declining
<b>Production</b>	32.83	44.88	-12.0	declining
<b>Employment</b>	47.04	45.74	1.3	declining
<b>Supplier Deliveries</b>	57.37	48.88	8.5	slower
<b>Inventories</b>	53.57	50.00	3.6	growing
<b>Customers' Inventories *</b>	46.43	50.00	-3.6	declining
<b>Prices *</b>	28.57	39.29	-10.7	declining
<b>Backlog of Orders *</b>	57.14	42.86	14.3	growing
<b>Exports *</b>	36.36	35.00	1.4	declining
<b>Imports *</b>	45.45	44.44	1.0	declining

(\*) 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 August 2015:**

- Orders have slowed from a few months ago in response to lack of demand.
- There have been critical machine breakdowns.
- There is near term scheduling volatility.
- Near term orders are volatile.

## Blue and White Collar Employment:

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

	Diffusion Index June-2015	Diffusion Index July-2015	Diffusion Index Aug-2015	Direction	Comments
<b>Blue Collar</b>	58.8	52.8	54.3	growing	-
<b>White Collar</b>	62.8	45.7	50.7	growing	-

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

## What respondents are saying in August 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 **June 2015, and July 2015, and August 2015.**

Category	June 2015 Diffusion index	July 2015 Diffusion index	August 2015 Diffusion index	change in percentage point
Aluminum	35.00%	27.78%	48.89%	21.1
Brass	50.00%	25.00%	62.50%	37.5
Caustic Soda	25.00%	50.00%	50.00%	0.0
Chemicals	40.00%	50.00%	65.00%	15.0
Copper	33.33%	37.50%	52.08%	14.6
Copper Based Products	33.33%	16.67%	41.67%	25.0
Cocoa Powder	-	-	-	-
Corn	50.00%	-	-	-
Corrugated Containers	50.00%	50.00%	75.00%	25.0
Diesel	60.00%	10.00%	65.00%	55.0
Electronic Components	50.00%	25.00%	62.50%	37.5
Gasoline	71.43%	20.00%	81.43%	61.4
High Density Polyethylene	50.00%	33.33%	66.67%	33.3
Natural Gas	50.00%	40.00%	70.00%	30.0

Nickel	0.00%	0.00%	0.00%	0.0
PET	25.00%	0.00%	25.00%	25.0
Plastic Resins	42.86%	37.50%	61.61%	24.1
Polyester	37.50%	33.33%	54.17%	20.8
Polyethylene	75.00%	50.00%	100.00%	50.0
Resins	75.00%	50.00%	100.00%	50.0
Soybean Oil	-	-	-	-
Stainless Steel	31.25%	42.86%	52.68%	9.8
Starch	-	50.00%	-	-
Steel	28.57%	35.71%	46.43%	10.7
Steel Products	33.33%	42.86%	54.76%	11.9
Sulfur	-	-	-	-
Tin Plate	50.00%	50.00%	75.00%	25.0
Titanium Dioxide	50.00%	50.00%	75.00%	25.0
Wheat	-	-	-	-
Beef/Pork	0.00%	0.00%	0.00%	0.0

## Buying Policy

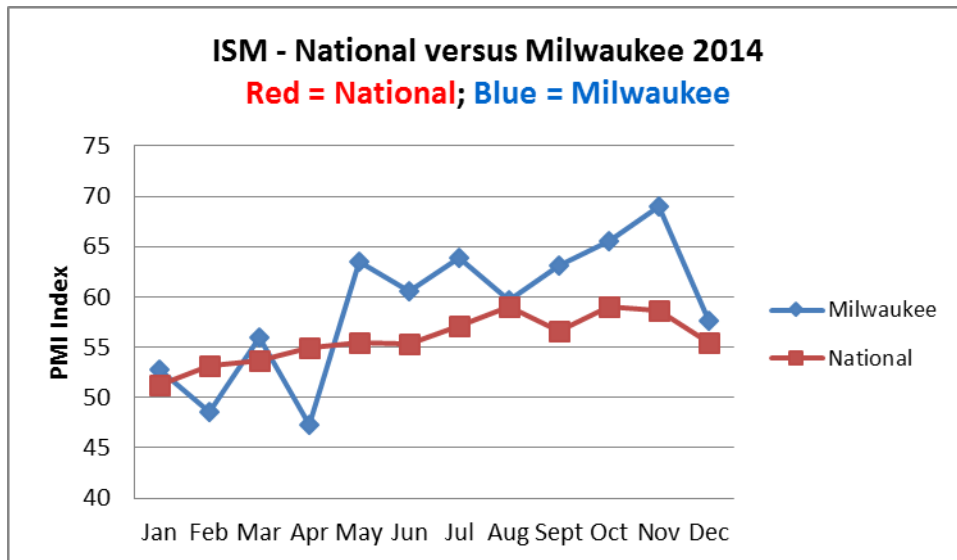
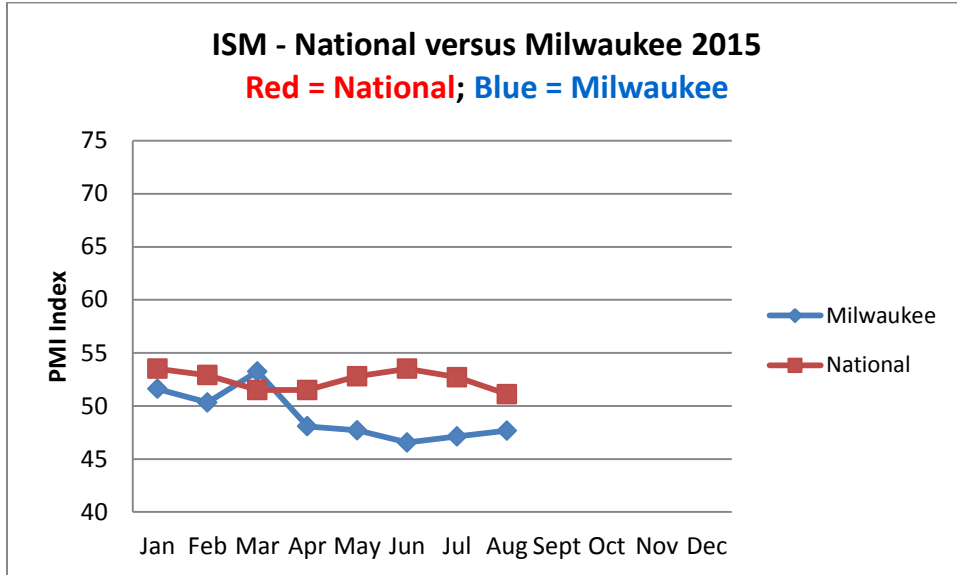
Average commitment lead time for Capital Expenditures increased by 55 days to 123 days. Average lead time for Production Materials increased by 7 days to 46 days. Average lead time for Maintenance, Repair and Operating (MRO) Supplies decreased by 2 days to 20 days.

## Six- Month Outlook on Business Conditions

In this outlook, there is an upward shift in positive expectations compared with July in terms of market conditions. Approximately 38.5% of respondents expect positive conditions, 53.8% expect conditions to remain the same and 7.7% of the respondents expect conditions to worsen within the next six months.

	Expect Positive Conditions	Expect Same Conditions	Expect Worse Conditions	Diffusion Index
Aug-15	38.5%	53.8%	7.7%	65.4%
July-15	28.6%	57.1%	14.3%	57.1%
June-15	43.8%	37.5%	18.8%	62.5%

**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*<sup>®</sup> 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>