Prepared by: Dr. Randy Cragun
Assistant Professor of Economics
Niagara University
rcragun@niagara.edu

Institute for Supply Management - Buffalo (ISM-Buffalo, Inc.)
November 2017 Business Survey Monthly Comparison Report

The Buffalo-Niagara Manufacturing index

The Buffalo-Niagara Manufacturing index ("local PMI") fell to 62.1 in November (where values of 50.0 or greater are generally consistent with increased activity relative to the prior month). Because the index is highly volatile, readers should pay attention to average values over multiple months; the local PMI for November is still high relative to recent years and early 2017 (and the index has been increasing on average throughout that period), but there are concerning signals in the New Orders and Vendor Deliveries indices. The PMI and other indices in this report are calculated from a survey administrered by ISM-Buffalo, Inc.

This month (seasonally adjusted)

Index Name	Index	Direction	Change in Index From Last Month
Manufacturing	62.1	Increasing	Lower growth rate
Production	73.0	Increasing	Lower growth rate
New Orders	60.0	Increasing	Lower growth rate
Inventories	60.0	Increasing	Lower growth rate
Employment	66.1	Increasing	Lower growth rate
Deliveries	51.3	No Change	Same slowdown of deliveries
Prices	71.4	Increasing	Higher growth rate

National and state indicators

The national PMI (58.2) indicated continued expansion at rates similar to the 2017 average and similar to 2005. The NY Fed's Empire State Manufacturing Survey's general business index (a statewide measure) indicated production growth and increasing employment in November, but the December employment growth numbers are less robust, with only a slightly larger fraction of respondents indicating increased employment than those indicating decreased employment. National unemployment (4.1%) and other labor underutilization measures from the Bureau of Labor Statistics have been nearly constant for two months and were falling slowly over the last year.

Sub-indices

The seasonally-adjusted Production, Employment, and Inventories indices suggested expansion at rates slightly above early 2017, but the New Orders and Vendor Deliveries indices suggest some risk that the expansion may slow down in the near future, as the rate at which new orders increase may have been slowing for the last half year, and vendor deliveries are no longer slowing. Respondents again reported facing growing commodity prices.

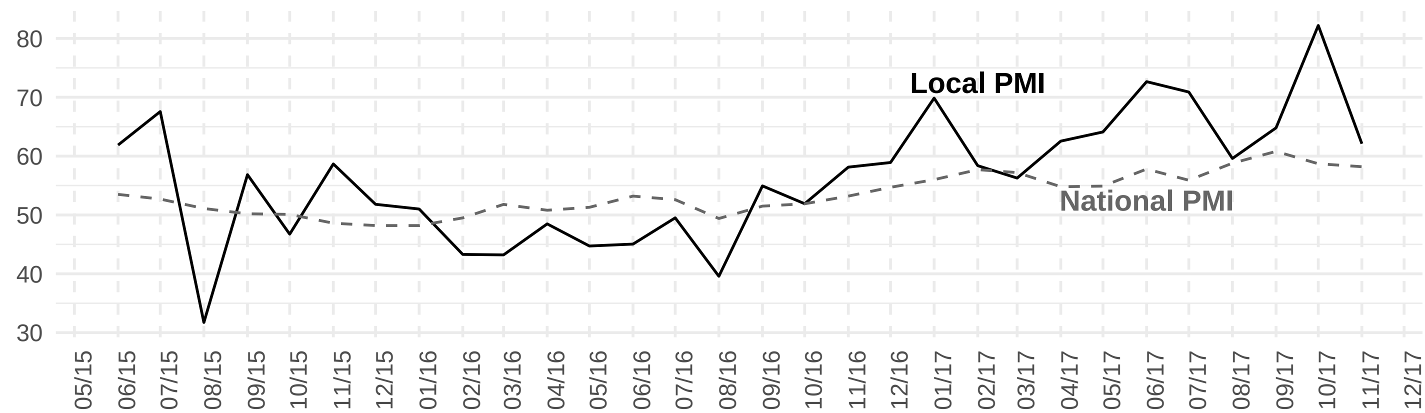

Figure 1: Local and National PMI over the last 2.5 years

Production Buying Policy

Days ahead production buying commitments among respondents remained nearly constant between October and November at 69.3 days, a value in line with the long-term trend.

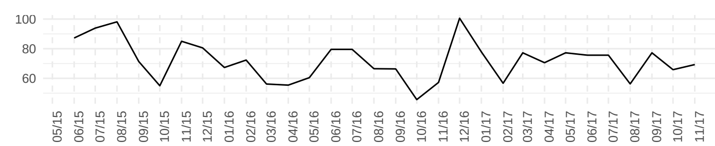

Figure 2: Production Buying Policy

MRO Buying Policy (Maintenance, Repair, and Operating)

Maintenance, Repair, and Operating (MRO) supplies on hand among respondents rose slightly in November to 30.7 days, although the value is still broadly consistent with fairly stable values around 30 days for the last two years.

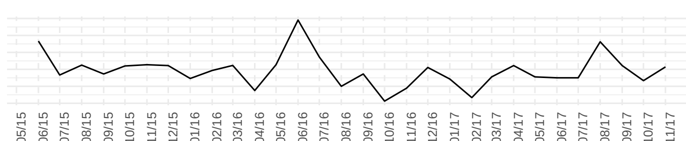

Figure 3: MRO Buying Policy

Capital Equipment Buying Policy

Manufacturers reported making capital equipment buying commitments an average of 172.1 days ahead in November. The index has been volatile for a few months, but the values are generally consistent with the previous year.

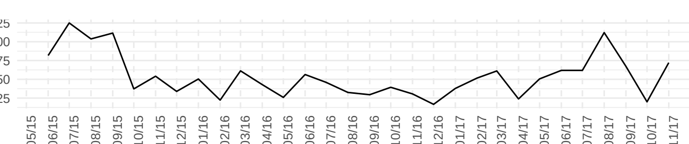

Figure 4: Capital Buying Policy

Production Level

Month	Higher	Same	Lower	Index
Nov 2017	71.4%	0.0%	28.6%	71.4
Oct 2017	100.0%	0.0%	0.0%	100.0
Sep 2017	66.7%	11.1%	22.2%	72.2

The non-seasonally adjusted Production diffusion index fell to 71.4 after a big swing upward last month. The long-term trend points to expansion of production.

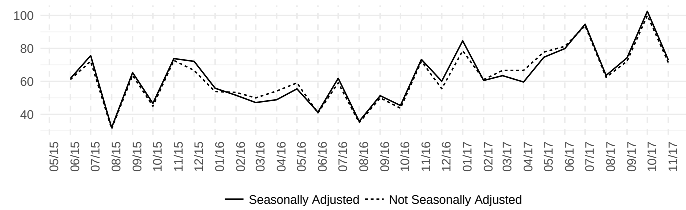

Figure 5: Production Diffusion Index

New Orders

Month	Higher	Same	Lower	Index
Nov 2017	57.1%	0.0%	42.9%	57.1
Oct 2017	83.3%	16.7%	0.0%	91.7
Sep 2017	55.6%	11.1%	33.3%	61.1

The non-seasonally adjusted New Orders index fell back to 57.1 in November, consistent with values from August and September. Since August of last year, this series has consistently been in expansionary territory, but the three-month moving average has been decreasing fairly steadily since May (indicating that new orders are growing a slower rate). New orders are a good leading indicator of future economic performance, so this index should be watched closely in upcoming months. Combined with the fact that vendor deliveries have stopped slowing down (see below), this is a concerning result that could indicate future slowdowns of production and employment growth.

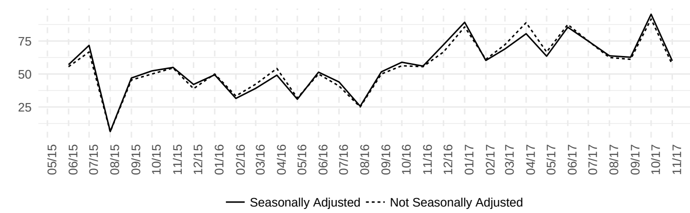

Figure 6: New Orders Diffusion Index

Inventories of Purchased Goods

Month	Higher	Same	Lower	Index
Nov 2017	57.1%	0.0%	42.9%	57.1
Oct 2017	66.7%	33.3%	0.0%	83.3
Sep 2017	44.4%	33.3%	22.2%	61.1

The Inventories of Purchased Goods index held steady with the last half year (last month was anomalous) and continued to indicate increasing inventories on average for the seventh month in a row in November.

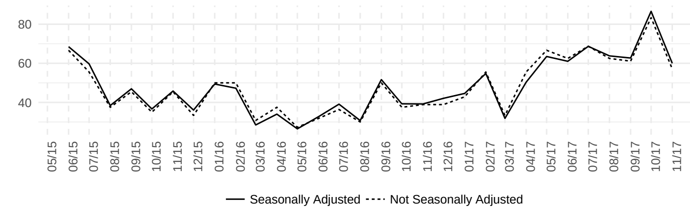

Figure 7: Purchased Inventories Diffusion Index

Employment Levels

Month	Higher	Same	Lower	Index
Nov 2017	42.9%	42.9%	14.3%	64.3
Oct 2017	50.0%	50.0%	0.0%	75.0
Sep 2017	44.4%	33.3%	22.2%	61.1

Although the non-seasonally adjusted Employment index fell to 64.3 in November from October's level of 75.0, the index is still consistent with stronger employment growth than in recent years and even in early 2017.

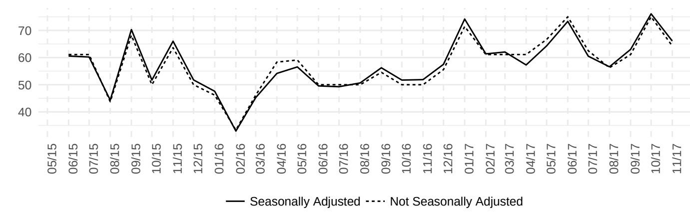

Figure 8: Employment Diffusion Index

Vendor Deliveries

Month	Slower	Same	Faster	Index
Nov 2017	0.0%	100.0%	0.0%	50.0
Oct 2017	0.0%	100.0%	0.0%	50.0
Sep 2017	22.2%	77.8%	0.0%	61.1

The Vendor Deliveries index registered a value of 50.0 in November, with every respondent indicating that deliveries were neither faster nor slower than last month. Slower deliveries are generally consistent with increasing economic activity. Over the last year, deliveries have been getting slower on average but at a decreasing rate.

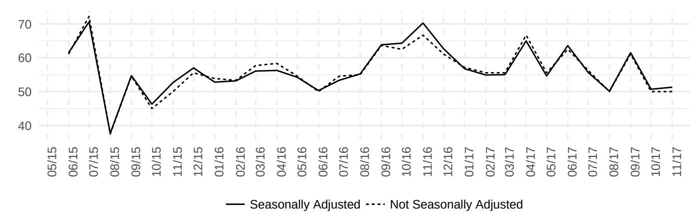

Figure 9: Vendor Deliveries Diffusion Index

Commodity Prices

Month	Higher	Same	Lower	Index
Nov 2017	42.9%	57.1%	0.0%	71.4
Oct 2017	33.3%	66.7%	0.0%	66.7
Sep 2017	55.6%	44.4%	0.0%	77.8

Commodity Prices continued to grow for many respondents, with an index of (71.4) in November.

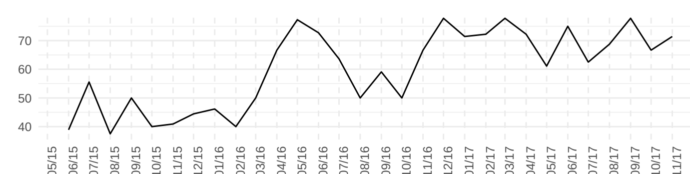

Figure 10: Commodity Prices Diffusion Index