

Buffalo-area manufacturing activity continued to grow in November, but the data are consistent with slower growth than in previous months. The Buffalo-Niagara Manufacturing index (or PMI®) fell to 65.7 in November after October's value of 78.0. The PMI® is a weighted average of a set of sub-indices calculated from a survey of local supply executives administered by ISM-Buffalo, Inc., and values of 50.0 or greater are generally consistent with increased business activity relative to the prior month.

Although most of the sub-indices are consistent with economic expansion, they may indicate slower growth than over the last year. Most respondents continued to report increasing production and new orders (although at a lower rate), and no respondents indicated decreasing employment. A smaller proportion of respondents reported facing growing commodity prices than have since the beginning of the year, and reports of growing inventories dropped dramatically. We should wait for more data before making strong claims based on such volatile indices, but the December Empire State Manufacturing Survey (from the NY Fed) also showed slowing growth statewide.

This month (seasonally adjusted)			
Index Name	Index	Direction	Change in Index From Last Month
PMI	65.7	Increasing	Lower growth rate
Production	68.4	Increasing	Lower growth rate
New Orders	70.8	Increasing	Lower growth rate
Inventories	44.2	Decreasing	Lower growth rate
Employment	76.5	Increasing	Higher growth rate
Deliveries	68.4	Slower	More slowdown of deliveries
Prices	66.7	Increasing	Lower growth rate

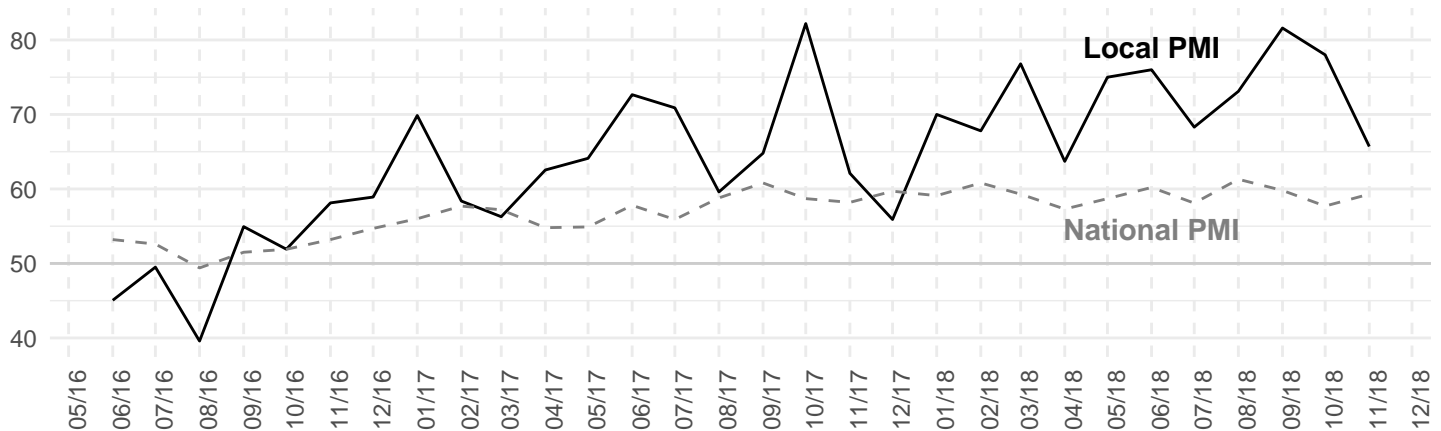


Figure 1: Local and National PMI over the last 2.5 years

Production Buying Policy

Days ahead production buying commitments among respondents decreased between October and November from 82.1 to 65.8 days, returning to levels seen throughout 2018.

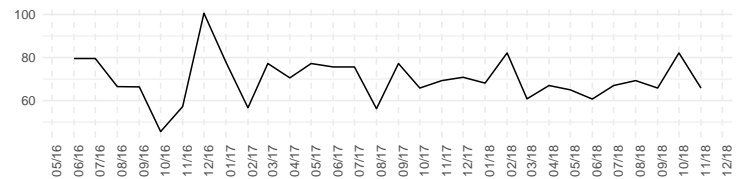


Figure 2: Production Buying Policy

MRO Buying Policy (Maintenance, Repair, and Operating)

Maintenance, Repair, and Operating (MRO) supplies on hand among respondents stayed nearly constant from October to November at 21.7 days. The value has been nearly constant since April, when it fell below the 2017 norm.

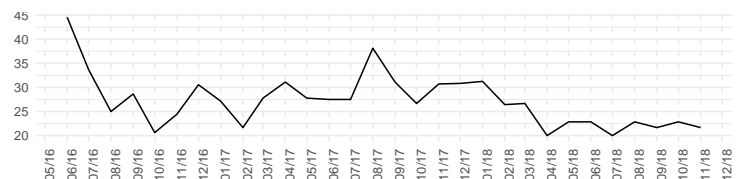


Figure 3: MRO Buying Policy

Capital Equipment Buying Policy

Manufacturers reported making capital equipment buying commitments an average of 130.8 days ahead in November, which is about average for recent months.

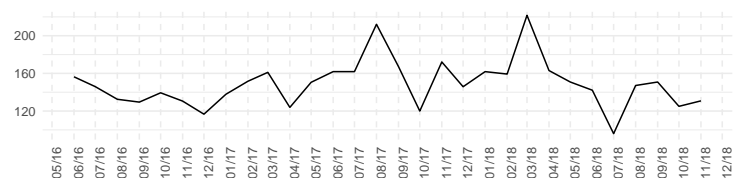


Figure 4: Capital Buying Policy

Production Level

Month	Higher	Same	Lower	Index
Nov 2018	50.0%	33.3%	16.7%	66.7
Oct 2018	85.7%	14.3%	0.0%	92.9
Sep 2018	83.3%	16.7%	0.0%	91.7

The Production diffusion index fell from 92.9 to 66.7 in November. The majority of respondents continued to indicate increasing or unchanged production, and this month's index value is similar to those observed over the last two years.

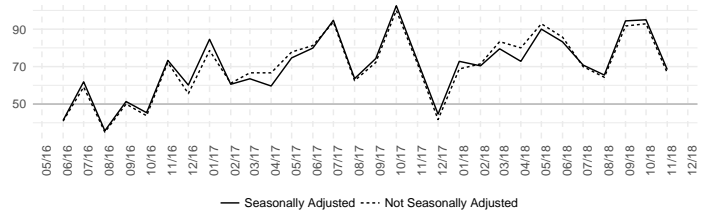


Figure 5: Production Diffusion Index

New Orders

Month	Higher	Same	Lower	Index
Nov 2018	50.0%	33.3%	16.7%	66.7
Oct 2018	71.4%	28.6%	0.0%	85.7
Sep 2018	83.3%	16.7%	0.0%	91.7

The non-seasonally-adjusted New Orders index stayed high at 66.7 in November.

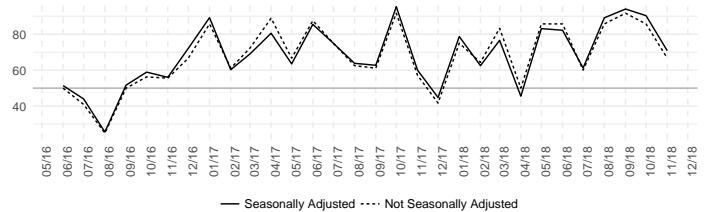


Figure 6: New Orders Diffusion Index

Inventories of Purchased Goods

Month	Higher	Same	Lower	Index
Nov 2018	33.3%	16.7%	50.0%	41.7
Oct 2018	57.1%	42.9%	0.0%	78.6
Sep 2018	66.7%	33.3%	0.0%	83.3

Reports of inventory growth fell dramatically, with a non-seasonally-adjusted Inventories of Purchased Goods index of 41.7 in November. In a break with recent months, half of respondents indicated decreasing inventories.

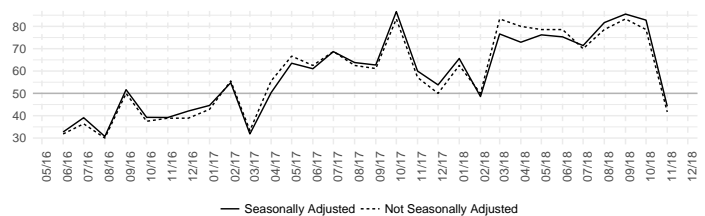


Figure 7: Purchased Inventories Diffusion Index

Employment Levels

Month	Higher	Same	Lower	Index
Nov 2018	50.0%	50.0%	0.0%	75.0
Oct 2018	28.6%	57.1%	14.3%	57.1
Sep 2018	50.0%	50.0%	0.0%	75.0

The non-seasonally-adjusted Employment index returned to the high values seen throughout most of 2017 and 2018 in November, with a value of 75.0. Volatility in the indices should be expected due to the small sample size.

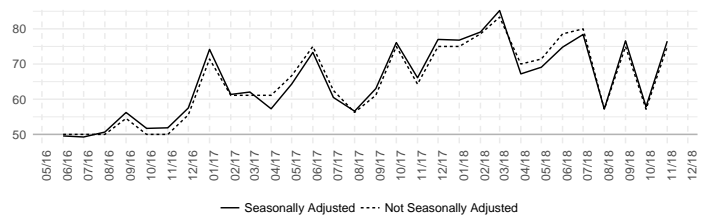


Figure 8: Employment Diffusion Index

Vendor Deliveries

Month	Slower	Same	Faster	Index
Nov 2018	33.3%	66.7%	0.0%	66.7
Oct 2018	28.6%	71.4%	0.0%	64.3
Sep 2018	16.7%	83.3%	0.0%	58.3

The Vendor Deliveries slowdown continued in November. A higher index value represents slower deliveries (longer delivery times), as slower deliveries are generally consistent with increasing shipments and increasing economic activity.

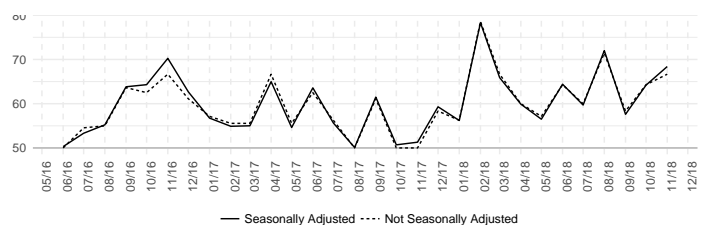


Figure 9: Vendor Deliveries Diffusion Index

Commodity Prices

Month	Higher	Same	Lower	Index
Nov 2018	50.0%	33.3%	16.7%	66.7
Oct 2018	100.0%	0.0%	0.0%	100.0
Sep 2018	66.7%	33.3%	0.0%	83.3

Reports of commodity price growth were much less common than in recent months. We will have to wait to see if these data indicate a respite from the last year of inflation, as the survey sample size is too small for precise estimation based on a single month. The December Empire State Manufacturing Survey (from the NY Fed) shows only a moderate decrease in price growth.

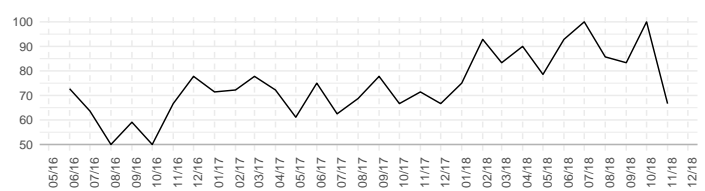


Figure 10: Commodity Prices Diffusion Index