

**The Buffalo-Niagara Manufacturing index**

The Buffalo-Niagara Manufacturing index (or PMI®) brought good news in February with the second straight month with index values near the 2017 average. February's value of 67.8 (slightly below the January value of 70.0) indicates strong growth. Values of 50.0 or greater are generally consistent with increased business activity relative to the prior month. The index increased on average from early 2016 until the last four months and has indicated positive growth in local economic activity since September 2016. The PMI® and other indices in this report are calculated from a survey of local supply executives administered by ISM-Buffalo, Inc.

**National and state indicators**

The national PMI® (60.8) indicated continued expansion at rates similar to the late 2017 average and similar to pre-recession highs from 2005. Seasonally adjusted National unemployment (4.1%) and other labor underutilization measures from the Bureau of Labor Statistics were unchanged from January to February and have been falling slowly over the last year. Long-term unemployment (15 weeks or more) fell from 1.8% (seasonally adjusted) in February 2017 to 1.4% last month. The NY Fed's March 2018 Empire State Manufacturing Survey general business index (a statewide measure) indicated strong growth of business activity in the state, with new orders, unfilled orders, shipments, employment, input prices, and inventories growing and delivery times lengthening.

**This month (seasonally adjusted)**

Index Name	Index	Direction	Change in Index From Last Month
PMI	67.8	Increasing	Lower growth rate
Production	70.4	Increasing	Lower growth rate
New Orders	62.5	Increasing	Lower growth rate
Inventories	48.6	No Change	Lower growth rate
Employment	79.1	Increasing	Higher growth rate
Deliveries	78.3	Slower	More slowdown of deliveries
Prices	92.9	Increasing	Higher growth rate

**Overview of sub-indices**

The Production and New Orders indices have bounced back up slightly over the last two month to reach levels close to those in early 2017 after two months of concerning low values, while Employment continued its strong growth among respondents. More than half of respondents indicated that vendor deliveries slowed (unfortunately, no respondents told us their suspected reasons for the slowdown). Most respondents reported facing growing commodity prices, and no respondents reported facing shrinking commodity prices, in line with extensive input price increases reported in the NY Fed's March 2018 Empire State Manufacturing Survey.

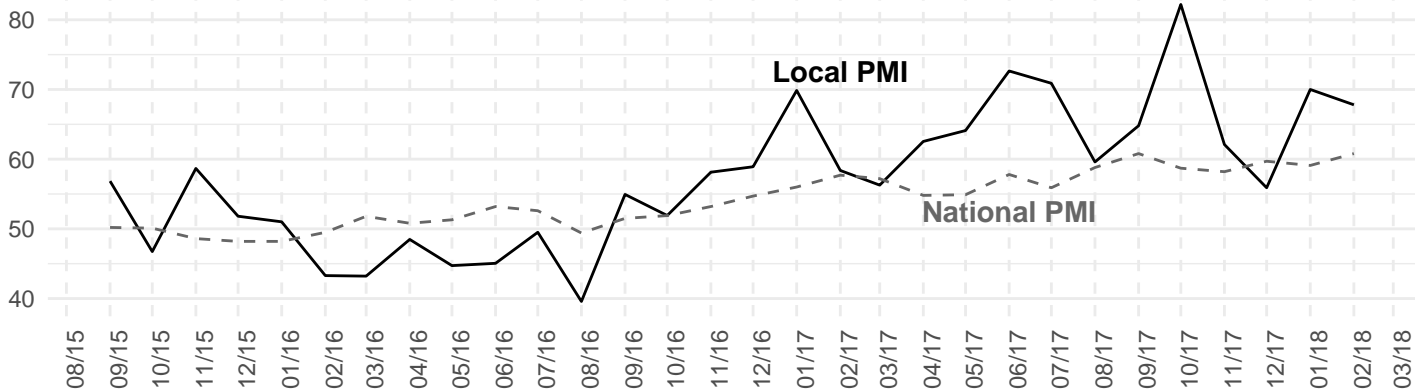


Figure 1: Local and National PMI over the last 2.5 years

**Production Buying Policy**

Days ahead production buying commitments among respondents rose slightly between January and February, reaching a value of 82.1 days. This value has changed little since the beginning of 2017.

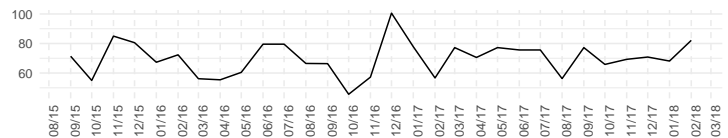


Figure 2: Production Buying Policy

**MRO Buying Policy (Maintenance, Repair, and Operating)**

Maintenance, Repair, and Operating (MRO) supplies on hand among respondents fell slightly between January and February to a level of 26.4 days. The value is consistent with fairly stable values around 30 days for the last two years.

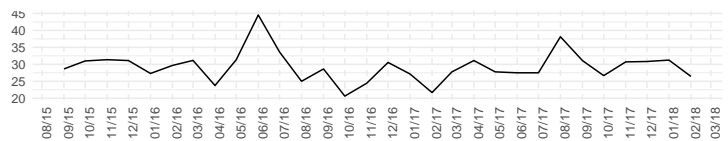


Figure 3: MRO Buying Policy

**Capital Equipment Buying Policy**

Manufacturers reported making capital equipment buying commitments an average of 159.3 days ahead in February. The value is generally consistent with the previous two years.

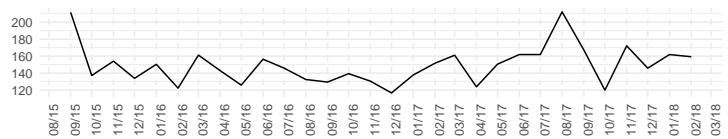


Figure 4: Capital Buying Policy

## Production Level

Month	Higher	Same	Lower	Index
Feb 2018	57.1%	28.6%	14.3%	71.4
Jan 2018	62.5%	12.5%	25.0%	68.8
Dec 2018	33.3%	16.7%	50.0%	41.7

The Production diffusion index remained fairly steady between January and February, with a (non-seasonally-adjusted) value of 71.4, indicating strong production growth.

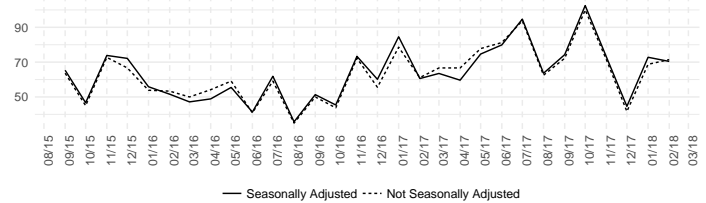


Figure 5: Production Diffusion Index

## New Orders

Month	Higher	Same	Lower	Index
Feb 2018	57.1%	14.3%	28.6%	64.3
Jan 2018	75.0%	0.0%	25.0%	75.0
Dec 2018	33.3%	16.7%	50.0%	41.7

The non-seasonally-adjusted New Orders index fell to 64.3 in February, slightly below the 2017 average. This series has been in expansionary territory since October of 2016, and the three-month moving average is starting to pick up again after decreasing fairly steadily since May (indicating that new orders had been growing at slower rate).

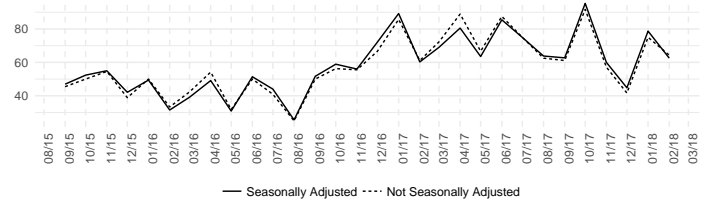


Figure 6: New Orders Diffusion Index

## Inventories of Purchased Goods

Month	Higher	Same	Lower	Index
Feb 2018	42.9%	14.3%	42.9%	50.0
Jan 2018	50.0%	25.0%	25.0%	62.5
Dec 2018	50.0%	0.0%	50.0%	50.0

The non-seasonally-adjusted Inventories of Purchased Goods index fell to 50.0 in February.

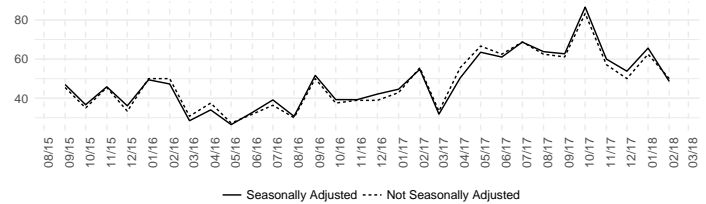


Figure 7: Purchased Inventories Diffusion Index

## Employment Levels

Month	Higher	Same	Lower	Index
Feb 2018	57.1%	42.9%	0.0%	78.6
Jan 2018	50.0%	50.0%	0.0%	75.0
Dec 2018	50.0%	50.0%	0.0%	75.0

The non-seasonally-adjusted Employment index stayed quite steady at a very-high value of 78.6 in February, indicating continued expansion of employment. The index has been rising on average over the last two years, and every respondent for four of the last five months has indicated increasing or unchanged employment.

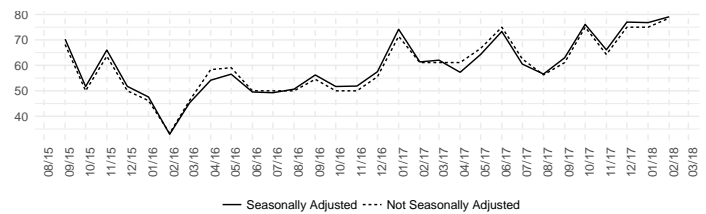


Figure 8: Employment Diffusion Index

## Vendor Deliveries

Month	Slower	Same	Faster	Index
Feb 2018	57.1%	42.9%	0.0%	78.6
Jan 2018	12.5%	87.5%	0.0%	56.2
Dec 2018	16.7%	83.3%	0.0%	58.3

The Vendor Deliveries index registered a value of 78.6 in February, higher than in any other month in the history of the series. Many more respondents indicated that deliveries were slower in February than in the previous month than have reported such slowdowns in the past. Slower deliveries are generally consistent with increasing economic activity. Since late 2016, deliveries had been getting slower on average but at a decreasing rate. Unfortunately, no survey respondents described reasons for the February slowdown.

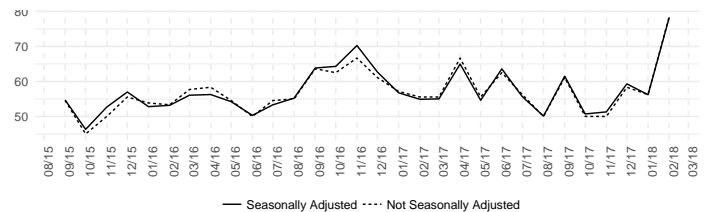


Figure 9: Vendor Deliveries Diffusion Index

## Commodity Prices

Month	Higher	Same	Lower	Index
Feb 2018	85.7%	14.3%	0.0%	92.9
Jan 2018	50.0%	50.0%	0.0%	75.0
Dec 2018	33.3%	66.7%	0.0%	66.7

Commodity Prices continued to grow for many respondents, with an index of 92.9 in February. No respondent has indicated facing lowering commodity prices during the last six months, and a greater proportion of respondents indicated facing growing prices this month than at any time since the beginning of the survey (however, this month's sample size is lower than in past years, which makes extreme values more likely). The NY Fed's March 2018 Empire State Manufacturing Survey (a statewide measure) also revealed a "new multiyear high" in input price growth.

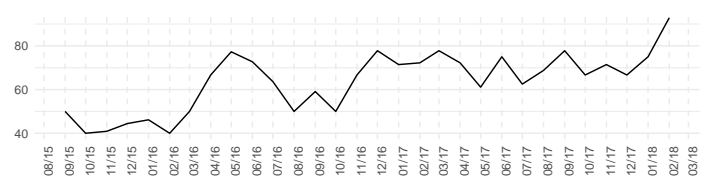


Figure 10: Commodity Prices Diffusion Index