Consensus Outlook – 2018 and 2019

Twenty-fifth Annual Automotive Outlook Symposium

June 1, 2018

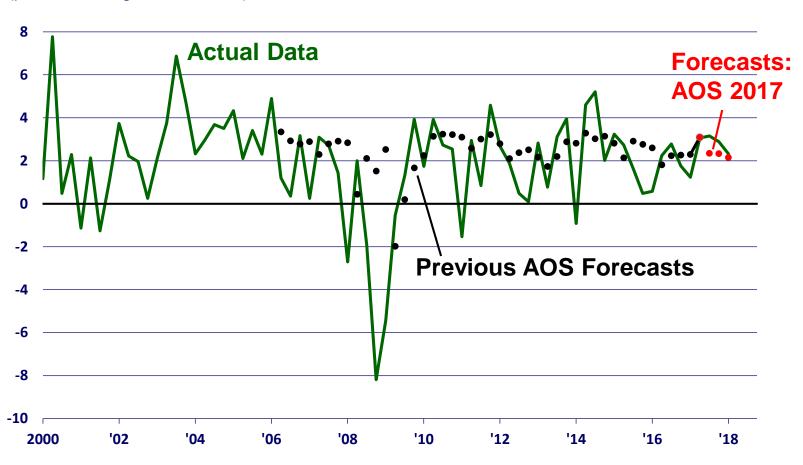
William Strauss
Senior Economist and Economic Advisor
Federal Reserve Bank of Chicago

The views expressed herein are those of the author and do not necessarily represent the views of the Federal Reserve System or the Federal Reserve Bank of Chicago.

Review of Past Performance

Real GDP growth was stronger than forecast

Real GDP



Oil prices were expected to remain flat but rose sharply towards the end of last year

Oil Prices - West Texas Intermediate

(dollars per barrel)



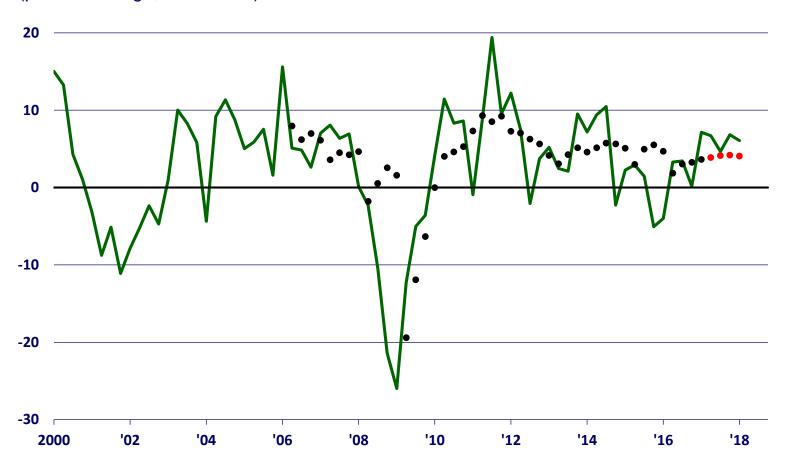
This in part explains why recent inflation rose at a faster pace than forecast

CPI Inflation Rate



Business fixed investment was much stronger than expected

Business Fixed Investment



Inventories contribution to growth was less than predicted

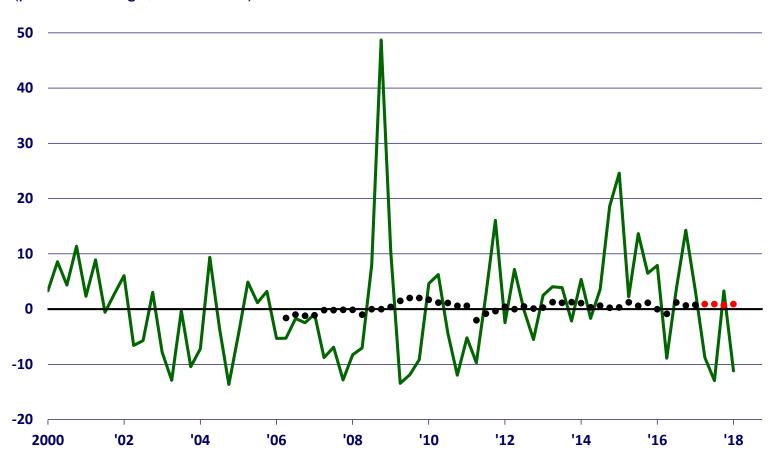
Change in Private Inventories

(billions of constant dollars)



The trade weighted value of the dollar was expected to edge higher, but it fell at a significant pace

J.P. Morgan Trade Weighted Dollar



However, the trade deficit continued to rise

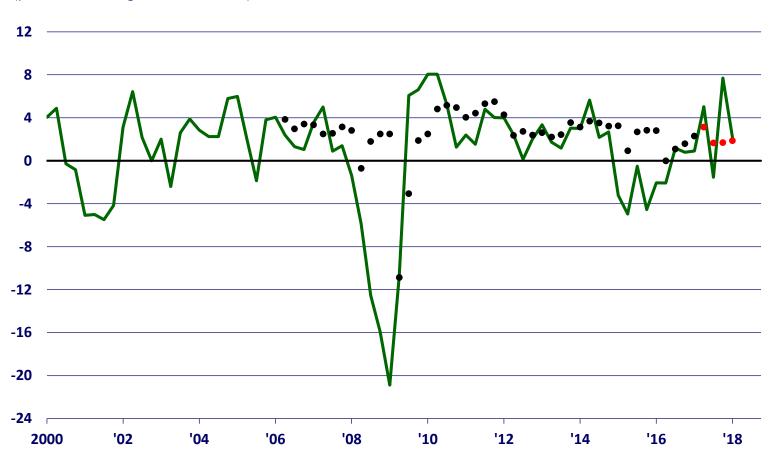
Net Exports of Goods and Services

(billions of constant dollars)



Industrial production improved at a pace just a bit higher than what was expected

Industrial Production



The unemployment rate moved somewhat below the rate forecast

Unemployment Rate

(percent)



Consumer spending was very close to what was predicted

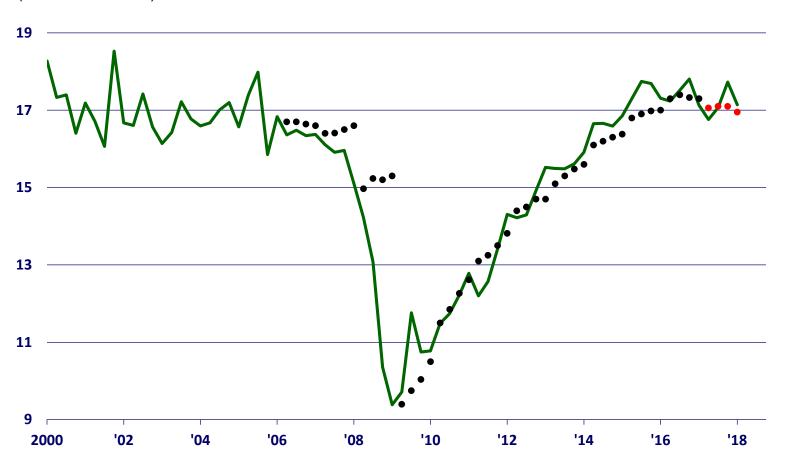
Personal Consumption Expenditures



Light vehicle sales were very close to what was anticipated

Car and Light Truck Sales

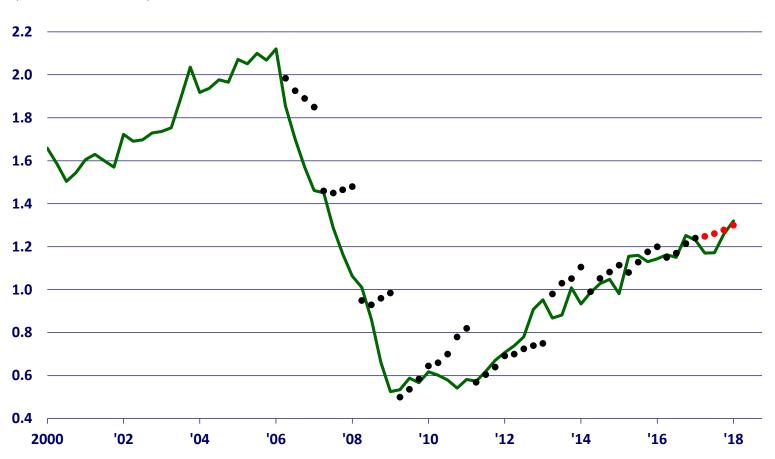
(millions of units)



Housing starts initially were weaker than forecast

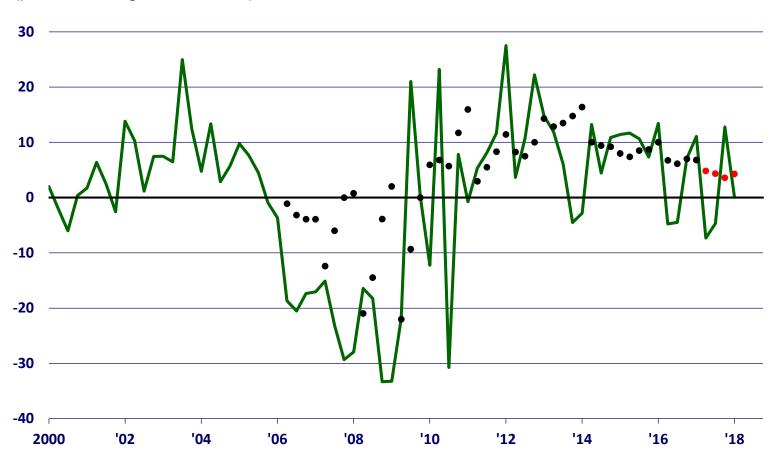
Housing Starts

(millions of units)



The same pattern can be seen in the residential investment forecast

Residential Investment



Longer-term rates ended up rising close to what was predicted

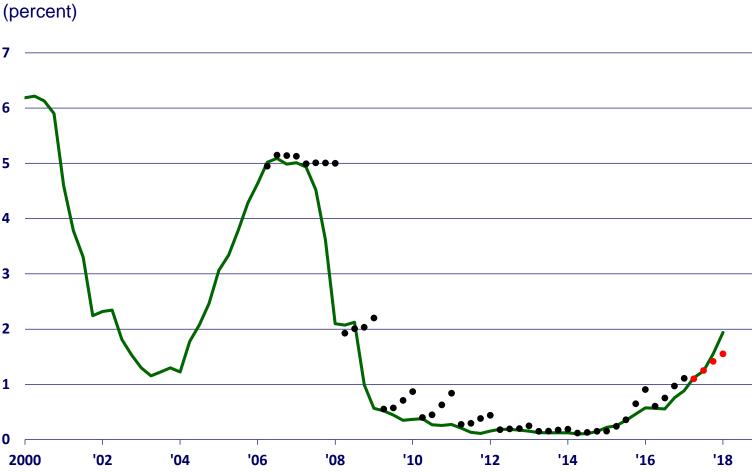


(percent)



Short-term interest rates rose at a faster pace than forecast

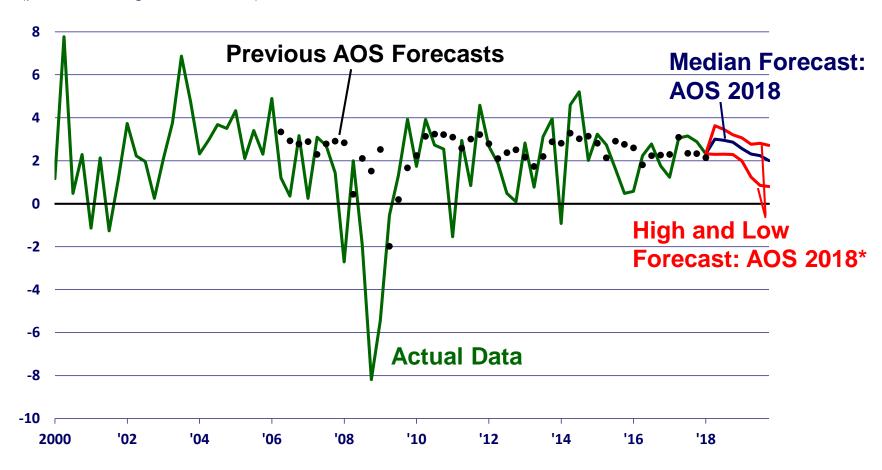




Forecast for 2018 and 2019

Real GDP growth is expected to be strong in 2018 and then moderate in 2019

Real GDP

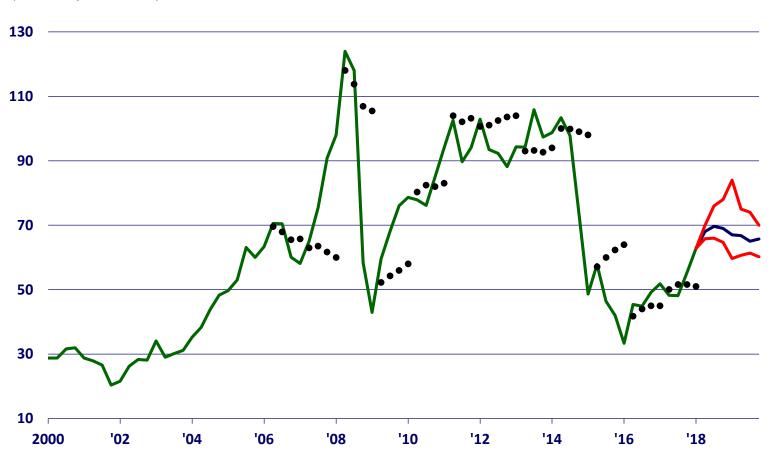


^{*}Excludes the two highest and two lowest forecasts

Oil prices are anticipated to decrease modestly beginning towards the end of this year

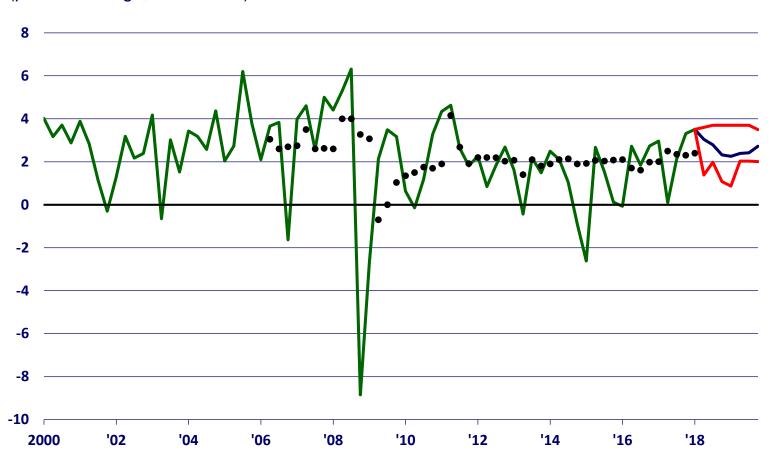
Oil Prices - West Texas Intermediate

(dollars per barrel)



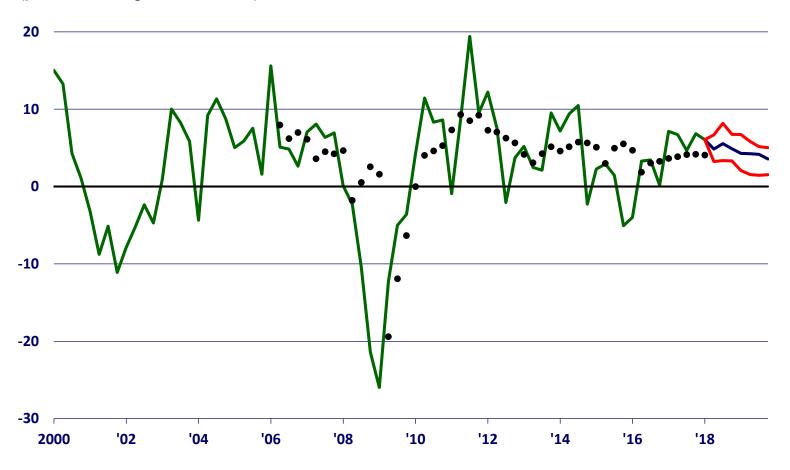
Inflation is expected to moderate through early next year and then edge higher in 2019

CPI Inflation Rate



Business fixed investment is anticipated to rise at a strong although slowing pace

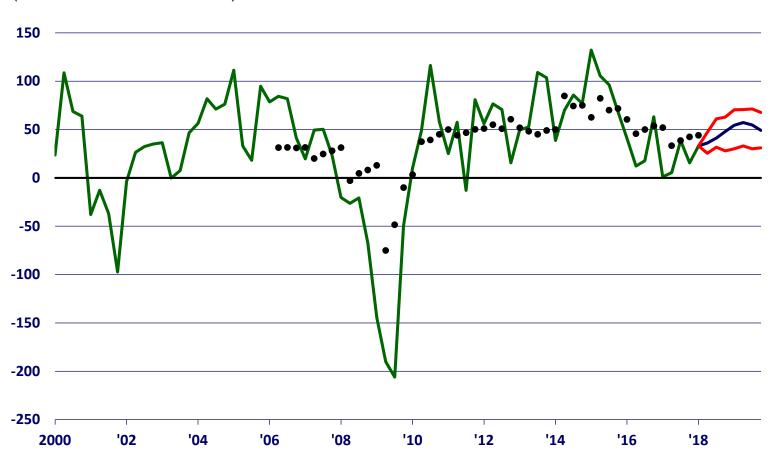
Business Fixed Investment



The change in business inventories are forecast to rise at a pace likely to keep the inventory to GDP ratio constant

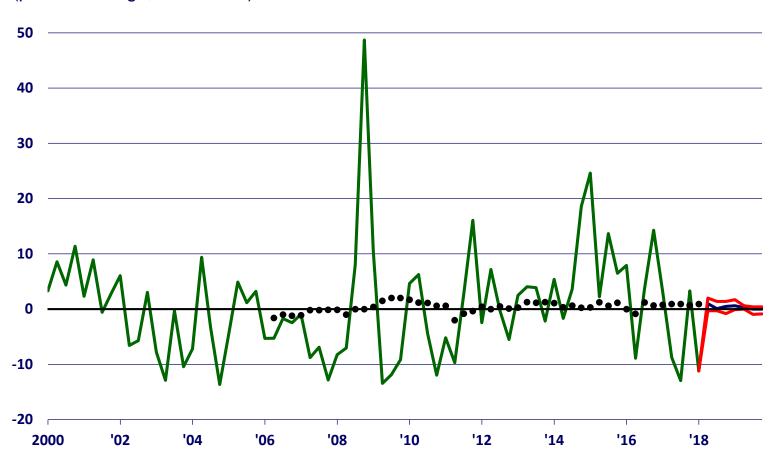
Change in Business Inventories

(billions of constant dollars)



The trade weighted dollar is predicted to remain relatively constant

J.P. Morgan Trade Weighted Dollar



But the trade deficit is expected to increase sharply

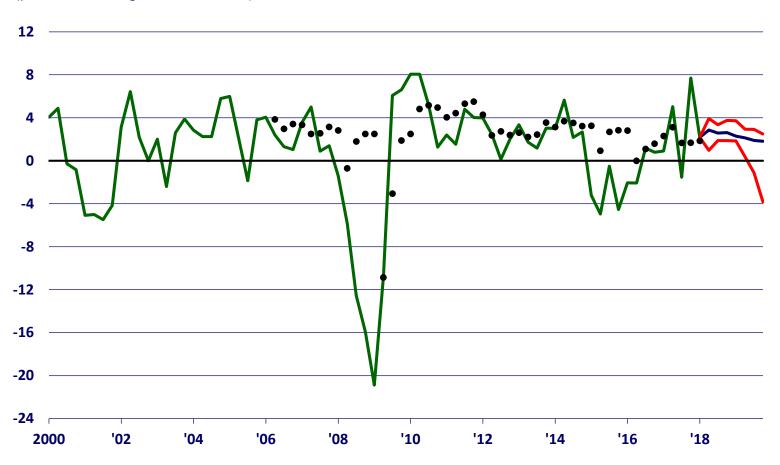
Net Exports of Goods and Services

(billions of constant dollars)



Industrial output is forecast to rise at pace above trend this year and below trend in 2019

Industrial Production



The unemployment rate is predicted to remain stable at a very low rate

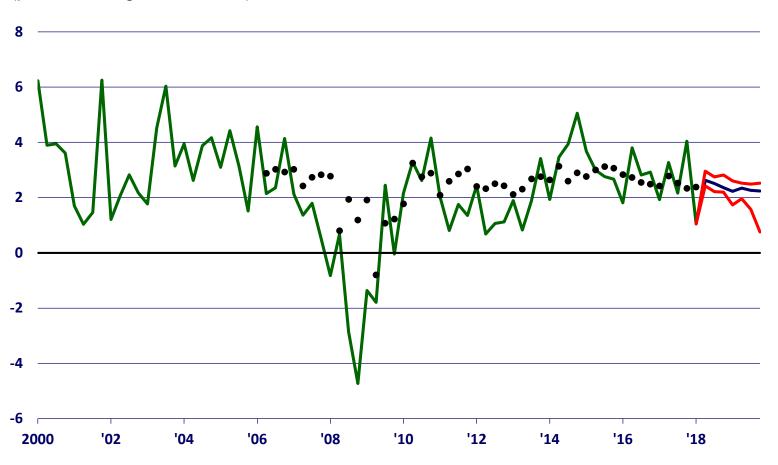


(percent)



Consumer spending is anticipated to increase at a solid pace

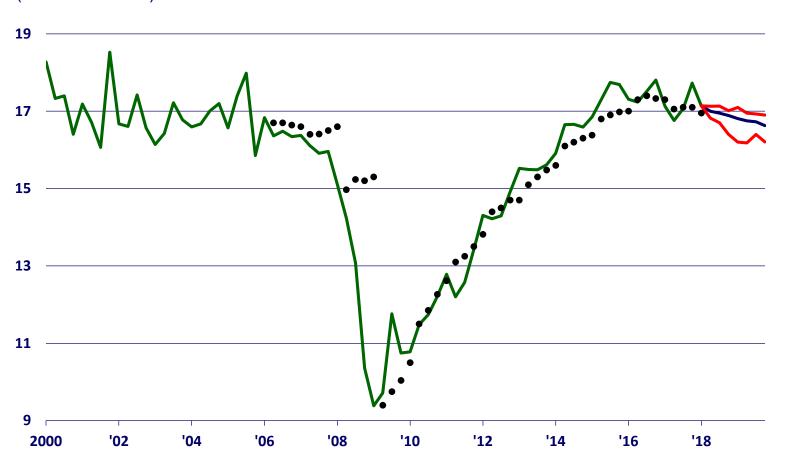
Personal Consumption Expenditures



Even with light vehicles sales edging lower

Car and Light Truck Sales

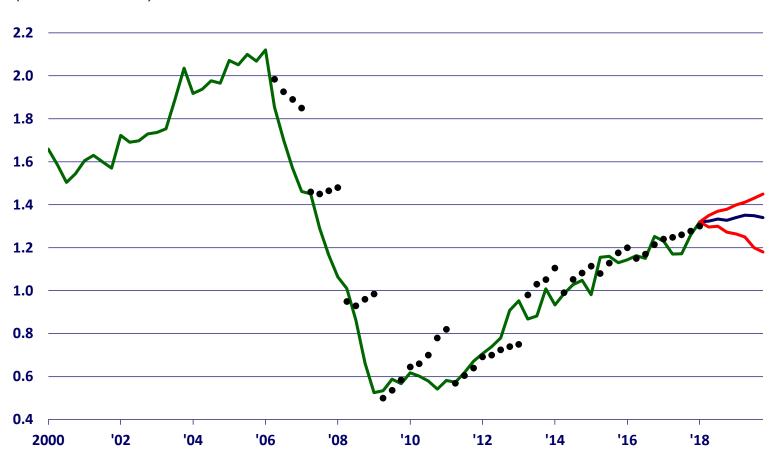
(millions of units)



Housing starts are expected to continue its modest gains

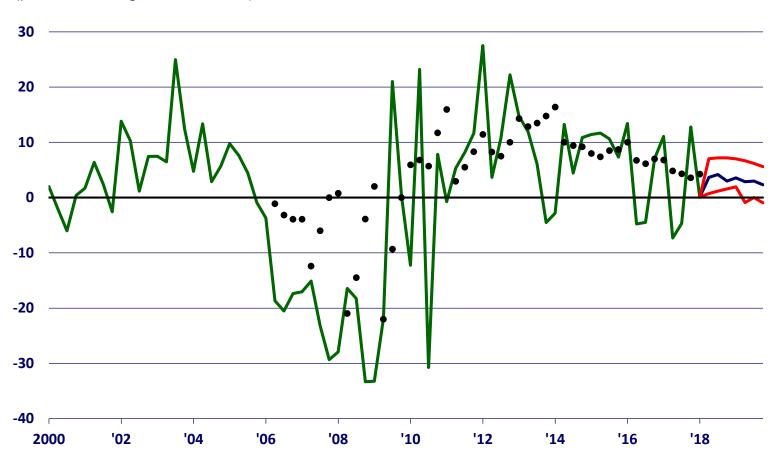


(millions of units)

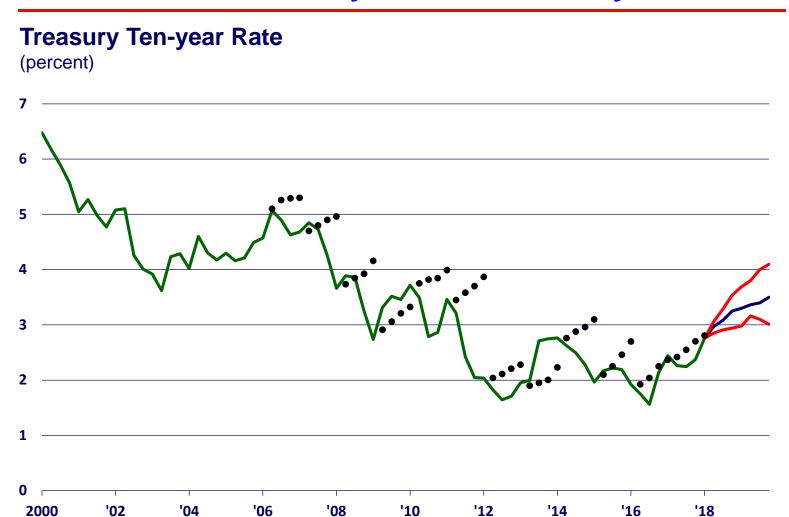


Residential investment is predicted to grow moderately

Residential Investment



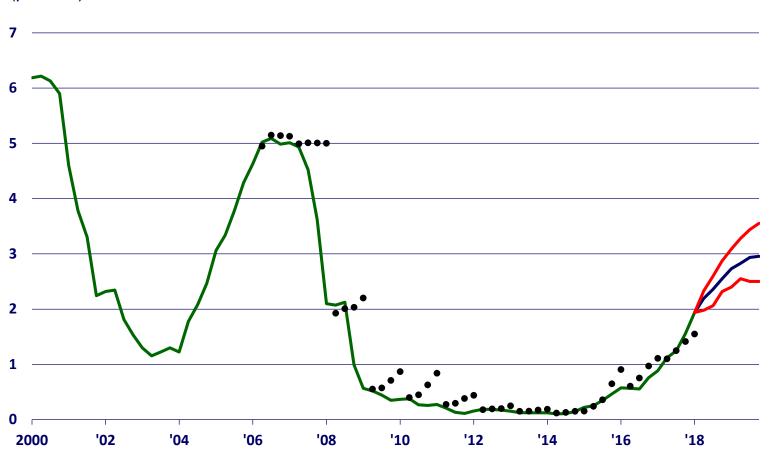
Ten-year interest rates are forecast to rise to 3.50% by the end of next year



Short-term interest rates are expected to rise to just under 3% by the end of 2019



(percent)



Median Forecasts: Consensus Book Page 1

| | 2017 | 2018 | 2019 |
|--|----------|-------------|----------|
| GDP, current dollars* | 4.5% | 4.8% | 4.7% |
| GDP Price Index, chain-type* | 1.9% | 2.1% | 2.3% |
| Real GDP, chained dollars* | 2.6% | 2.8% | 2.2% |
| Real Personal Consumption Expenditures* | 2.8% | 2.2% | 2.2% |
| Real Business Fixed Investment* | 6.3% | 5.6% | 3.7% |
| Real Residential Investment* | 2.6% | 2.8% | 3.3% |
| Change in Private Inventories** | \$15.6 | \$48.0 | \$49.2 |
| Net Exports of Goods and Services (billions of constant dollars)** | -\$653.9 | -\$675.6 | -\$724.7 |
| Real Government Consumption Expenditures and Gross Investment* | 0.7% | 2.3% | 1.8% |

^{*} Q4 over Q4

^{**} Q4 value

Median Forecasts: Consensus Book Page 1

| | 2017 | 2018 | 2019 |
|--|---------|---------|---------|
| Industrial Production* | 3.0% | 3.3% | 2.1% |
| Car and Light Truck Sales (millions – calendar year including imports) | 17.2 | 17.0 | 16.7 |
| Housing Starts (millions of units) | 1.21 | 1.33 | 1.35 |
| Oil Price (dollars per barrel of West Texas Intermediate)** | \$55.39 | \$69.00 | \$65.75 |
| Unemployment Rate** | 4.1% | 3.8% | 3.9% |
| Consumer Price Index* | 2.1% | 2.9% | 2.3% |
| Treasury Constant Maturity One-year Rate** | 1.55% | 2.55% | 2.96% |
| Treasury Constant Maturity Ten-year Rate** | 2.37% | 3.25% | 3.50% |
| J.P. Morgan Trade Weighted OECD Dollar* | -4.1% | -0.5% | 0.3% |

^{*} Q4 over Q4

^{**} Q4 value

Summary

- The economy is forecast to rise at a strong rate in 2018 and then moderate to a pace just above it's long-term trend 2019
- The unemployment rate is expected remain low falling this year and edging higher in 2019
- CPI inflation is anticipated to rise to 2.9% percent this year and then pull-back to a 2.3% rate next year
- Manufacturing growth is expected to improve to a pace that is above trend this year and below trend in 2019
- Light vehicles sales are forecast to decline to 17.0 million units in 2018 and 16.7 million units in 2019
- Housing starts are predicted to increase to 1.33 million units this year and tick higher to 1.35 million next year
- www.chicagofed.org