The views I express here are my own and do not necessarily reflect the views of the Federal Reserve Bank of Chicago or within the Federal Reserve System.
Labor Markets

Monthly Payroll Employment Change (thousands)

3-Month Average

Unemployment Rate (percent)

FOMC Projections*

*Median of projections from the September 2018 SEP
Source: Bureau of Labor Statistics and Federal Reserve Board from Haver Analytics
Labor Force Participation Rate and Wages

Labor Force Participation Rate
(percent)

Predicted Using Unemployment Gap

Trend

Wage Growth
(year over year percentage change)

Average Hourly Earnings

Employment Cost Index

Trend estimates from Chicago Fed staff calculations
Source: Bureau of Labor Statistics from Haver Analytics
Household Sector

Real Personal Consumption exp.  
(Q4/Q4 percentage change)

Personal Saving Rate  
(% of disposable personal income)

Source: BEA from Haver Analytics
Household Sector

Housing Starts
(millions of units, annual rate)

Light Vehicle Sales & Production
(millions of autos and light trucks, SAAR)

Source: BEA, Census Bureau, and Federal Reserve Board from Haver Analytics
Investment Indicators

Core Capital Goods
(nondefense capital good ex aircraft; billions of $, saar)

New Orders
Shipments

Aug-2018

Nonresidential Structures

Private Nonresidential Buildings (bils. of $)

Baker-Hughes Rig Count (thousands)

Source: BEA and Census Bureau from Haver Analytics; Baker-Hughes
Business Sector

Business Fixed Investment
(Q4/Q4 percentage change)

Capital Deepening
(percent change in input of capital services to trend hours)

Estimated revision for capital services calculated from Chicago Fed staff estimates
Source: BEA and BLS from Haver Analytics
2018 Growth Forecasts

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actual</strong></td>
<td>2.2</td>
<td>4.2</td>
<td></td>
<td></td>
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<tr>
<td><strong>Macroadvisers</strong></td>
<td>3.6</td>
<td>2.7</td>
<td></td>
<td></td>
<td>3.2</td>
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<tr>
<td>(Oct 15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Blue Chip</strong></td>
<td>3.3</td>
<td>2.8</td>
<td></td>
<td></td>
<td>3.1</td>
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<tr>
<td>(Oct 10)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>GDPNow</strong></td>
<td>4.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>(Oct 15)</td>
<td></td>
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</table>
### FOMC Forecasts

#### Median forecast, September 2018 Summary of Economic Projections

<table>
<thead>
<tr>
<th>Variable</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>LR</th>
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</thead>
<tbody>
<tr>
<td><strong>GDP</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>3.1</td>
<td>2.5</td>
<td>2.0</td>
<td>1.8</td>
<td>1.8</td>
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<tr>
<td>(central tendency)</td>
<td>(3.0-3.2)</td>
<td>(2.4-2.7)</td>
<td>(1.8-2.1)</td>
<td>(1.6-2.0)</td>
<td>(1.8-2.0)</td>
</tr>
<tr>
<td><strong>Unemployment</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>3.7</td>
<td>3.5</td>
<td>3.5</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>(central tendency)</td>
<td>(3.7)</td>
<td>(3.4-3.6)</td>
<td>(3.4-3.8)</td>
<td>(3.5-4.0)</td>
<td>(3.5-4.0)</td>
</tr>
</tbody>
</table>

1. Q4-to-Q4 percent change
2. Q4 Average
Inflation Expectations

Inflation Surveys (percent)

- University of Michigan Expected CPI Inflation: 5-10 years ahead
- SPF CPI 10-yr Forecast
- SPF PCE 10-yr Forecast

Market Pricing (percent)

- TIPS 5F/5 Inflation Compensation
- 3 Year Ahead Expected Inflation from DSTM Model

Source: University of Michigan, Survey of Professional Forecasters, Federal Reserve Bank of Chicago, and Federal Reserve Board
FOMC projections are the median values for core PCE inflation as reported from the September 2018 release of the SEP.
Treasury Rates

10 Year Treasury
(percent)

Source: Federal Reserve Board from Haver Analytics
Stock Market

S&P 500

VIX

Source: Wall Street Journal from Haver Analytics
Monetary Policy

Target Federal Funds Rate at Year-End; September Summary of Economic Projections (percent)
FOMC Statements – “Accommodative” Gone

August 1, 2018
Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that further gradual increases in the target range for the federal funds rate will be consistent with sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced.

In view of realized and expected labor market conditions and inflation, the Committee decided to maintain the target range for the federal funds rate at 1-3/4 to 2 percent. The stance of monetary policy remains accommodative, thereby supporting strong labor market conditions and a sustained return to 2 percent inflation.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

September 26, 2018
Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that further gradual increases in the target range for the federal funds rate will be consistent with sustained expansion of economic activity, strong labor market conditions, and inflation near the Committee's symmetric 2 percent objective over the medium term. Risks to the economic outlook appear roughly balanced.

In view of realized and expected labor market conditions and inflation, the Committee decided to raise the target range for the federal funds rate to 2 to 2-1/4 percent.

In determining the timing and size of future adjustments to the target range for the federal funds rate, the Committee will assess realized and expected economic conditions relative to its maximum employment objective and its symmetric 2 percent inflation objective. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.
Monetary Policy

Distribution of Target Federal Funds Rate Priced in Futures Markets (percent)

Current target rate: 2.00-2.25%
Probability of rate hike in Nov: 2.0%

Expectations for year-end are derived from CME contracts as of October 12, 2018
Source: CME FedWatch
Gradual Balance Sheet Normalization

Projected SOMA Domestic Securities Holdings: Alternative Liabilities Scenarios (billions $)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Reserves ($ bil)</th>
<th>Normalization</th>
<th>Currency ($ bil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>750</td>
<td>2020:Q1</td>
<td>2,400</td>
</tr>
<tr>
<td>Medium</td>
<td>600</td>
<td>2021:Q1</td>
<td>2,200</td>
</tr>
<tr>
<td>Small</td>
<td>400</td>
<td>2022:Q3</td>
<td>1,900</td>
</tr>
<tr>
<td>Memo: Current</td>
<td>1,838</td>
<td></td>
<td>1,686</td>
</tr>
</tbody>
</table>

Source: Federal Reserve Bank of New York 2017 Open Market Annual Report, published in April 2018
“A couple of participants commented on issues related to the operating framework for the implementation of monetary policy, including ... the demand for reserves and for the size and composition of the Federal Reserve’s balance sheet....

The Chairman suggested that the Committee would likely resume a discussion of operating frameworks in the fall.”