Economic Overview

Academic Advisory Council
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The views expressed are my own and not those of the Federal Reserve Bank of Chicago or the Federal Reserve System
**Labor Market**

**Total Nonfarm Payroll Employment**
(change, thousands)

- **Monthly Change**
  - April 2017
- **3-month Average**
  - March 2017

**Unemployment Rate**
(percent)

- **FOMC Projections**
  - Long-run Forecast
  - Mar-2017

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*Median of the forecasts made by FOMC participants as of March 15, 2017.*
Labor Force Participation Rate and Wages

Labor Force Participation Rate (percent)

- Actual
- Fit to Unemp. Gap
- Trend

Average Hourly Earnings Growth (percent)

- Mar-2017

*FRBCHI staff estimates
Household Sector

**Personal Consumption Expenditures**
(Percent change, annual rate)

**Housing Starts**
(millions of units, annual rate)

* Bars are annualized half-year percentage changes, except right bar, which is the annualized percentage change from the October-November average to the January-February average.

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2011 '12 '13 '14 '15 '16 '17

2005 '07 '09 '11 '13 '15 '17

Jan-Feb 2017*

Feb-2017
Business Investment

Nondefense Capital Goods ex. Aircraft
(Bils. $, 3-month MA)

Nonresidential Private Construction
(Bils. $, 3-month MA)
## GDP Forecasts

<table>
<thead>
<tr>
<th></th>
<th>2017:Q1</th>
<th>2017:Q2</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Macroadvisers (Apr. 14)</td>
<td>0.6</td>
<td>3.5</td>
<td>2.3</td>
<td>2.1</td>
</tr>
<tr>
<td>GDPNow (Apr. 7)</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blue Chip (Apr. 10)</td>
<td>1.4</td>
<td>2.7</td>
<td>2.4</td>
<td>2.3</td>
</tr>
<tr>
<td>FOMC (Mar. 15)</td>
<td></td>
<td>2.1</td>
<td>2.1</td>
<td></td>
</tr>
</tbody>
</table>
PCE Inflation

PCE Price Index
(12-month percent change)

Core CPI Inflation

<table>
<thead>
<tr>
<th></th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly</td>
<td>0.3</td>
<td>0.2</td>
<td>-0.1</td>
</tr>
<tr>
<td>Yr-to-Yr</td>
<td>2.3</td>
<td>2.2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total

Core

Long-run target

FOMC projections*

Feb-2017

* FOMC projections are the median values of the FOMC participants’ forecasts for core PCE inflation as reported in the March 15, 2017 Summary of Economic Projections.
Oil and Import Prices

Brent Crude Oil Prices and Futures (dollars)

Non-Petroleum Import Prices (12 month percent change)
Inflation Expectations

Inflation Surveys
(percentage)

TIPS CPI Compensation 5-10 years ahead
(percentage)

University of Michigan for CPI: 5-10 years ahead

Survey of Professional Forecasters for PCE: 10 years ahead

Mar-2017

Q1-2017

12-Apr-2017
## March FOMC Projections

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median(^1)</th>
<th>Central tendency(^2)</th>
<th>Range(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in real GDP</td>
<td>2.1</td>
<td>2.1</td>
<td>1.9</td>
</tr>
<tr>
<td>December projection</td>
<td>2.1</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>December projection</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
</tr>
<tr>
<td>PCE inflation</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>December projection</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Core PCE inflation(^4)</td>
<td>1.9</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td>December projection</td>
<td>1.8</td>
<td>2.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Memo: Projected appropriate policy path

| Federal funds rate        | 1.4  | 2.1  | 3.0  | 3.0       | 1.4–1.6 | 2.1–2.9 | 2.6–3.3 | 2.8–3.0     | 0.9–2.1 | 0.9–3.4 | 0.9–3.9 | 2.5–3.8     |
| December projection       | 1.4  | 2.1  | 2.9  | 3.0       | 1.1–1.6 | 1.9–2.6 | 2.4–3.3 | 2.8–3.0     | 0.9–2.1 | 0.9–3.4 | 0.9–3.9 | 2.5–3.8     |
Risks to the FOMC Projections

* Minutes from the March 15, 2017 FOMC Meeting.
Pace of Policy Firming – March FOMC

Federal Funds Rate at Year-End (percent)

Source: Interest rate projections are from the March 15, 2017 FOMC Summary of Economic Projections. Market expectations are from OIS futures as of April 13, 2017.
Federal Funds Futures Distribution

CME futures for December, 2017
(probability)

* Source: CME Group.
Start “at some point when funds rate normalization is well under way”

- Timing depends on assessment of economic and financial conditions including risks to outlook and confidence that would not have to reverse decision
- Most participants judged will be appropriate to start process later this year

Path for normalization

- Cease or reduce reinvestments in gradual and orderly way
- Most say funds rate, not balance sheet, will be primary means for adjusting the stance of policy (away from ZLB)