Economic Outlook and Monetary Policy

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The views expressed here are my own and not those of the Federal Reserve Bank of Chicago or the Federal Reserve System.
Federal Reserve’s Mandate

- Promote maximum employment, stable prices, and moderate long-term interest rates\(^1\)

- Price stability\(^2\)
  - 2 percent inflation in price index for total personal consumption expenditures (PCE)

- Maximum employment\(^2\)
  - May change over time for non-monetary reasons
  - Current FOMC forecasts for long-run normal unemployment rate: 5.2-5.5 percent

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1. Federal Reserve Act Section 2a (monetary policy objectives)
2. Statement on Longer-Run Goals and Monetary Policy Strategy
Labor Market

Private Nonfarm Payroll Employment
(change, thousands)

Monthly change

Aug-2014

3-month average

Unemployment Rate
(percent)

Aug-2014

Unemployment Rate (percent of labor force)

FOMC Long-run central tendency

## Multiple Indicators – Labor Market Dashboard

<table>
<thead>
<tr>
<th>Substantial Progress</th>
<th>Point to “Extra” Slack</th>
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<tbody>
<tr>
<td>- Payroll employment</td>
<td>- Labor force participation</td>
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<tr>
<td>- Unemployment rate</td>
<td>- Long-term unemployed</td>
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<td>- Job loss (unemployment insurance claims, layoff rates)</td>
<td>- Part time for economic reasons</td>
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<td>- Job openings</td>
<td>- Hiring rate</td>
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<td></td>
<td>- Quit rate</td>
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<td>- Job finding rate</td>
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<td>- Wage growth</td>
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Labor Force Participation Rate

Labor Force Participation Rate (percent)

Participation Rate (percent of population 16 and over)

Trend Participation Rate

Spending Outlook

- Consumption expanding at solid, but unspectacular, pace
- Strong orders for business capital goods
- Single-family housing slow to recover
- Government sector relatively neutral
## FOMC Economic Forecasts

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Long-run(^4)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GDP(^2)</strong></td>
<td>2.10</td>
<td>2.80</td>
<td>2.75</td>
<td>2.40</td>
<td>2.15</td>
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<tr>
<td><strong>Unemployment rate(^3)</strong></td>
<td>5.95</td>
<td>5.50</td>
<td>5.25</td>
<td>5.10</td>
<td>5.35</td>
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<tr>
<td><strong>PCE inflation(^2)</strong></td>
<td>1.60</td>
<td>1.75</td>
<td>1.85</td>
<td>1.95</td>
<td>2.00</td>
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1. Midpoint of central tendency of Sep. 17, 2014 FOMC Summary of Economic Projections
2. Fourth quarter to fourth quarter percent change
3. Quarter average for end of period
4. Assessment of rate to which each variable expected to converge under appropriate monetary policy and in the absence of further shocks to the economy
Inflation

PCE Price Index
(12-month percent change)

Little Cost Pressure

Commodity Prices
(dollars; index, 1967 = 100)

CRB Commodity Prices

Brent Crude Oil

Wages and Compensation
(percent change from previous year)

3.5% = 2% inflation + 1.5% productivity growth

26-Sep-2014

Q2-2014

Policy Rate Constrained by Zero Lower Bound

Federal funds rate, $r_t$
(percent)

Source: Federal Reserve and Haver Analytics.
Policy Rate Constrained by Zero Lower Bound

Federal funds rate, $r_t$ (percent)

Taylor Rule (1999): $r_t = 2 + \pi_t + \frac{1}{2} (\pi_t - \pi^*) + (y_t - y^*)$

- $\pi_t$ = inflation; $\pi^*$ = inflation target
- $y_t$ = actual output; $y^*$ = potential output

Policy Tools at the Zero Lower Bound

- Two ways to provide additional accommodation at the ZLB; both work by lowering longer-term interest rates
  - Large Scale Asset Purchases (LSAPs)
    - Lower term premia in long term rates
    - Signaling effect about future short term rates
    - Latest program most likely to end in October
  - Forward guidance about path for the federal funds rate
Appropriate Pace of Policy Firming

Federal Funds Rate at Year-End
(percent)

“In determining how long to maintain the current 0 to 1/4 percent target range for the federal funds rate, the Committee will assess progress—both realized and expected—toward its objectives of maximum employment and 2 percent inflation.”

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“When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.”

Appropriate Pace of Policy Firming

Federal Funds Rate at Year-End
(percent)

March liftoff, 25 bps every meeting

June liftoff, 25 bps every other meeting

Market Expectations as of September 26

Monetary Policy Normalization

- FOMC will determine timing and pace of increases in rates so as to promote maximum employment and price stability

- Federal funds rate will continue to be the key policy rate
  - Target a 25bp range initially, instead of a single number

- Interest paid on excess reserves primary tool to raise rates
  - Overnight Reverse Repo Facility to play temporary supporting role to help provide control over federal funds rate

- Reduce the size of the balances sheet gradually and predictably
  - Reduce reinvestments sometime after the first rate hike
  - In the long-run, the balance sheet at smallest level for efficient implementation of monetary policy