Economic Outlook

- Very balanced, but gradual expansion
- Nearing full employment
- Low inflation with few signs of acceleration
- Very modest supply-side growth
  - Limited productivity improvements
  - Aging of workforce
  - Some reentry of discouraged workers
  - Little room for real wage gains
- More stimulative fiscal policy
- Gradual normalization of monetary policy
Actual and Potential GDP, Nonfarm Business Sector, 2004-2018
### CBO Revisions to Potential GDP Growth

#### Annual Percent Change

<table>
<thead>
<tr>
<th></th>
<th>2007 projections</th>
<th>2017 projections</th>
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<tr>
<td>Total Economy</td>
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<td>Potential Output</td>
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<td>Potential Labor Productivity</td>
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<td>Potential TFP</td>
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<tr>
<td>Total</td>
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## Productivity Trends, Major OECD Countries

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Actual and Demographically-Adjusted Labor Force Participation.
Changes in productivity and real wage, 1947-2016

- Output per hour
- Hourly Compensation (Output Price)
- Hourly Compensation (Consumption Price)
- Hourly Wage (Consumption Price)
Labor Market Pressures

Unemployment Rate (left scale)

Job Openings (right scale)
Budget Trends, 1970-2027

Percent of GDP

![Graph showing budget trends from 1970 to 2027, focusing on percent of GDP, fiscal year, average outlays, and average revenues. The graph displays fluctuations over the years with notable peaks and troughs.](image-url)
Debt Held By the Public, 1970-2027
Percent of GDP
Federal Reserve Assets, 2007-2017
Schedule of Portfolio Caps
billions of dollars

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<th>Months</th>
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<th>7-9</th>
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<tr>
<td>MBSs</td>
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<td>8</td>
<td>12</td>
<td>13</td>
<td>20</td>
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Monthly redemptions in excess of Caps will be reinvested.
Monetary Policy Concerns

- Long-term decline in nominal interest rates.
  - Future policy rates could be constrained at ZLB as much as 1/3rd of the time (Kiley&Roberts, 2017)

- Loss of CB Independence

- Policy Tools:
  - Forward guidance & quantitative easing.
  - Negative interest rates and yield curve control (limited by cash option and depth of market)
  - Higher inflation target
  - Price-level target
Monetary Policy Options (1)

- **Raise current inflation rate target**
  - (+) More space to lower rates in future
  - (+) Consistent with current framework
  - (+) Still incorporate unemployment considerations in determination of speed in return to target
  - (-) Cost of higher inflation—public opposition.
  - (-) Suboptimal response to transitory problem—higher long-run average inflation.
  - (-) Not calibrated to severity of ZLB event.
Price-level targeting

- Equivalent to low very-long-run average inflation rate target. (Consistent with price stability mandate)
- (+) Bygones are not bygones
- (+) Responsive to severity of ZLB episode
- (-) Major shift in policy framework that may be difficult to communicate
- (-) Need to tighten policy for temporary supply shocks with negative effects on employment and output.
Temporary price-level target
(Bernanke)

- Limited to periods around lower bound
- Would not require major shift in underlying policy framework
- Would not require policy to tighten in response to supply shocks in ordinary times
- Rule--increase in FF rate would be delayed until average inflation rate since date when FF rate first hit zero.
Fiscal Policy Concerns

- In addition to stabilization role, fiscal policy has major distributional effects within and across generations

- Fiscal rules
  - Difficult to measure fiscal stance
  - Unfunded commitments--Public pensions
  - Application of rules at subnational level
    - Enforcement through population mobility
  - Historical failures
  - Rules inhibit stabilization policy
Fiscal Policy Concerns

- Stabilization policy
  - General view that FP in recent financial crisis was too small and too quickly reversed
  - Strong shift to structural surplus in advanced economies after 2011
  - Resurgence of confidence in and need for discretionary policy
  - Variation in size of multipliers across strong versus weak economic situations
  - Interactions with existing debt levels?
  - Determinants of fiscal space?
Fiscal-Monetary Coordination

- In retrospect, the initial response to the financial crisis was quite optimal.
  - Both fiscal and monetary policy were strongly expansionary.

- But premature shift to fiscal consolidation eroded the recovery.
  - Fear that debt would not be repaid
  - References to Ricardian equivalence

- Recent shift back toward modest fiscal stimulus

- Low long-bond yields suggest primary concern is about growth not solvency.
Fiscal-Monetary Coordination

- Fiscal policy needs to do more near ZLB
- Monetary policy reforms may help, but they will have relatively small effects on overall economy.
- Primary need is for a stronger fiscal response targeted on raising inflation
- In short run there may be no fiscal-monetary conflict
  - Perception that future debt will be partially monetized has positive impact