

The Economy and Unemployment

Chris Foote

Research Department
Federal Reserve Bank of Boston

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Disclaimer: I do not speak for:



Eric Rosengren, President of Boston Fed



Janet Yellen, Chair of Federal Reserve

Outline

- 1 The Fed's Dual Mandate
- 2 Employment, Unemployment and Participation
- 3 Aggregate Supply

Fed's Marching Orders: The Dual Mandate

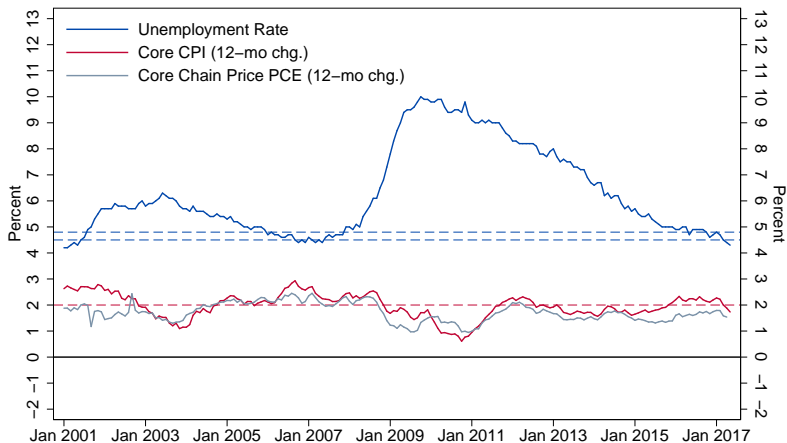
1 Stable prices

- Macroeconomic theory says Fed gets to pick long-term inflation rate
- Fed has chosen a 2% inflation target

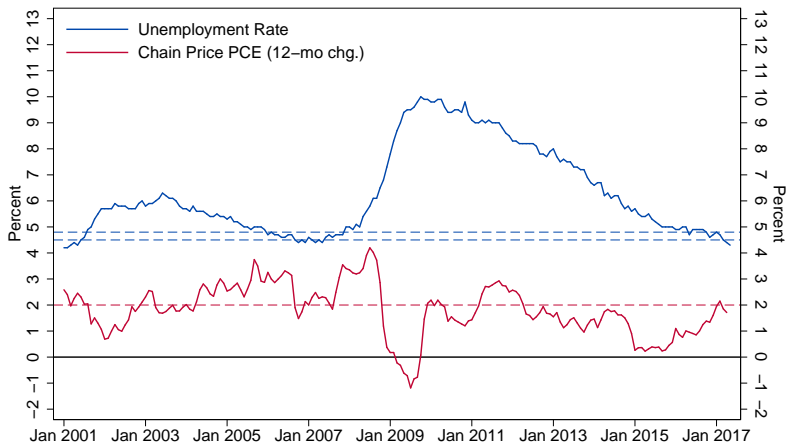
2 Maximum sustainable employment

- Theory says: Steer unemployment toward “natural rate”
- Fed has to estimate natural rate of unemployment

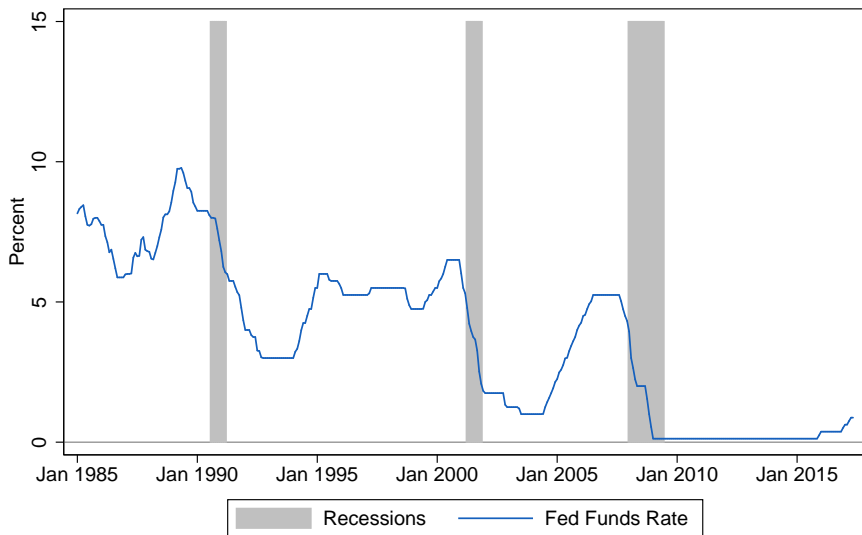
Dual Mandate: Inflation and Unemployment



Dual Mandate: Inflation and Unemployment



Federal Funds Rate



From FOMC Summary of Economic Projections

Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents under their individual assessments of projected appropriate monetary policy, June 2017

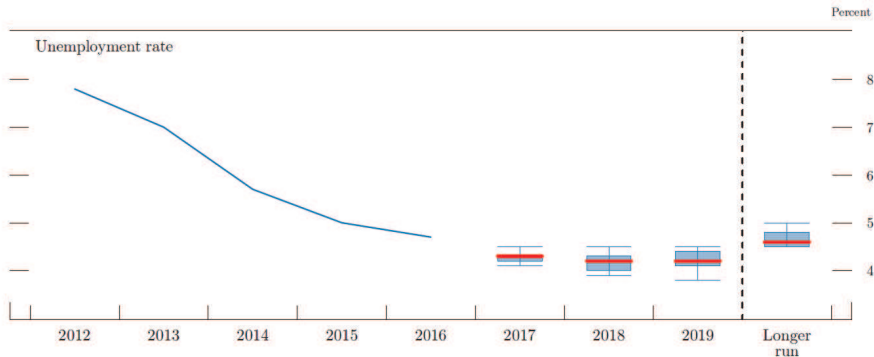
Advance release of table 1 of the Summary of Economic Projections to be released with the FOMC minutes

Percent

Variable	Median ¹				Central tendency ²				Range ³			
	2017	2018	2019	Longer run	2017	2018	2019	Longer run	2017	2018	2019	Longer run
Change in real GDP	2.2	2.1	1.9	1.8	2.1–2.2	1.8–2.2	1.8–2.0	1.8–2.0	2.0–2.5	1.7–2.3	1.4–2.3	1.5–2.2
March projection	2.1	2.1	1.9	1.8	2.0–2.2	1.8–2.3	1.8–2.0	1.8–2.0	1.7–2.3	1.7–2.4	1.5–2.2	1.6–2.2
Unemployment rate	4.3	4.2	4.2	4.6	4.2–4.3	4.0–4.3	4.1–4.4	4.5–4.8	4.1–4.5	3.9–4.5	3.8–4.5	4.5–5.0
March projection	4.5	4.5	4.5	4.7	4.5–4.6	4.3–4.6	4.3–4.7	4.7–5.0	4.4–4.7	4.2–4.7	4.1–4.8	4.5–5.0
PCE inflation	1.6	2.0	2.0	2.0	1.6–1.7	1.8–2.0	2.0–2.1	2.0	1.5–1.8	1.7–2.1	1.8–2.2	2.0
March projection	1.9	2.0	2.0	2.0	1.8–2.0	1.9–2.0	2.0–2.1	2.0	1.7–2.1	1.8–2.1	1.8–2.2	2.0
Core PCE inflation ⁴	1.7	2.0	2.0		1.6–1.7	1.8–2.0	2.0–2.1		1.6–1.8	1.7–2.1	1.8–2.2	
March projection	1.9	2.0	2.0		1.8–1.9	1.9–2.0	2.0–2.1		1.7–2.0	1.8–2.1	1.8–2.2	
Memo: Projected appropriate policy path												
Federal funds rate	1.4	2.1	2.9	3.0	1.1–1.6	1.9–2.6	2.6–3.1	2.8–3.0	1.1–1.6	1.1–3.1	1.1–4.1	2.5–3.5
March projection	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

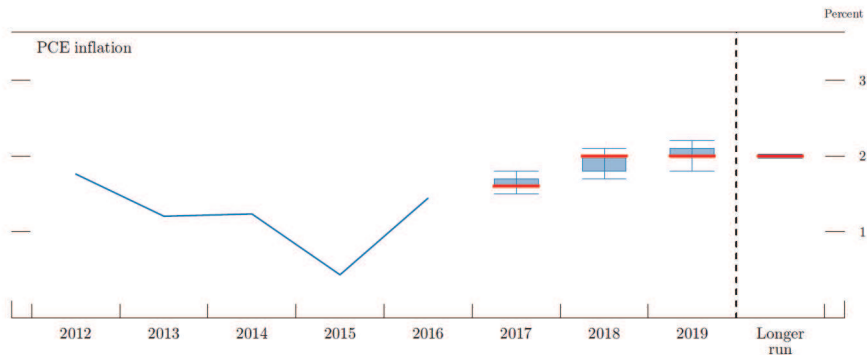
From FOMC Summary of Economic Projections

June 2017

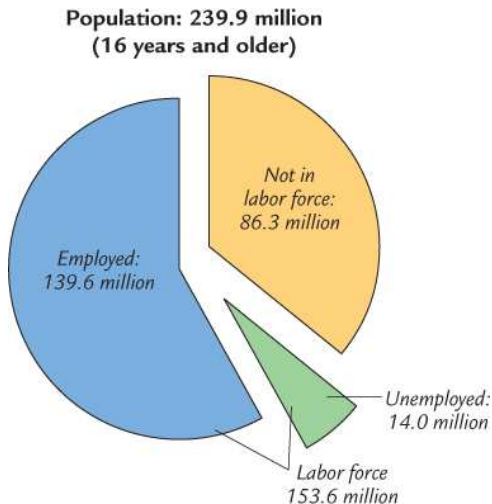


From FOMC Summary of Economic Projections

June 2017



Distribution of labor market states: Aug 2011



Atlanta Fed Jobs Calculator

No Change in UR (4.3%) or LFPR (62.7%)

Target and Time Frame:

Enter the target unemployment rate (as **XX.X%**).

 %

Enter how many months until target unemployment rate is achieved.

Results:

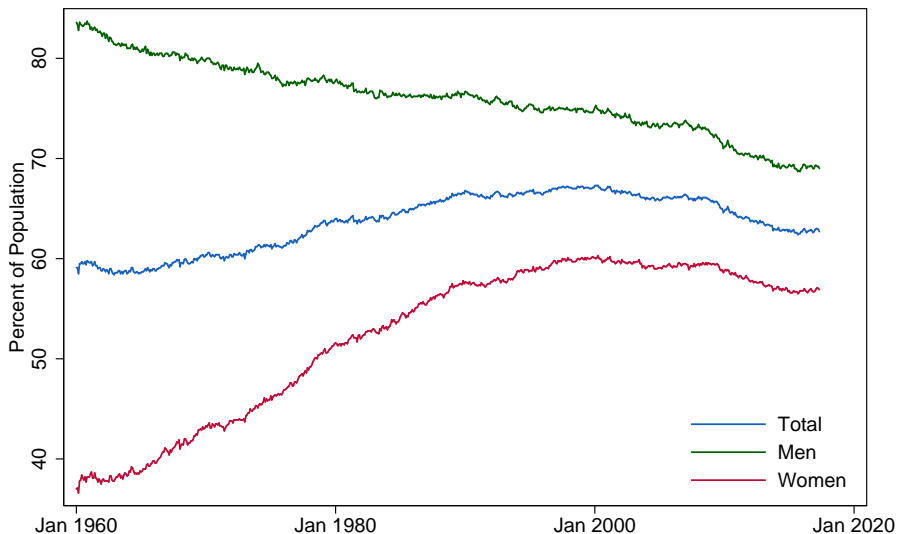
Average monthly change in payroll employment needed to achieve the target unemployment rate:

118,253

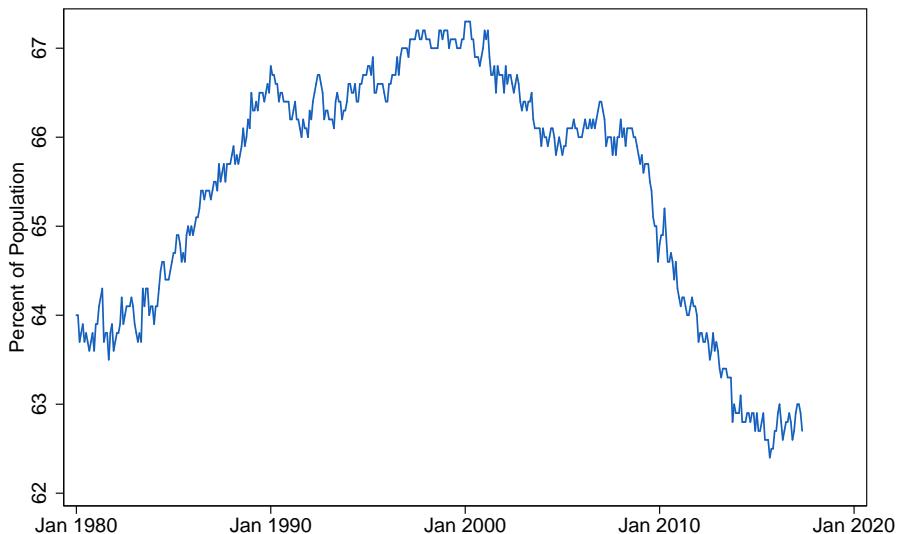
Average monthly change in household employment needed to achieve the unemployment rate:

123,825

Trends in Labor Force Participation

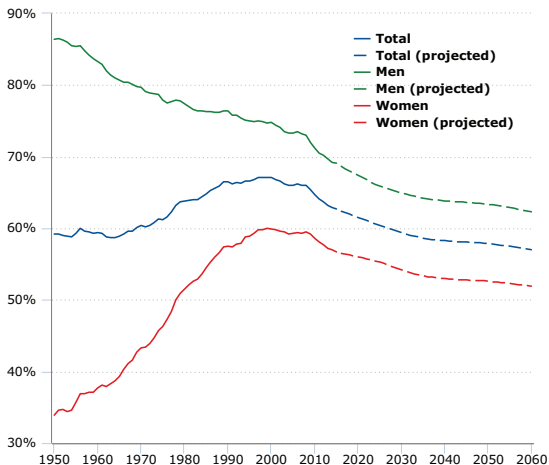


Total Participation Rate Since 1980



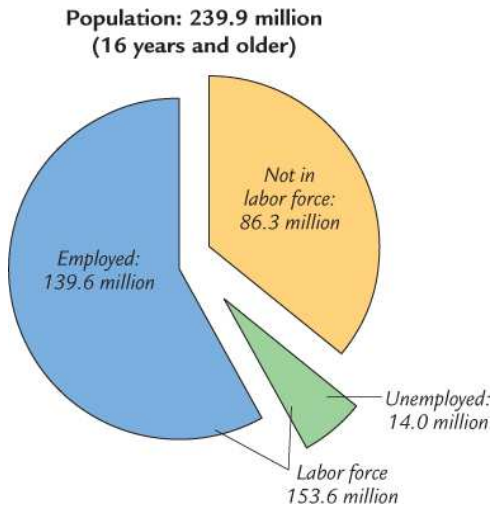
BLS Participation Projections

Labor force participation rates are projected to decline



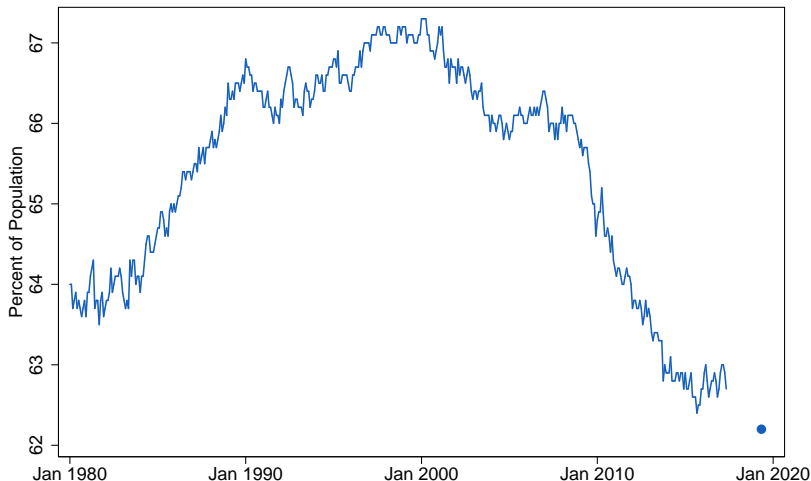
Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics

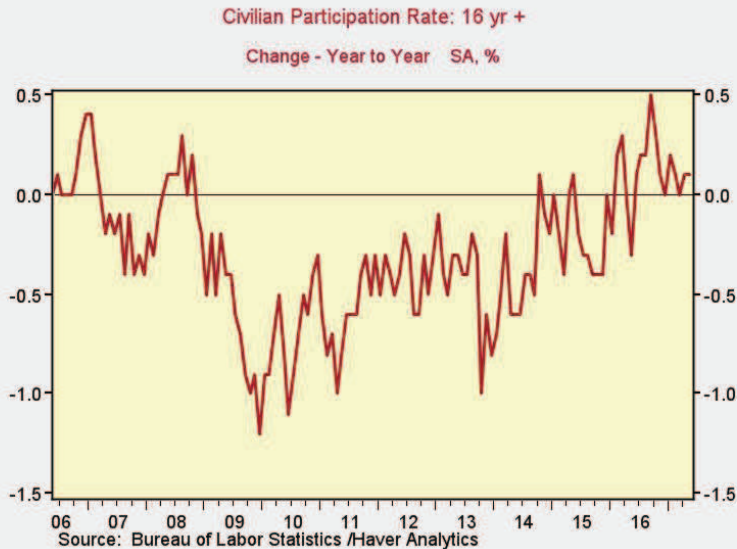
Distribution of labor market states (again)



Total Participation Rate Since 1980 (again)

Dot implies a decline of 0.25 ppt. per year through May 2019 for illustrative purposes





Atlanta Fed Jobs Calculator

No Change in UR (4.3%); Lower LFPR (62.2%)

Target and Time Frame:

Enter the target unemployment rate (as **XX.X%**).

Enter how many months until target unemployment rate is achieved.

Results:

Average monthly change in payroll employment needed to achieve the target unemployment rate:

68,801

Average monthly change in household employment needed to achieve the unemployment rate:

72,043

NEWS RELEASE

BUREAU OF LABOR STATISTICS

U. S. DEPARTMENT OF LABOR



Transmission of material in this release is embargoed until
8:30 a.m. (EDT) Friday, June 2, 2017

USDL-17-0732

Technical information:

Household data: (202) 691-6378 • cpsinfo@bls.gov • www.bls.gov/cps

Establishment data: (202) 691-6555 • cesinfo@bls.gov • www.bls.gov/ces

Media contact: (202) 691-5902 • PressOffice@bls.gov

THE EMPLOYMENT SITUATION — MAY 2017

Total **nonfarm payroll employment** increased by 138,000 in May, and the **unemployment rate** was little changed at 4.3 percent, the U.S. Bureau of Labor Statistics reported today. Job gains occurred in health care and mining.

Chart 1. Unemployment rate, seasonally adjusted,
May 2015 – May 2017

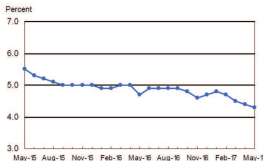
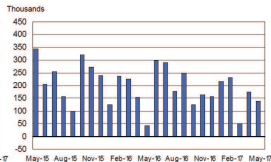
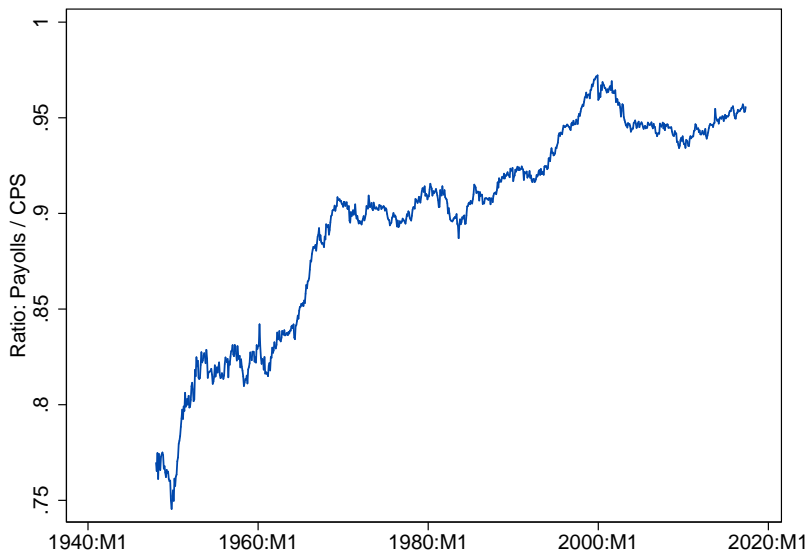


Chart 2. Nonfarm payroll employment over-the-month
change, seasonally adjusted, May 2015 – May 2017



Ratio of Nonfarm Payrolls to Total CPS Employment



Current Work on CES/CPS Reconciliation

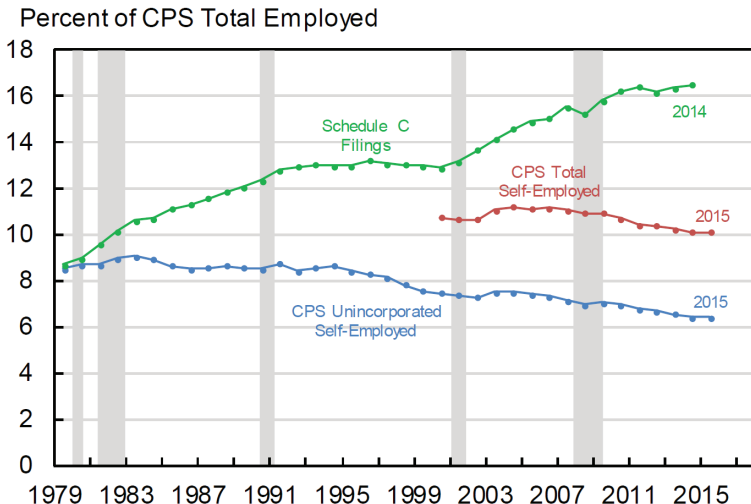
- Researchers writing in the 2013 *Journal of Labor Economics* matched March CPS records to UI records in 16 states.
- Paper focused on “in-scope” workers (private, nonfarm, wage & salary, etc.)
- **Findings:**
 - About one out of every six CPS workers (17.6 percent) does not have a UI record.
 - About six percent of in-scope UI workers are not in the CPS.
 - Problems reconciling multiple job holders are even worse.
- **Implication:** Surveys have problems measuring ...
 - Off-the-books employment and independent contractors (in CPS, not in UI)
 - “Marginal jobs” (in UI, not in CPS)
 - Multiple jobholders

Measurement of Alternative Work Arrangements

Source: *NY Times*, March 1, 2017

The trend is hard to measure, since subcontracting can take many forms. But it is big. A study last year by Lawrence F. Katz of Harvard and Alan B. Krueger of Princeton, a former chief economic adviser to President Barack Obama, concluded that independent contractors, on-call workers and workers provided by contracting companies or temp agencies accounted altogether for 94 percent of employment growth over the last 10 years. Nonstandard employment arrangements like these account for nearly one in six jobs today. That is 24 million jobs, nine million more than 10 years ago.

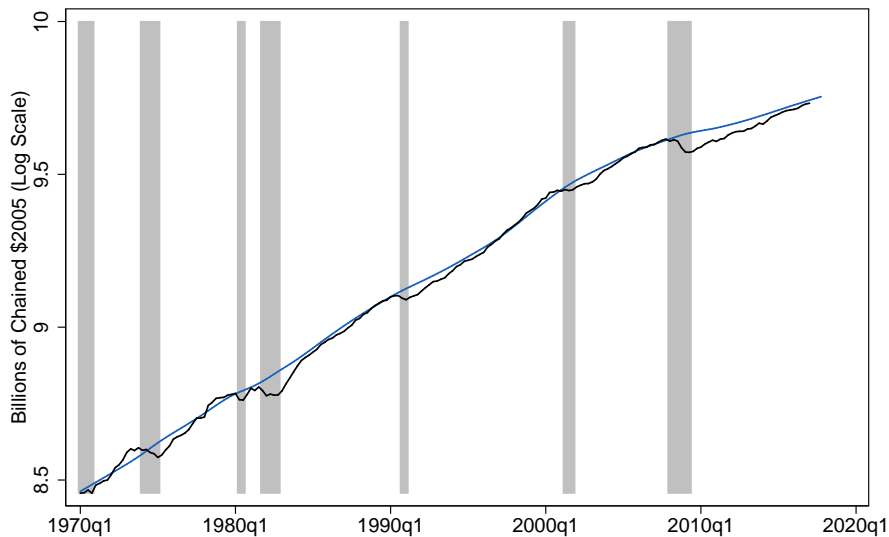
From Katz and Krueger (2016)



Note: Shading denotes recession.

Source: Current Population Survey, IRS Statistics of Income Publication 1304 (Table 1.3).

CBO Potential and Actual Real GDP

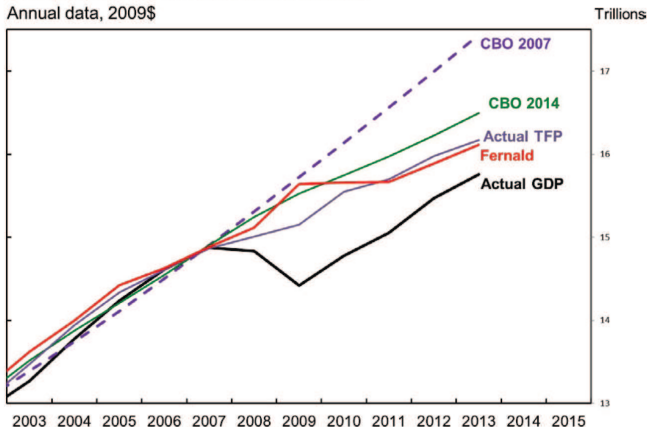


Potential Growth of GDP

Source: John Fernald, SF Fed (2014)

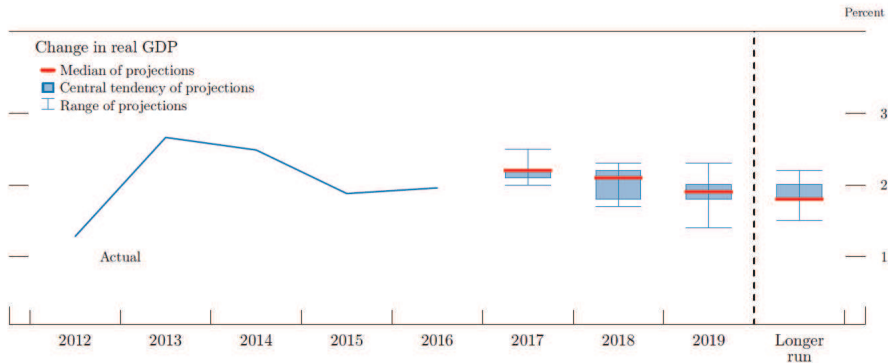
Alternative Measures of Potential

Annual data, 2009\$



From FOMC Summary of Economic Projections

June 2017



Decomposition of Aggregate Output

- Output per capita = $\text{Output} / \text{Population}$
- Output per capita = $\text{Output} / \text{Workers} \times \text{Workers} / \text{Population}$
- = Labor Productivity \times Labor Force Participation

Productivity Growth

Source: John Fernald, SF Fed (2014)

Contributions to Labor Productivity Growth

Business sector, percent change, annual rate

