How Has the Great Recession Changed Our Understanding of Macroeconomics?

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Outline

- Is Macro broken?
- Post-Great Recession Issues:
  - Long-Run Growth Trend – stagnation?
  - Labor market issues – labor market participation, labor market tightness.
  - Monetary policy – unconventional policies, normalization.

Is Macro Broken?

- The Financial Crisis and Great Recession created criticism directed at macroeconomists and macroeconomics.
- Some common complaints:
  - Macroeconomists did not predict the financial crisis.
  - Macroeconomic models have omitted banking, financial frictions, and financial crises.
  - We can do just fine with pre-1970 Keynesian models, for example the Hicks (1937) IS-LM model.

No, Macro is not Broken

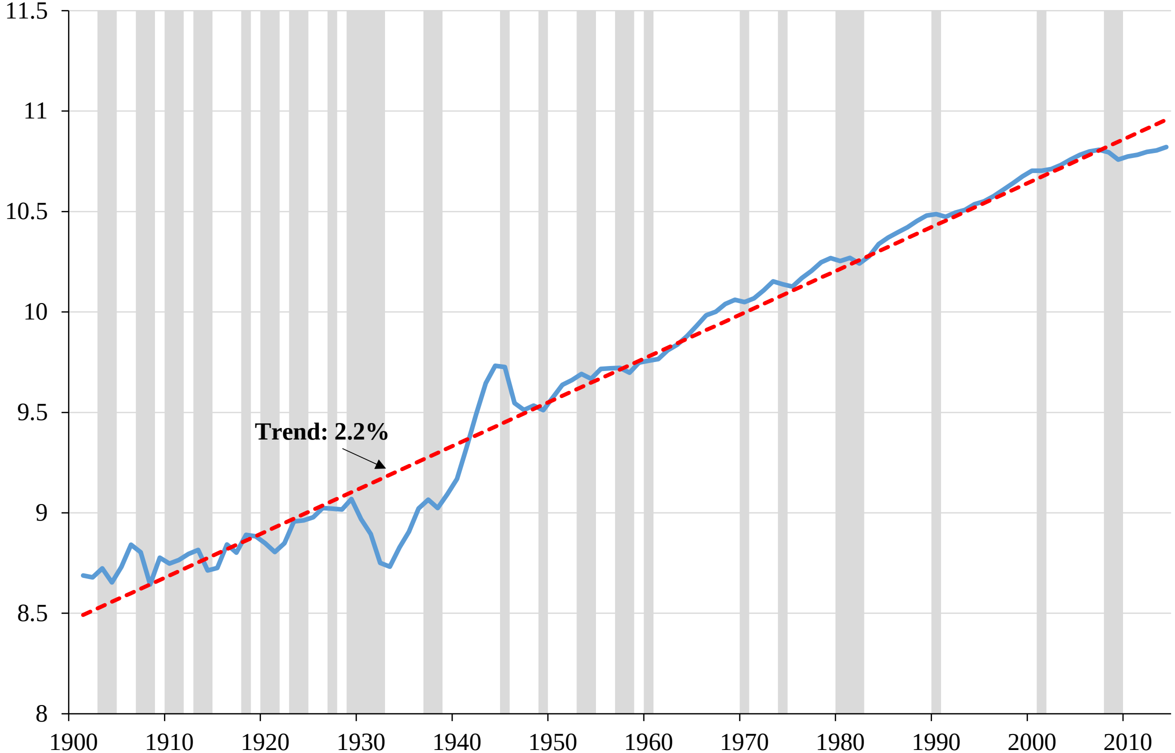
- Theory tells us that, by their nature, financial crises are unpredictable, and that policymakers may not be able to stop one, even when they recognize it is underway.
- There has been much economic modeling of banking, financial frictions, and crises in the last 40+ years – though macroeconomists don't always use what is on the shelf.
- There is much that IS-LM does not capture – dynamics, financial detail, unconventional monetary policy effects.
- The trick is to distill frontier work in macroeconomic theory to make it accessible to students.

How is the Post-Great Recession World Different?

- Solow growth model – a standard tool for understanding economic growth, and often taught to undergraduates.
- Solow model says long-run growth in per-capita income is determined by the rate of technological change.
- Pre-Great Recession: U.S. looks like an economy driven by a roughly constant rate of technical change – per-capita income growth does not deviate much from a 2% trend.

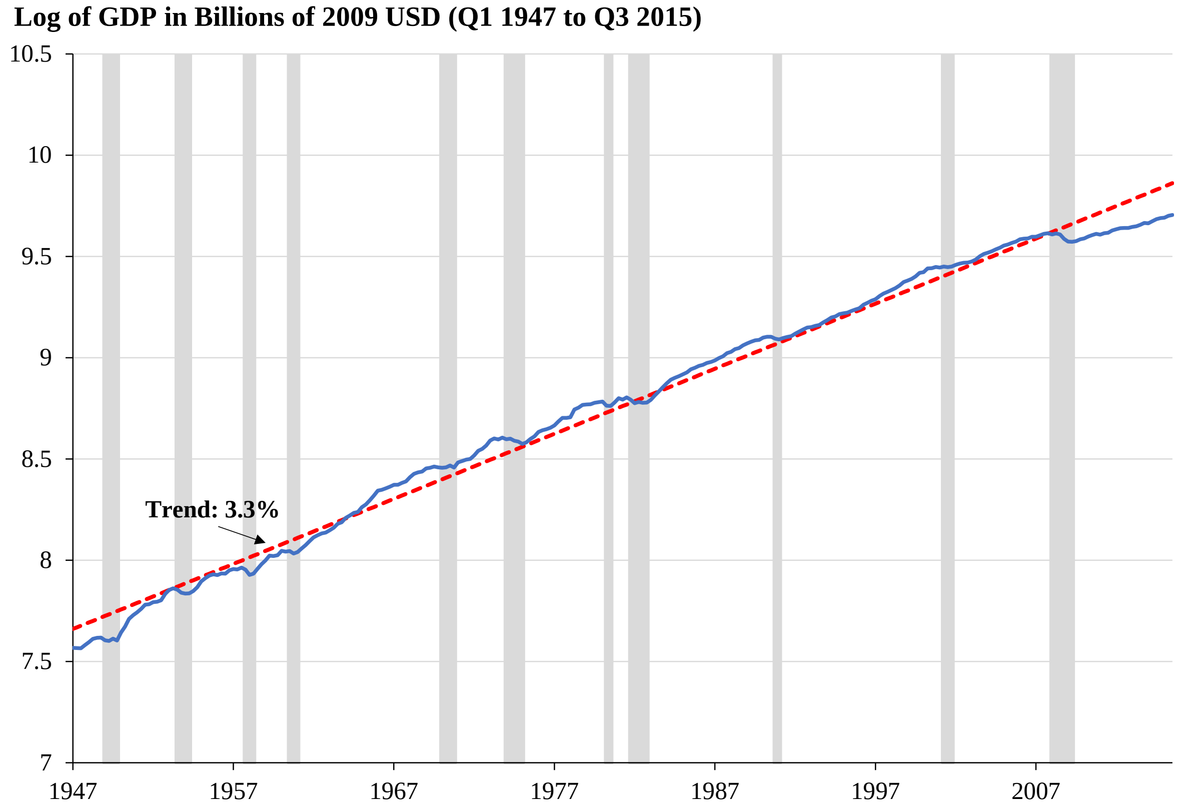
Per Capita Real GDP For the U.S.

Log of GDP per Capita in 2009 USD (1901 to 2014)



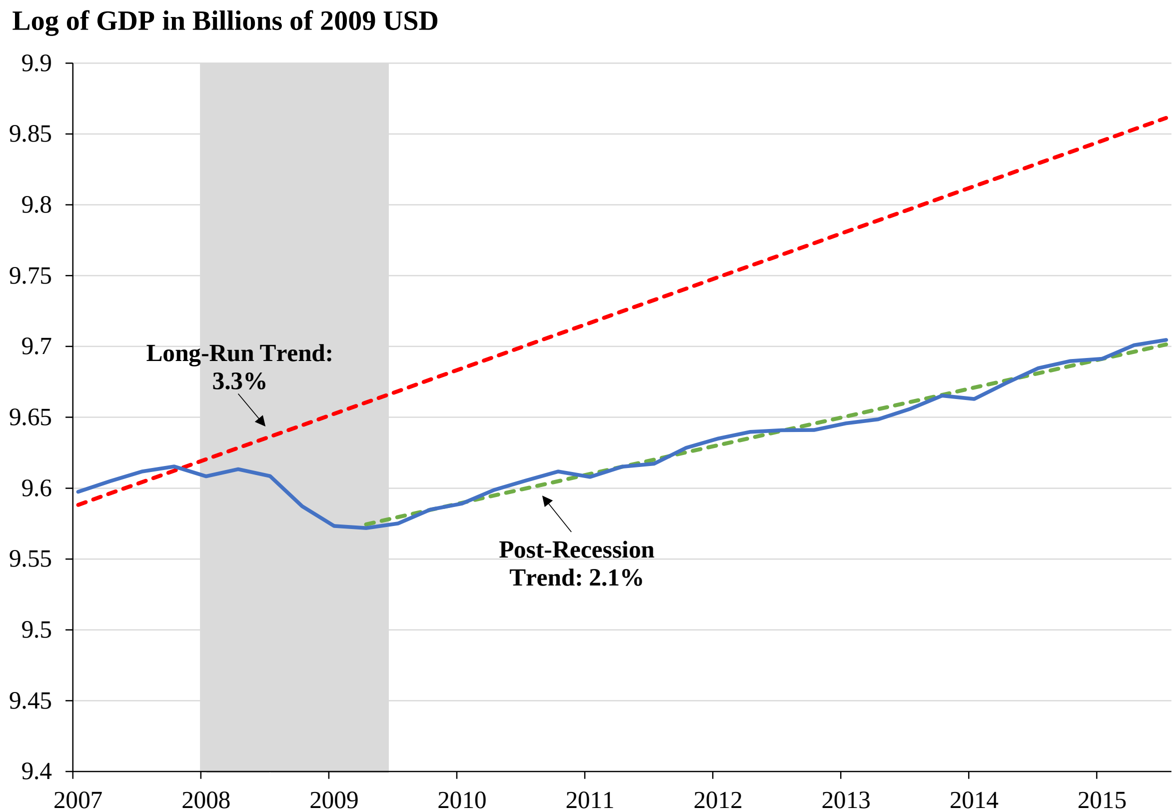
Sources: BEA and Historical Statistics of the United States/Haver

Real GDP, Post-WWII



Sources: BEA/FRED

Real GDP, Recent History



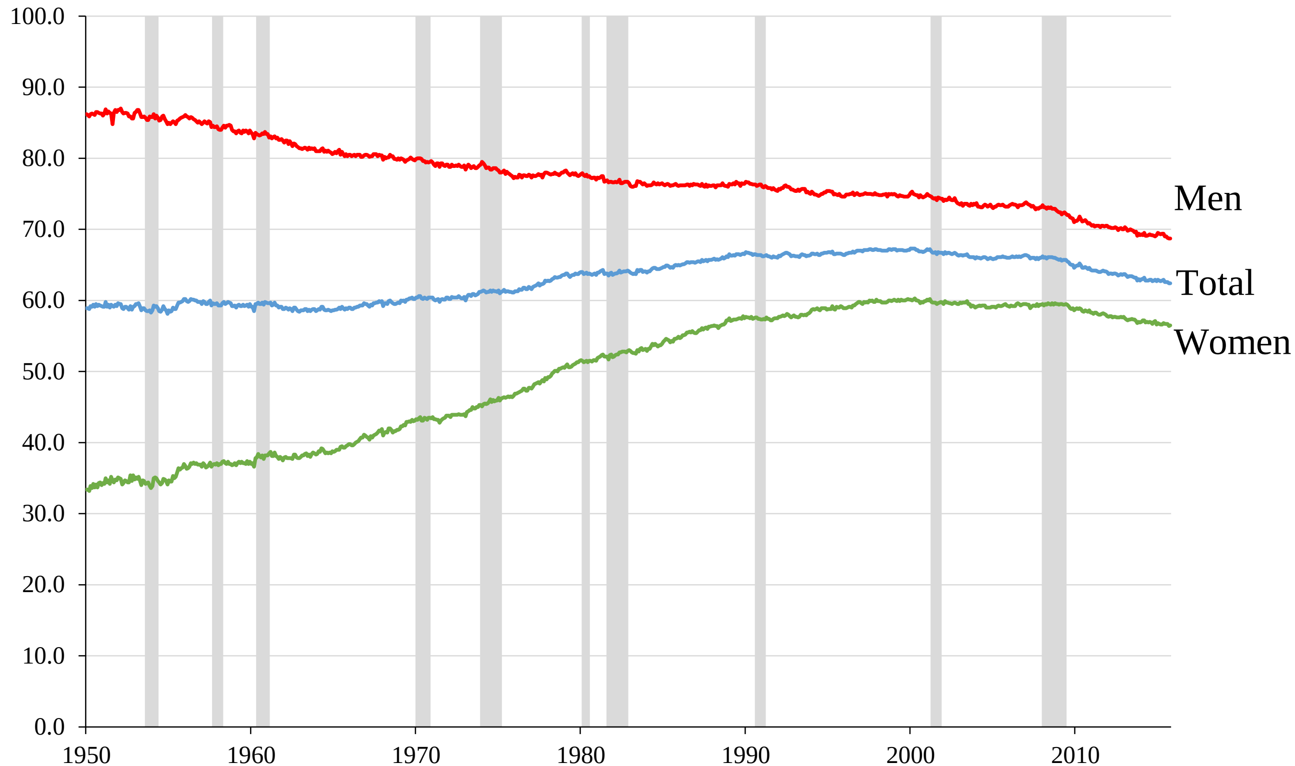
Sources: BEA/FRED

Questions About Future U.S. Growth Performance

- Has there been a permanent downward level adjustment in real GDP, and also a permanent downward adjustment in the growth rate?
- Or is this just a protracted response to the financial crisis?
- Will the future be a long period of secular stagnation?
  - Low TFP growth – growth pessimists.
  - Larry Summers and secular stagnation – dearth of investment opportunities.

Labor Market Issues

Labor Force Participation Rates, Seasonally Adjusted Percent

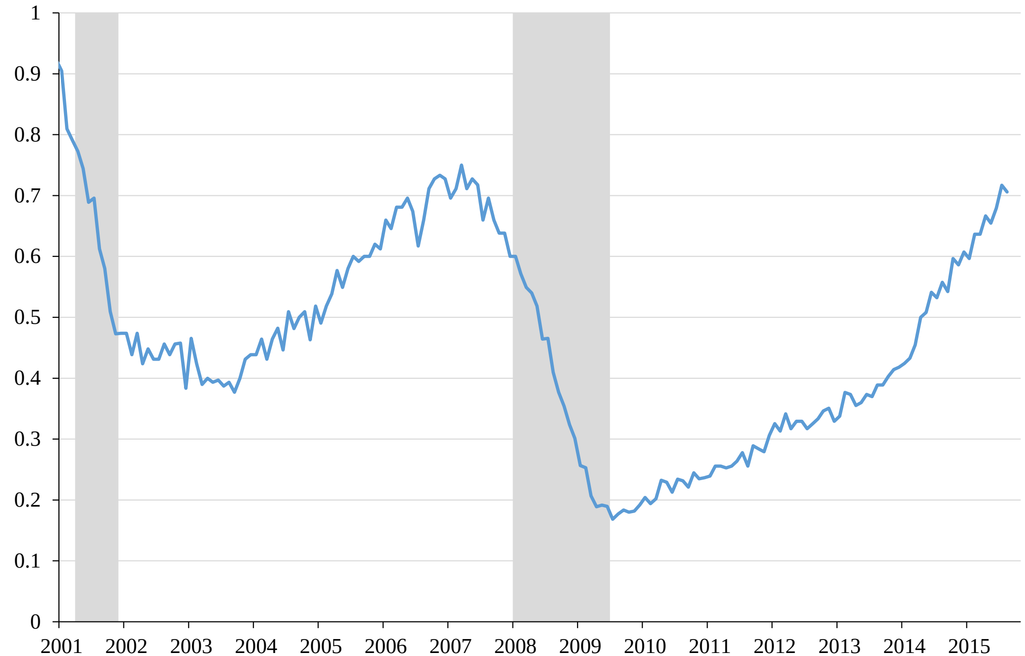


Sources: BLS/FRED

Labor Market Tightness

- One measure of tightness: ratio of vacancies to unemployment.

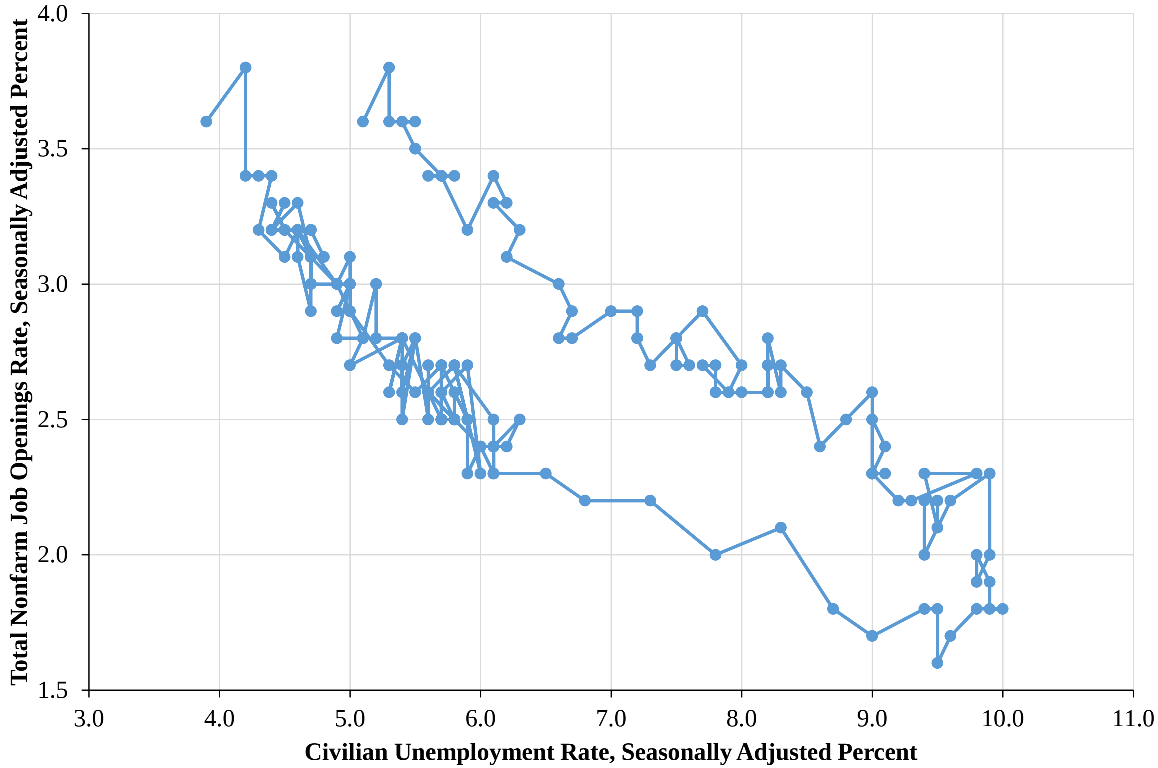
Total Nonfarm Job Openings Rate/Civilian Unemployment Rate, Both Seasonally Adjusted



Sources: BLS/FRED

Beveridge Curve

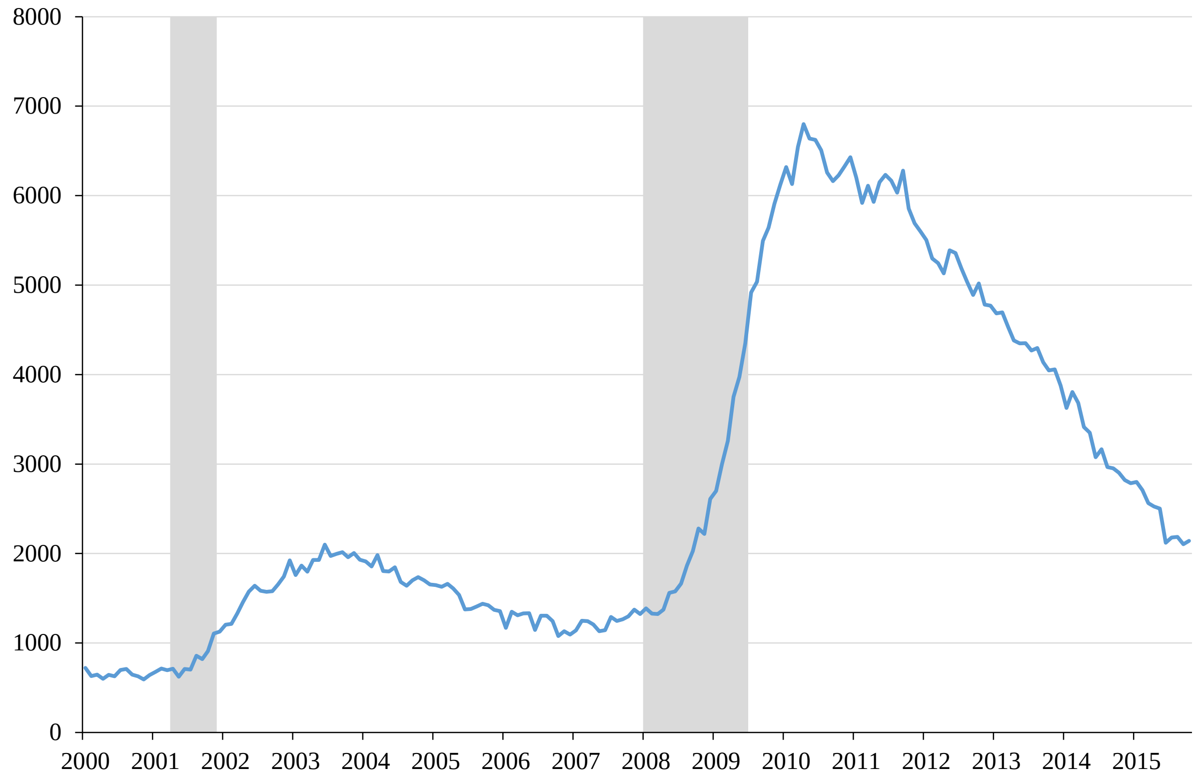
December 2000 to August 2015



Sources: BLS/FRED

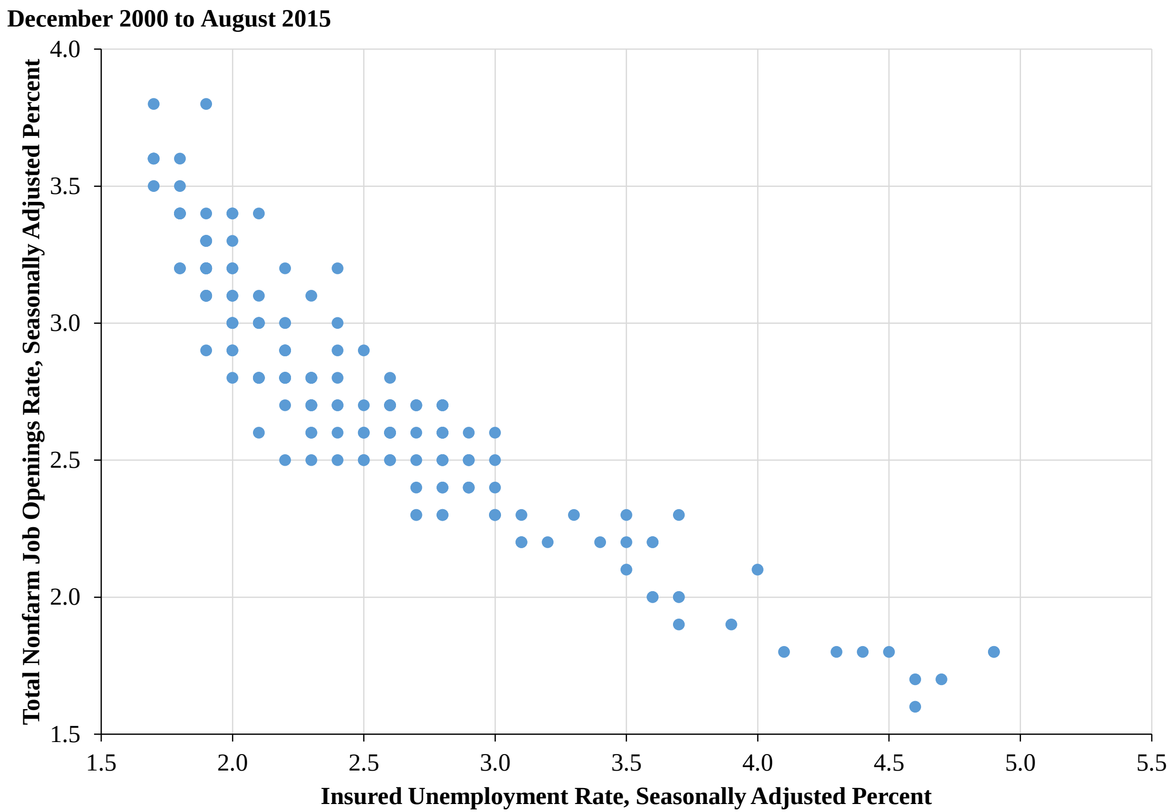
Long-Term Unemployed

Number of Civilians Unemployed 27 Weeks and Over, Seasonally Adjusted (Thousands)



Sources: BLS/FRED

Beveridge Curve #2: Insured Unemployment

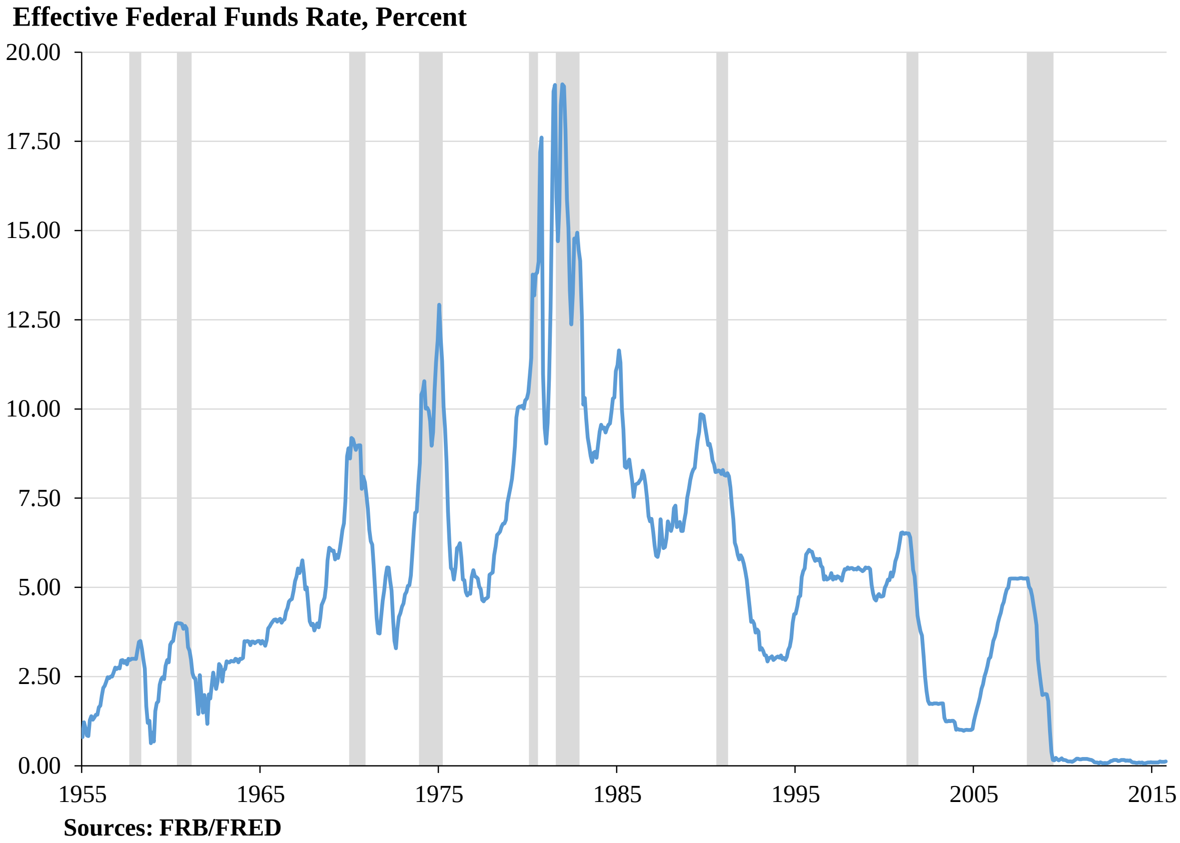


Sources: BLS and DOL/FRED

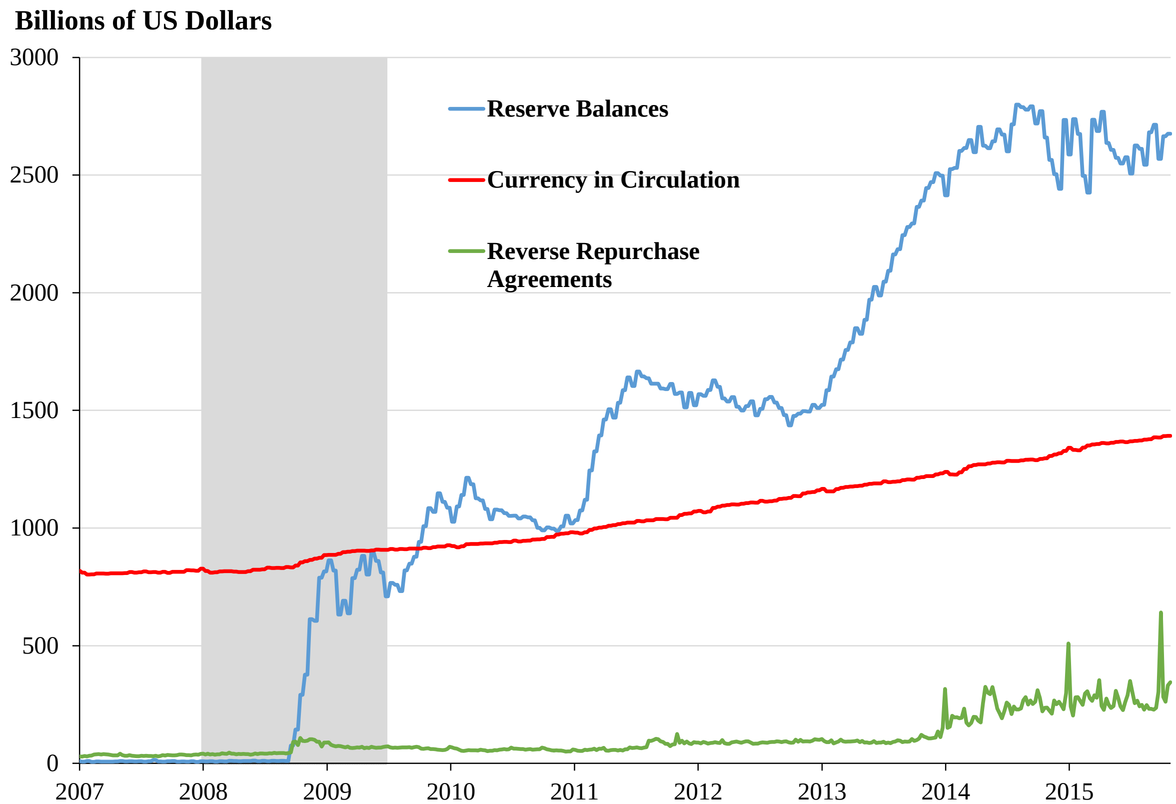
Monetary Policy

- Unconventional monetary policy tools:
  - Extended ZIRP (zero interest rate policy).
  - Quantitative easing: (i) Outright purchases of long-maturity Treasury securities; (ii) Swaps of short Treasuries for long Treasuries; (iii) Purchases of non-Treasury debt – mortgage-backed securities.
  - Forward guidance: Promises about future policy actions.
  - Negative policy interest rates (tried in Sweden, Euro area, Switzerland, Denmark).

ZIRP


Effective Federal Funds Rate, Percent
20.00
17.50
15.00
12.50
10.00
7.50
5.00
2.50
0.00
1955
1965
1975
1985
1995
2005
2015
Sources: FRB/FRED

Fed Liabilities



Sources: FRB/FRED

Monetary Policy Normalization

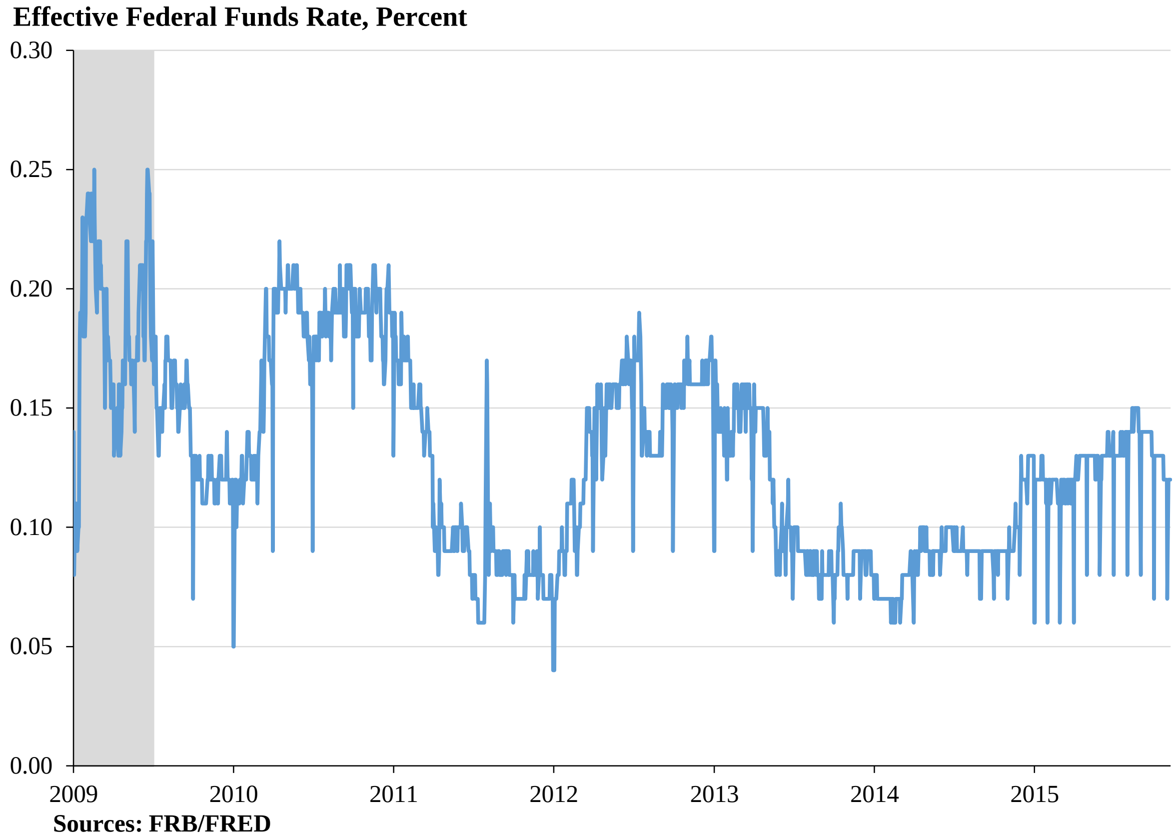
Steps in normalization (from FOMC's posted "Policy Normalization Principles and Plans"):

1. Liftoff: Fed funds rate target range to increase from the 0-0.25% range.
2. Reduction in the Fed's balance sheet: Treasury securities mature, and MBS run off – will take approximately 7 years (Board estimate) to return to normal size, and longer to return the maturity composition to normal.

Liftoff

- Will be somewhat complicated because of:
  - Large balance sheet.
  - Unusual features of U.S. financial markets.
- Idea is to control fed funds rate, not by intervening to control reserve balances, but with:
  - Interest rate on reserves (IOER).
  - ON RRP (overnight repurchase agreement) rate.
- IOER and ON RRP rate should bound the fed funds rate.

Fed Funds Rate, Post-Great Recession



Key U.S. Macroeconomic Issues

- Long run growth:
  - Is the average rate of real GDP growth going to be 2% rather than 3%?
  - Will the U.S. economy never return to its previous trend growth path?
- Labor market:
  - Is the decline in labor force participation permanent?
  - Is the labor market as tight as it's going to get?
- Monetary policy:
  - When will liftoff occur? What if ZIRP continues indefinitely?
  - Will operational changes and Fed communications work smoothly in the liftoff phase?

Federal Reserve Bank of St. Louis
stlouisfed.org

Federal Reserve Economic Data (FRED)
research.stlouisfed.org/fred2/

St. Louis Fed Business Outlook Survey
research.stlouisfed.org/outlooksurvey/