

Monetary Policy Normalization:

What's New? What's Old? How Does It Matter?



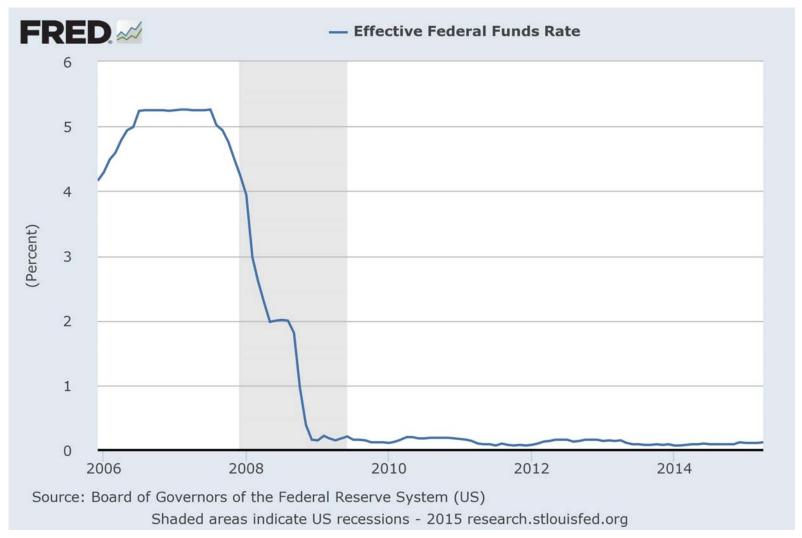
Cletus Coughlin

Senior Vice President and Policy Adviser to the President Federal Reserve Bank of St. Louis May 28, 2015

The views expressed here are those of the speakers and do not necessarily represent the views of the Federal Reserve Bank of St. Louis or of the Federal Reserve System.

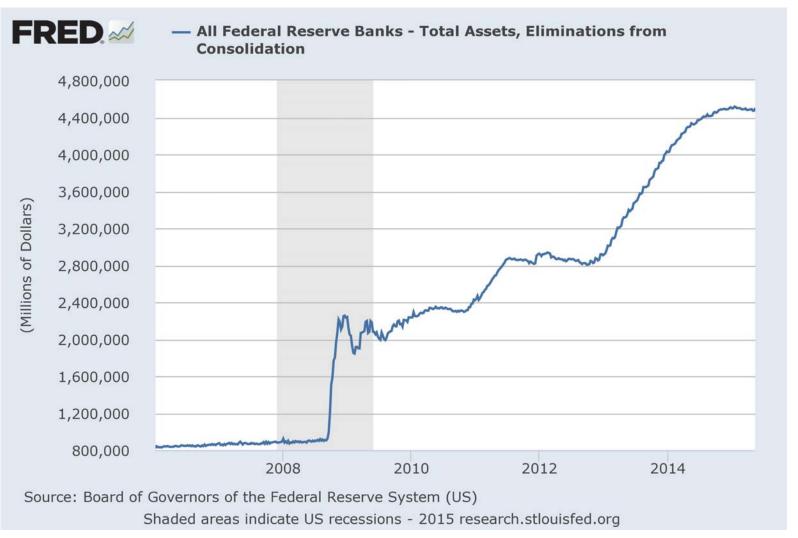
U.S. Monetary Policy

Policy Rate Has Been Near Zero since December 2008



Link to FRED chart: http://research.stlouisfed.org/fred2/graph/?g=1bPD

The Fed's Balance Sheet Remains Large



Link to FRED chart: http://research.stlouisfed.org/fred2/graph/?g=1bxr

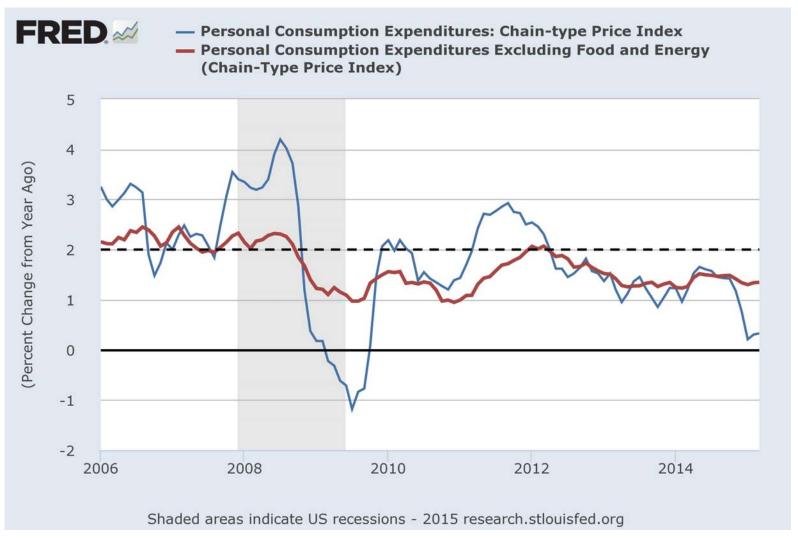
U.S. Economy

The Labor Market Has Improved



Link to FRED chart: http://research.stlouisfed.org/fred2/graph/?g=1aUS

Low Inflation: Temporary?



Link to FRED chart: http://research.stlouisfed.org/fred2/graph/?g=1bZ7



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What's New? What's Old? How Does It Matter?



Stephen Williamson

Vice President and Economist
Federal Reserve Bank of St. Louis
May 28, 2015

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Tonight's Presentation

- Early central banking: Bank of England and the early days of the Fed.
- Before the financial crisis: conventional monetary policy.
- □ The financial crisis and unconventional monetary policy.
- Normalization and the return to conventional monetary policy.

King Billy and the Bank of England

- Bank of England is the first successful central bank founded in 1694, a private financial institution until 1946.
- Bank of England wasn't started because some economists thought it would be a sound idea.
- □ King Billy (King William III) wanted to finance a war.
- Bank of England wanted to make a profit for its shareholders.

Bank of England's Balance Sheet

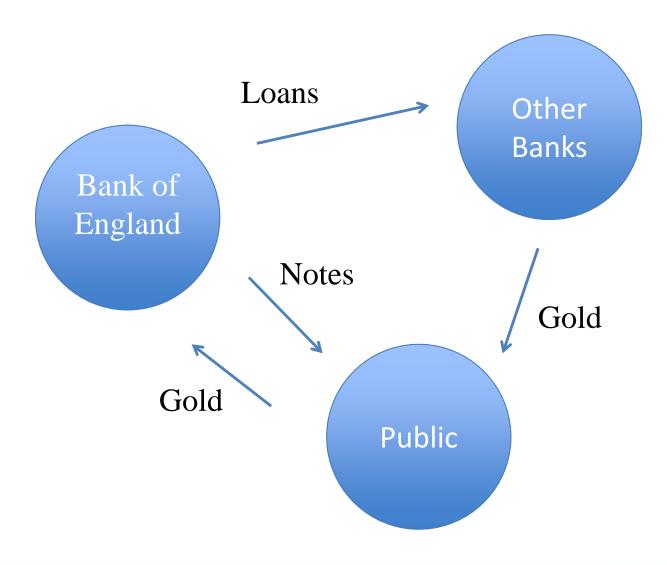
Assets	Liabilities
Loans to King Billy	Notes in Circulation
Loans to Private Entities	
Gold	

- Bank of England was granted a local monopoly on issuing notes, expanded to a monopoly for all of the U.K. in 1844.
- Bank of England got the monopoly profits from issuing notes; King Billy got a cheap means for financing war.

What Are "Notes in Circulation"?

- □ Paper currency issued at the time by banks.
- Before 1844, Bank of England notes competed with currencies issued by other private banks in the U.K.
- □ Notes issued by banks were redeemable in gold.

The Bank of England Learned Crisis Management



Bank of England Crisis Management

- □ South Sea Bubble 1720.
- □ Various 18th and 19th century financial panics.
- Walter Bagehot's *Lombard Street: A Description* of the Money Market (1873).
- Source of modern idea of a central bank as "lender of last resort."

Bank of England Innovations

- □ Central bank as sole issuer of currency national currency that was *uniform* and *safe*.
- □ Financial crisis intervention: central bank as lender of last resort.
- □ Innovations at the time were driven by the desire of the bank to make a profit.
- But in terms of modern economics, we can understand these innovations as socially beneficial.

Founding of the Fed, 1914

- Federal Reserve Act of 1913 was based on serious science the work of the *National Monetary Commission* (after the panic of 1907).
- □ Currency (Federal Reserve notes) would be:
 - 1. Uniform
 - 2. Safe
 - 3. Elastic

The Fed Was Founded To Get Rid of ...

- □ Pre-Civil War bank notes: issued by statechartered banks. The supply of these notes was not uniform, safe or elastic.
- National bank notes (1863-1913): safe and uniform, but not elastic.
- Banking panics: Lack of elasticity helped cause 19th and early 20th century banking panics. (Last panic was in 1907.)

Discount Window Lending

Early Fed Balance Sheet

Assets	Liabilities
Discount Window Loans to Banks	Federal Reserve Notes (Currency)
Gold	Bank Reserves

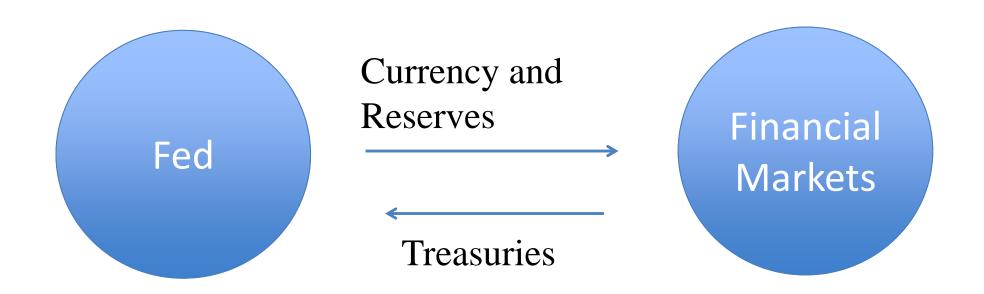
- Initial plan for Fed: expand and contract the supply of currency through lending to banks.
- □ Idea: smooth interest rates over time and prevent financial panics.

The Fed Discovers Open Market Operations

- 1920s: The Fed discovers that it can move market interest rates by buying and selling Treasury securities.
- So, the Fed's balance sheet started to look like this:

Assets	Liabilities
Discount Window Loans	Currency
Treasury Securities	Bank Reserves
Gold	

How An Open Market Purchase Works

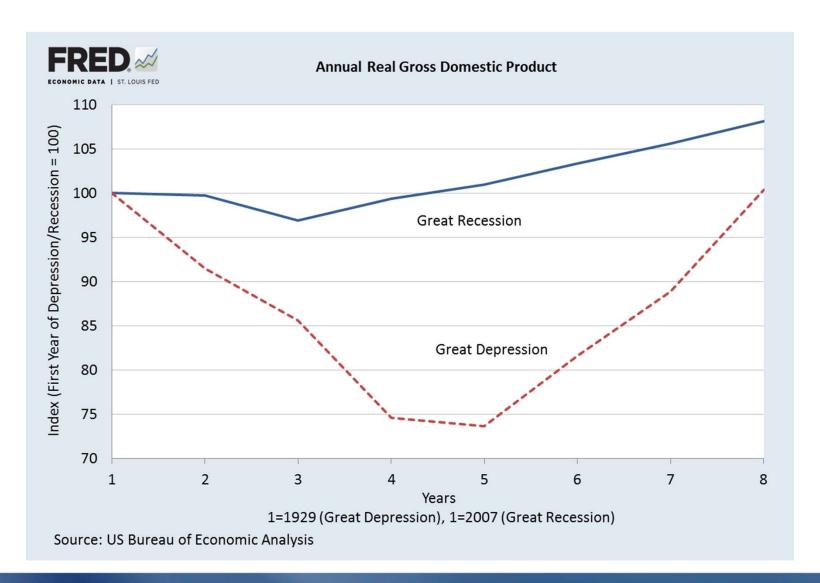


Assets	Liabilities
Discount Window Loans	Currency
Treasury Securities	Bank Reserves
Gold	

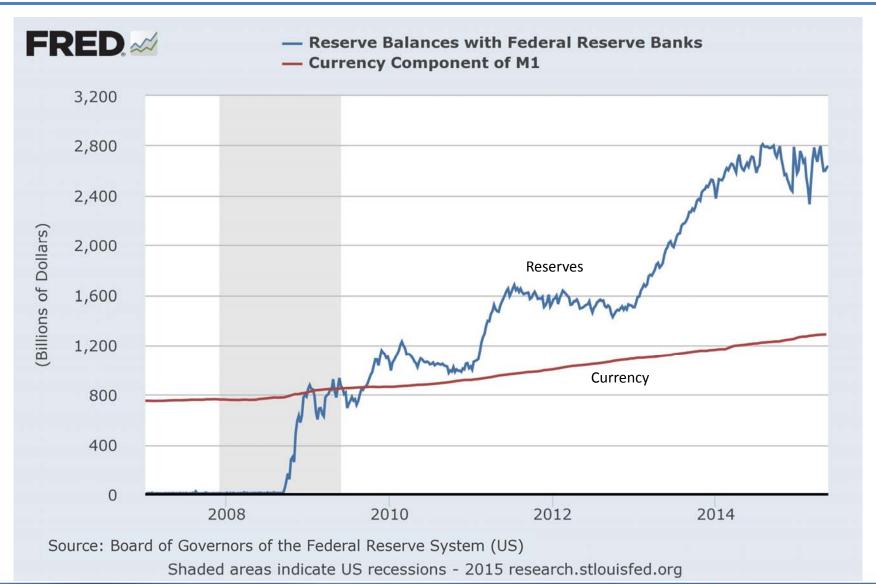
By the 1930s, the Fed Had Serious Tools

- □ Discount window lending to private banks through regional Federal Reserve banks.
- □ Open market purchases and sales of Treasury securities by the New York Fed.

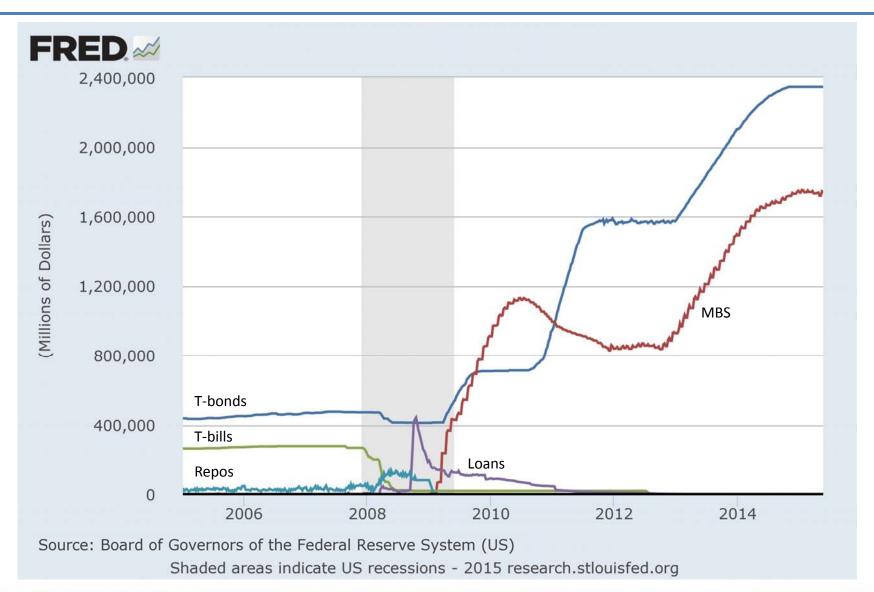
But Did It Use These Tools during the Great Depression? Not So Much.



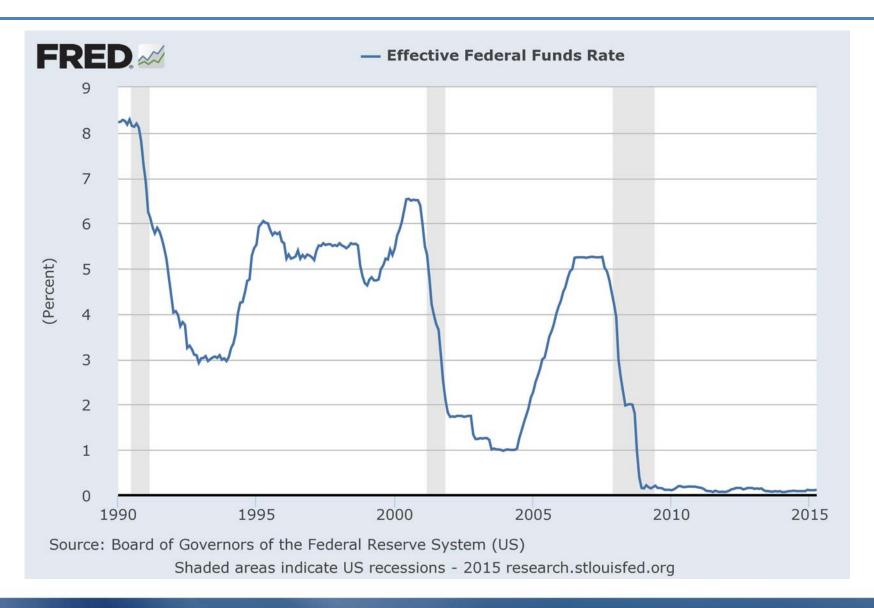
Fed's Liabilities, 2007-present



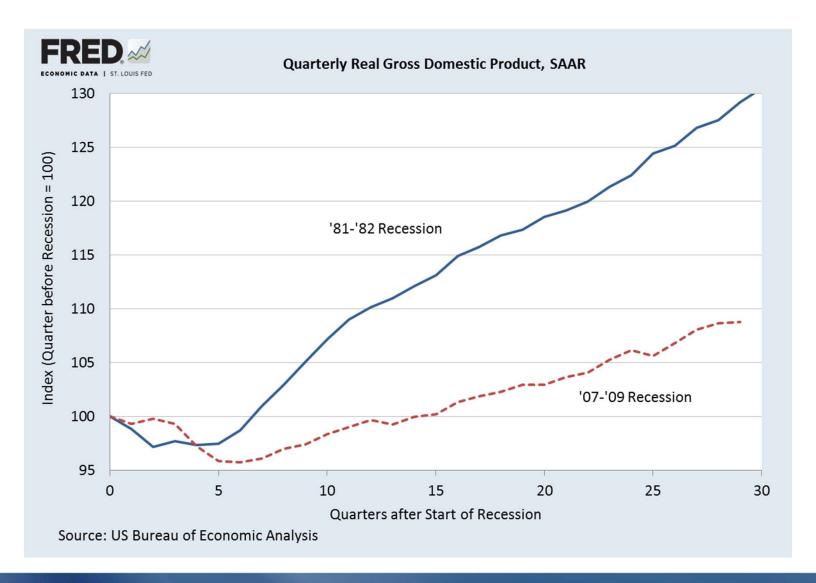
Assets on the Fed's Balance Sheet



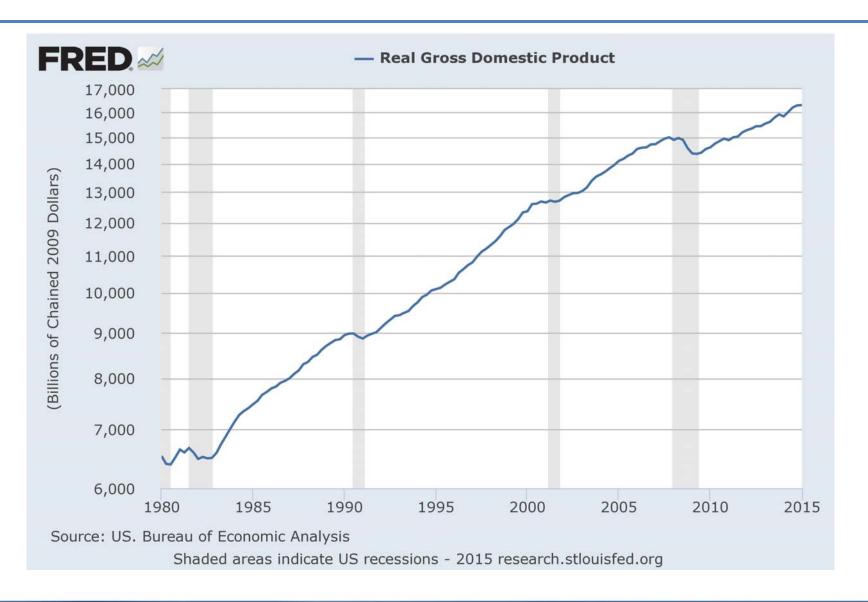
Fed Funds Rate



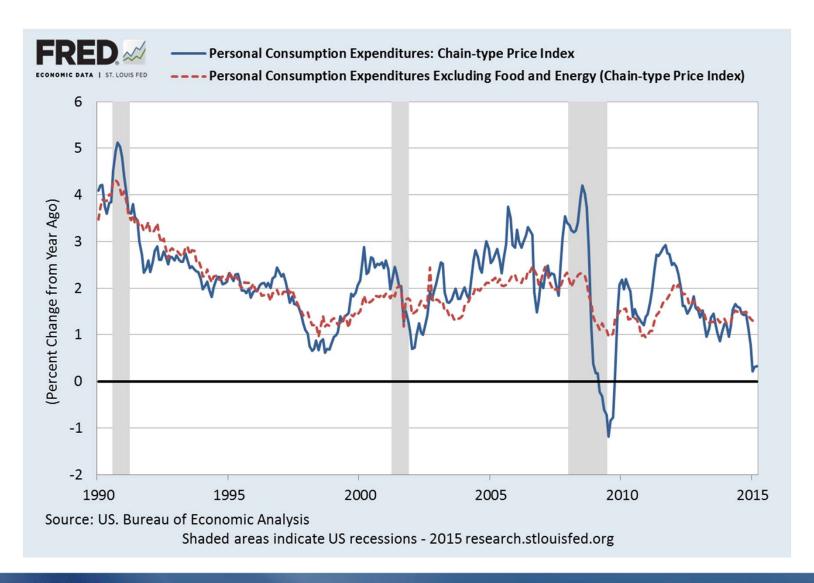
Why Were There Unusual Interventions after the Great Recession Ended?



Another Way To Look at This:



Fed's Dual Mandate: Price Stability and Maximum Employment



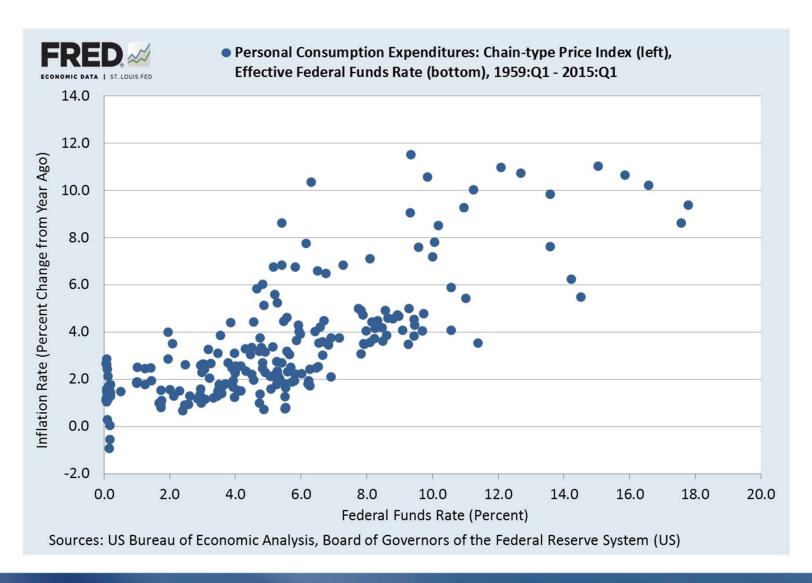
Fed's Dual Mandate: Price Stability and Maximum Employment



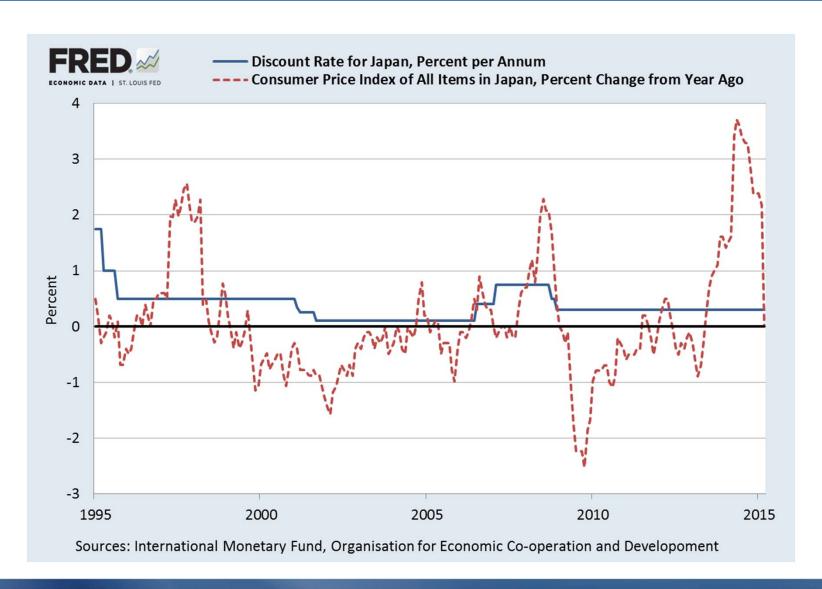
Why Normalize?

		PCE Inflation	PCE Core Inflation	Fed Funds Rate
	5.4%	2.6%	2.2%	2.5%
Current	5.4%	0.3%	1.3%	0.13%

Do Low Interest Rates Mean High Inflation?



Japan's Experience



What Does Normalization Entail?

- Laid out in the FOMC's "Policy Normalization Principles and Plans."
- 1. Get fed funds rate off zero achieve "liftoff."
- 2. End "reinvestment."
- 3. Return the balance sheet to near-zero reserves.
 - Federal Reserve Board economists estimate this process will take seven years once it starts.

How Will the Fed's Balance Sheet Shrink?

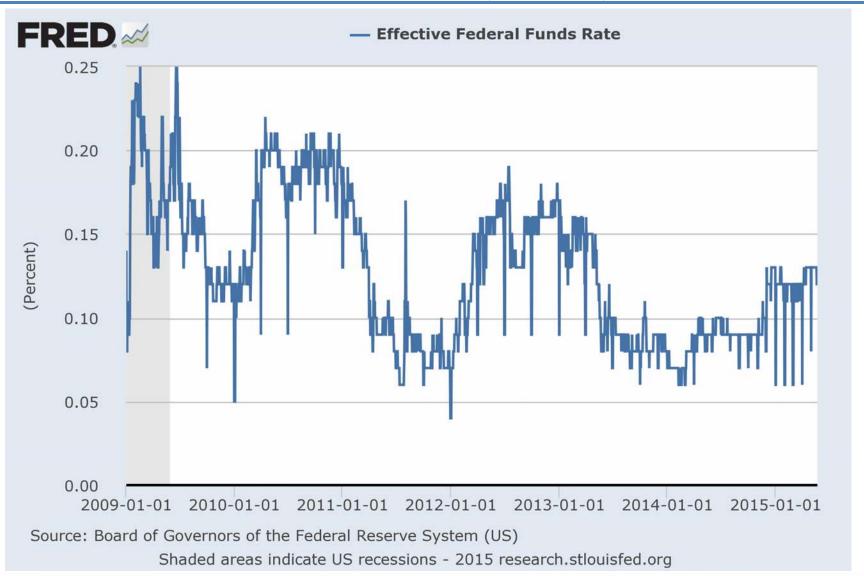
Assets	Liabilities
Mortgage-Backed Securities	Currency
Long-Maturity Treasuries	Reserves
	Reverse Repos 👆

- □ As assets mature, reserves fall.
- Currency increases as demand grows, reducing reserves and reverse repos.

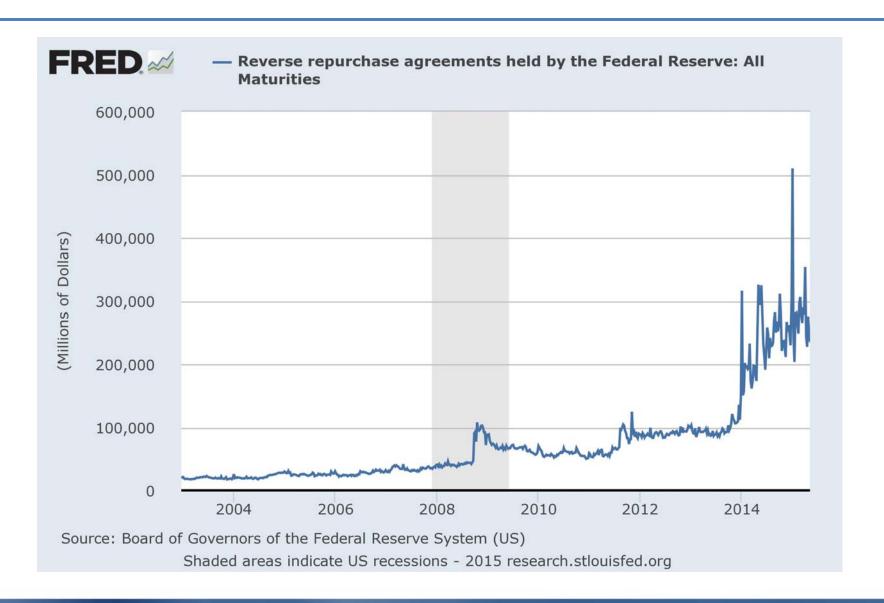
Complications Associated with Normalization

- □ Reserves now bear interest in theory, this makes interest rate control easy.
- U.S. financial system a complicated beast so it's not actually so easy.
- □ Reverse repo facility intended to help with that.
- Reverse repos are like reserves, but can be held by financial institutions that can't hold reserves.

Fed Funds Rate Is Less than the Interest Rate on Reserves (0.25%)



Reverse Repurchase Agreements



How Will Normalization Matter for Consumers and Businesses?

- □ For financial firms, the differences in how the Fed intervenes in financial markets may make a difference.
- Higher interest rates will require adjustment, but the process should be gradual, with no big surprises.
- Normalization not an end in itself primary concern for the Fed is its dual mandate.

Conclusions

- When will liftoff happen?
 - Not a predetermined calendar date depends on future data and the views of FOMC participants.
- Large Fed balance sheet not a threat to price stability.
- □ Fed's actions determined by what the FOMC thinks is best, given the Fed's dual mandate.