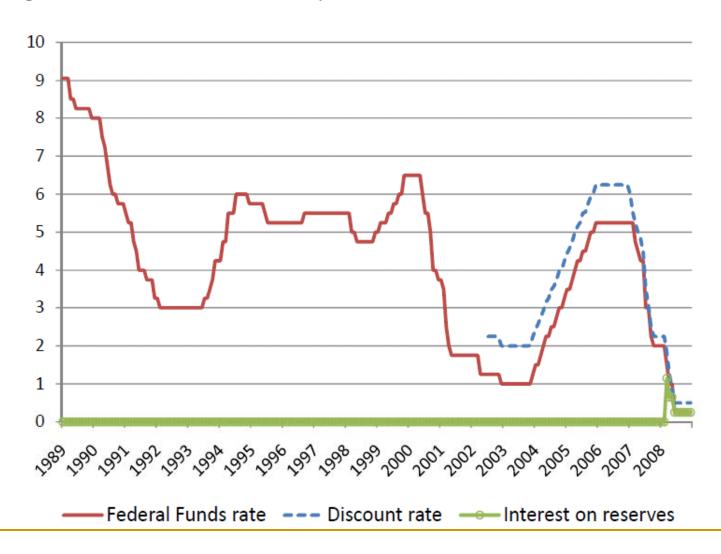
Exit strategies and the Federal Reserve

Ricardo Reis Columbia University American Enterprise Institute, October 8, 2009

Extraordinary times: interest rates

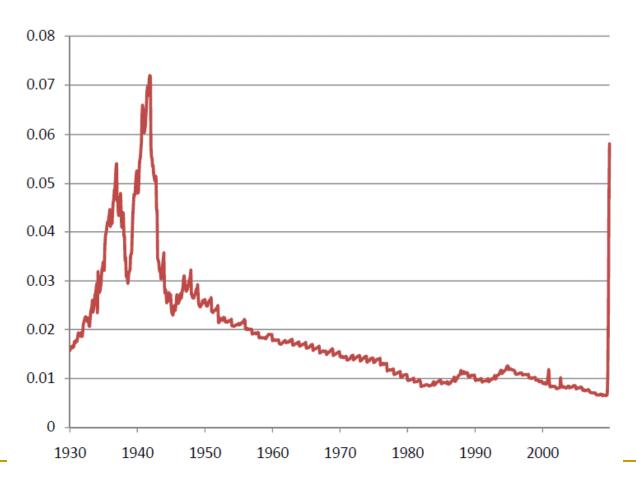
Figure 1. Interest rates controlled by the Federal Reserve, 1989:8-2009:8



Extraordinary times: reserves

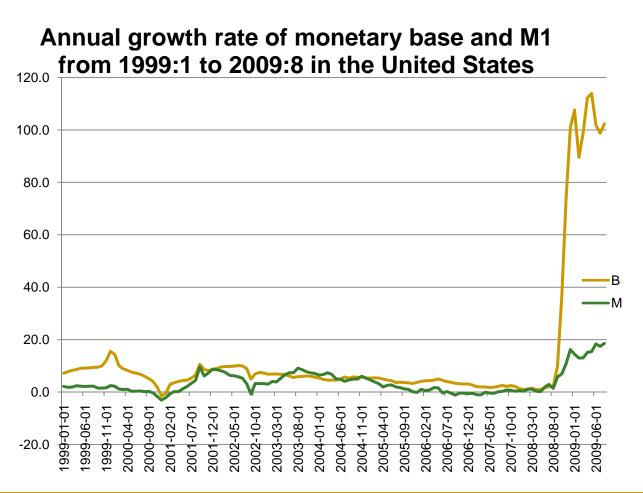
Size of balance sheet: 01/07 (\$879bn) vs. 08/09 (\$2064bn)

Figure 2. Adjusted reserves divided by annual U.S. GDP, 1929-2009



Extraordinary times: money

Money multiplier has collapsed



Extraordinary times: Fed's credit

Traditionally, Fed almost exclusively buys/sell Treasury securities in exchange for bank reserves. Now:

- TAF credit auction to banks for 28, 84 days
- TSLF (28d) and PDCF (overnight) primary dealers
- TALF lend against collateral provided by ABSs on student, auto, credit card, and SBE loans.
- AMLF and MMIFF Credit to money market funds.
- CPFF Credit to firms directly by buying commercial paper as a backstop provider
- Purchase of mortgage-backed securities.
- Maiden Lane taking in Bear Sterns and AIG assets

Extraordinary times: Fed's assets

Fed's assets January 07 Fed's assets August 09

Assets	
Securities held outright	
U.S. Treasury bills	277.2
U.S. Treasury notes and bonds	501.7
Agency Debt	0
Repurchase Agreements	39.8
Direct Loans	1.3
Gold	11.0
Foreign reserves	20.5
Other Assets	27.0
Total Assets	878.5

Assets	
Securities held outright	
U.S. Treasury bills	18.4
U.S. Treasury notes and bonds	717.7
Agency debt	111.8
Repurchase Agreements	0
Direct Loans	106.3
Gold	11.0
Foreign reserves and other assets	76.7
New asset categories	
Term Auction Facility (TAF)	221.1
Commercial Paper FF	53.7
Maiden Lane	61.7
Mortgage-backed securities	609.5
Central Bank liquidity swaps	69.1
Total Assets	2063.8

First question: what are the dangers of the current situation?

Inflation?

- Monetarist nightmare
- But (i) inflation today and expectations of it in future are low, (ii) will raise interest rates, (iii) once pay interest on reserves, naïve monetarism out the window.

Employment?

- Because of zero-lower bound on nominal interest rates, perhaps real interest rates are too high.
- But, doing everything it can.

Political

- Captured by Congress if need funds.
- Captured by financial market participants.

Second question: can the Fed get back?

- Monetary base
 - Easy by conventional open-market operations
- Credit programs
 - Let them expire
- Maturity of Treasury securities
 - Sell bonds and buy bills
- Mortgage-backed securities (\$610bn)
 - More difficult, as big stakes and political pressure
- Maiden Lane (\$62bn)
 - Hope...

Third question: should it go back?

Credit programs

- No reason to maintain
- Dangerous direct interference with financial markets

Interest rates

- Eagerness to raise can be dangerous
- Recession of 1937-38, and Japan's lost decade

Monetary base and interest on reserves

- Should not be reversed
- Optimal to satiate society with liquidity
- Accomplished by federal funds rate equal to rate on reserves
- Reserves and monetary base are whatever market wants