
The Financial Crisis Six Years On:

What Have We Learned?

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To the Q Group

October 20, 2014

Collapse of Lehman Brothers

- The failure of Lehman Brothers was the event that set in motion the greatest financial crisis since the Great Depression.
- Economists have been debating whether the Fed should have bailed Lehman out.
 - Allan Metzler and others said "yes," because they had bailed Bear before, and the market expected it.
 - Others, such as Charles Plosser said "no," claiming the crisis was made worse by the Bear Stearns bailout 6 months earlier.

Did the Fed have authority to bailout Lehman?

- **Absolutely! Under the Section 13 (3) of the 1932 Amendments to the Federal Reserve Act of 1913,**
 - In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, to discount for any individual, partnership, or corporation, notes, drafts and bills of exchange when [they] are secured to the satisfaction of the Federal Reserve bank: Provided, that before lending ... the Federal Reserve shall obtain evidence that such individual, partnership, or corporation is unable to secure adequate credit accommodations from other banking institutions.

Why didn't Fed bailout Lehman?

- **Political.** Republicans were furious at the Bear Stearns bailout. President Bush told Bernanke and Treasury Secretary Paulson: **No More Bailouts!**
- **And the Fed and Treasury were instructed to tell Lehman that it had to put its house in order, as no further money would be forthcoming for investment banks.**
- **The problem: Lehman, because of its heavy plunge into real estate, was already dead by the time Bear was rescued. Dick Fuld try to sell the firm, but nobody was biting.**
- **Nevertheless, Bernanke and Paulson hoped they had prepared the market for a Lehman filing.**

Was the Market Prepared ?

- **During the first 60 minutes of trading, stocks stabilized. “Bad news out of the way.” Then financial markets froze.**
 - **London wouldn’t clear trades connected to Lehman**
 - **All banks came under suspicion and investors tried to shed risk.**
 - **Treasury bill rates plunged to zero**
 - **Libor disconnected with Fed Funds and shot upward.**
 - **Money market funds faced with huge withdrawals.**
 - **All asset prices except treasuries collapsed**

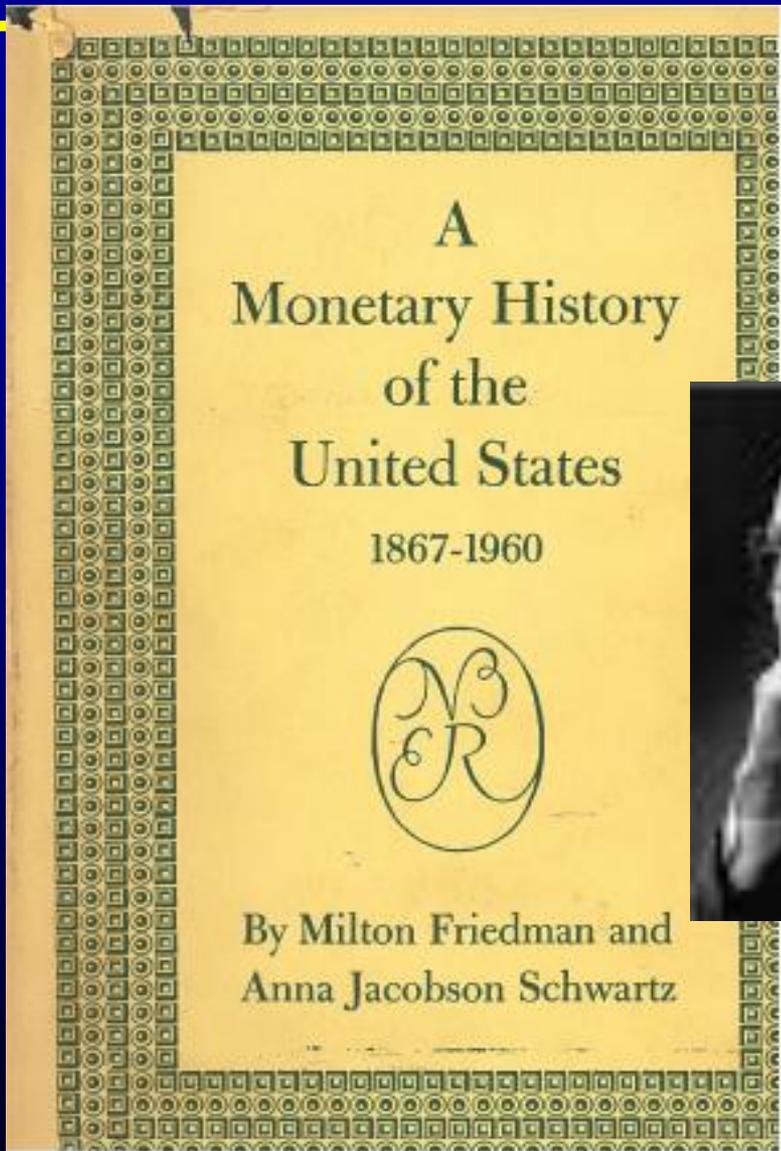
Fed Took Emergency Actions

- **Bernanke put aside political concerns and felt the Fed must go all out to stop the panic.**
 - **Bailed out AIG with \$85b loan and eventually loaned \$182b to insurer.**
 - **Ring-Fenced over \$300b troubled loans at Citibank and almost \$100b at B of A.**
 - **Backed up all money market mutual funds**
 - **Backed up all large corporate bank deposits over FDIC limit.**
- **These actions stabilized and saved the financial system.**

What Caused Bernanke's Turnarund?

- By far the most important reason was the impact of Milton Friedman's *Monetary History of the United States*, published in 1963 that Bernanke studied at MIT as a graduate student.

Milton Friedman's *Monetary History*



CHAPTER 7

The Great Contraction, 1929–33

THE CONTRACTION from 1929 to 1933 was by far the most severe cycle contraction during the near-century of U.S. history we may well have been the most severe in the whole of U.S. history sharper and more prolonged in the United States than in most countries, it was worldwide in scope and ranks as the most severe diffused international contraction of modern times. U.S. product in current prices fell by more than one-half from 1929 to 1933; net national product in constant prices, by more than one-third; and monthly wholesale prices, by more than one-quarter; and monthly wholesale prices fell by more than one-third.

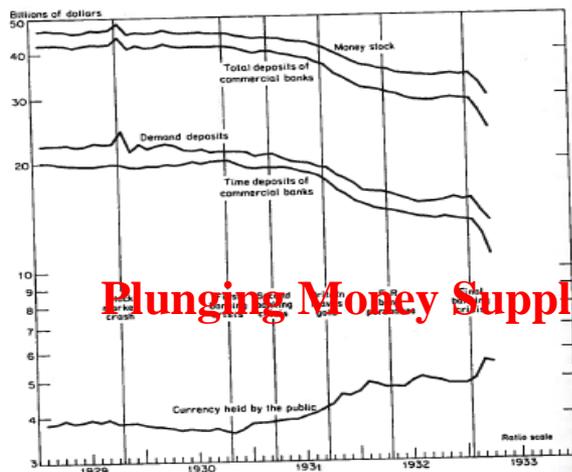
The antecedents of the contraction have no parallel in the years covered by our monthly data. As noted in the text, no other contraction before or since has been preceded by a period over which the money stock failed to rise or during the contraction itself is even more striking. The peak in August 1929 to the cyclical trough in March 1933, the money fell by over a third. This is more than tripling the declines reported in our series, the 9 per cent decline from 1879 and from 1920 to 1921. More than one-fifth of the banks in the United States holding nearly one-third of deposits at the beginning of the contraction suspended operations because of financial difficulties. Voluntary liquidations and consolidations added to the toll, so that the number of banks fell by well over one-third. The contraction was capped by a bank holiday in many states in early 1933 and by a nationwide bank holiday that extended from Monday, March 6, until Monday, March 13, 1933, when not only all commercial banks but also the Federal Reserve banks closed. There was no precedent in U.S. history of a concerted bank holiday for so extended a period over the entire country.

To find anything in our history remotely comparable to the collapse from 1929 to 1933, one must go back nearly a century to the contraction of 1839 to 1843. That contraction, too, occurred during a worldwide crisis, which intensified the domestic monetary contraction already unleashed by the political battle over the Second Bank of the United States, the failure to renew its charter, and the

Money, Income Prices 1929-32

THE GREAT CONTRACTION

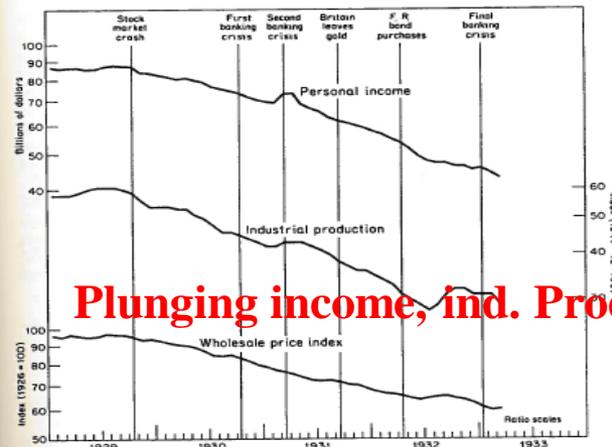
CHART 27
Money Stock, Currency, and Commercial Bank Deposits,
Monthly, 1929–March 1933



SOURCE Table A-1.

THE GREAT CONTRACTION

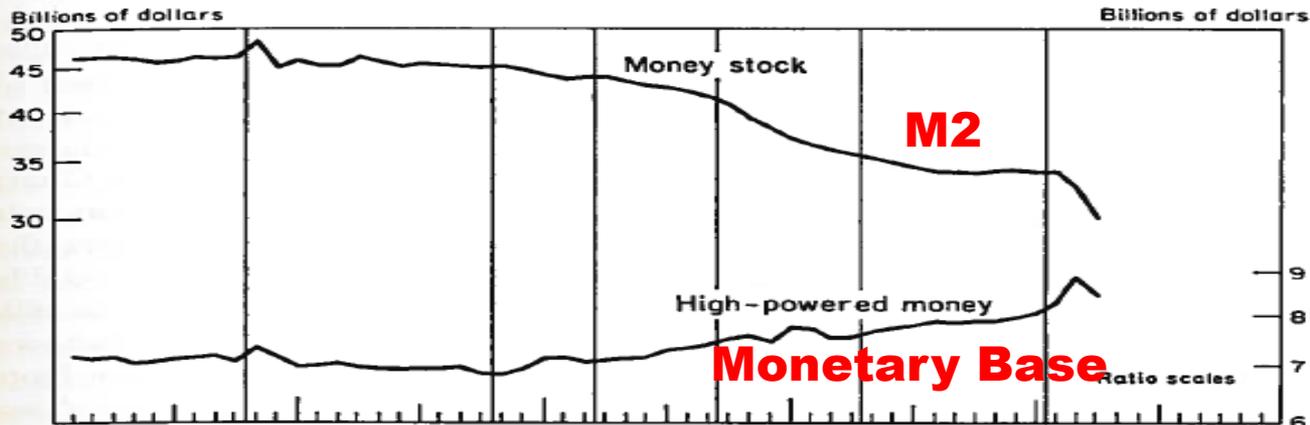
CHART 28
Prices, Personal Income, and Industrial Production, Monthly,
1929–March 1933



SOURCE Industrial production, same as for Chart 16. Wholesale price index, same as for Chart 62. Personal income, *Business Cycle Indicators* (Princeton for NBER, G. H. Moore, ed., 1961), Vol. II, p. 139.

THE GREAT CONTRACTION

CHART 31
The Stock of Money and Its Proximate Determinants, Monthly,
1929–March 1933



Economic Variables Since 2005



Comparing 1929 with 2008

Economic Variable	Great Depression	Great Recession
Decline in M2	31%	none
Rise in Base	5%	380%
Real GDP Decline	27%	6%
Max Unemp Rate	28%	10%
Fall in Price Level	25%	none
Decline in Stocks	89%	65%

Bernanke Speech at Friedman 90 Bday

Remarks by Governor Ben S. Bernanke

At the Conference to Honor Milton Friedman, University of Chicago, Chicago, Illinois

November 8, 2002 On Milton Friedman's Ninetieth Birthday

Let me end my talk by abusing slightly my status as an official representative of the Federal Reserve. I would like to say to Milton: Regarding the Great Depression. You're right, we did it. We're very sorry. But thanks to you, we won't do it again. Best wishes for your next ninety years.

I
Today I'd like to honor Milton Friedman by talking about one of his greatest contributions to economics. This achievement is nothing less than to provide what has become the leading and most persuasive explanation of the worst economic disaster in American history, the onset of the Great Depression--or, as Friedman and Schwartz dubbed it, the Great Contraction of 1929-33. As a personal aside, I note that I first read *A Monetary History of the United States* early in my graduate school years at M.I.T. I was hooked, and I have been a student of monetary economics and economic history ever since.¹ I think many others have had that experience, with the result that the direct and indirect influences of the *Monetary History* on contemporary monetary economics would be difficult to overstate.

What about TARP?

- Was TARP, the Troubled Asset Relief Program which allocated \$700b of capital to the banks, necessary?
- Not at all. The Fed already had the power to lend any amount to banks. Bernanke pursued TARP for political cover . The Fed was not going to take all the heat for bailing out banks and wanted Congress to endorse his actions.

Was the government unfair to AIG?

- No, Maurice Greenberg, former CEO of AIG will lose his case claiming that AIG was unfairly treated by government.
- Federal Government risked \$182b and had a profit of \$23B for AIG holdings.
- Bear Stearns traded at \$171 at peak, was sold to JPM for \$2 (later raised to \$10) in March 2008
- Lehman was let go, stockholders lost everything.
- AIG sold for \$1230 at peak, now at \$50.

Haircuts for AIG creditors?

- **Shouldn't the Fed have demanded that AIG creditors, such as Goldman, take haircuts on their claims?**
- **No. Anything less than 100% would have accelerated the panic. Can you picture the Fed saying that it would guarantee only $x\%$ of the public's money funds?**
- **Even with the 100% payout, risk premiums soared. The libor spread hit unheard of 364 bps.**

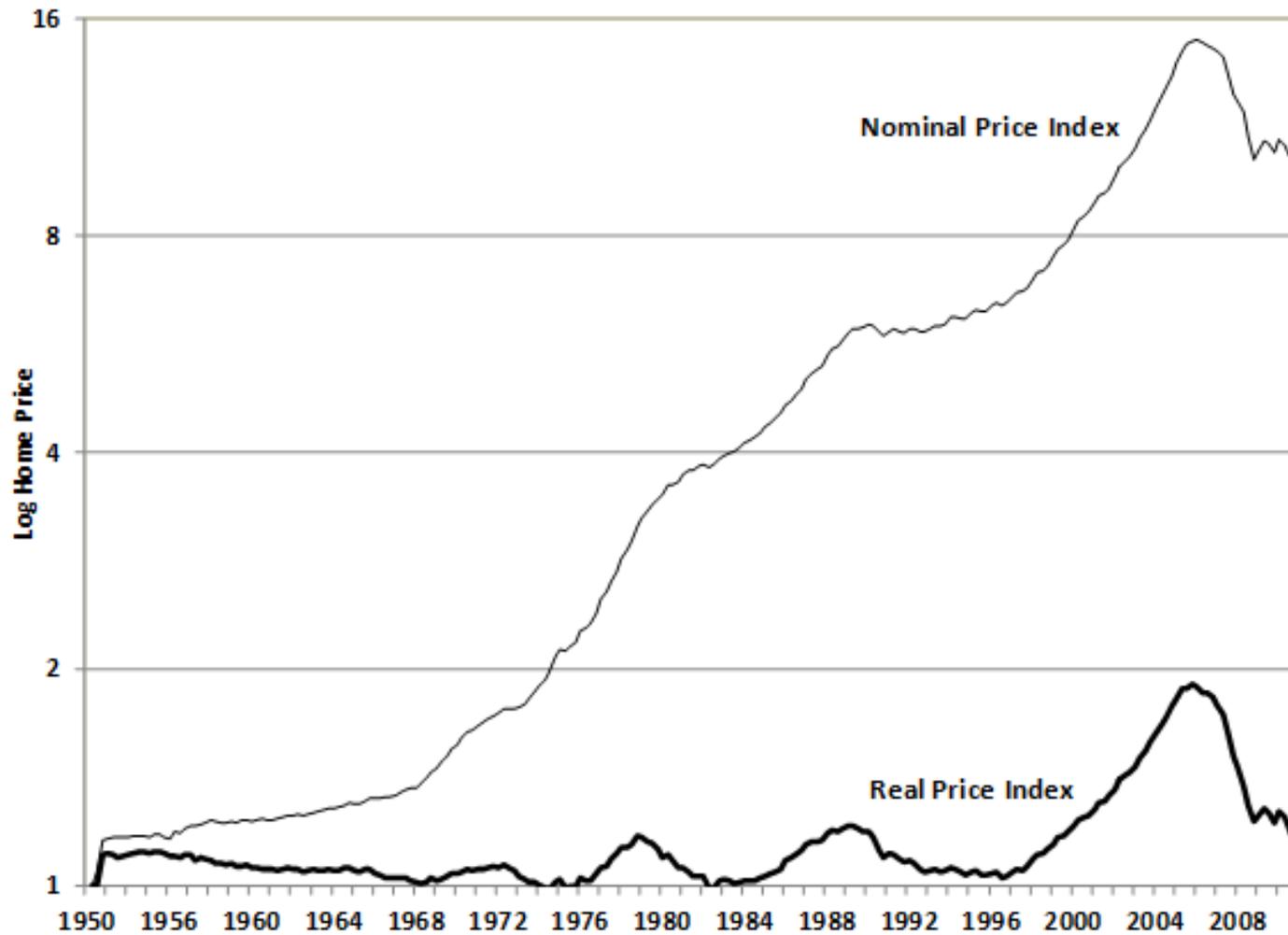
Fate of Section 13 (3)

- Although Bernanke's actions would have not been possible without Amendments 13(3) of the Federal Reserve Act, this section has now been superseded by the Dodd-Frank Law.
- Dems bought GOP votes by restricting the Fed.
- Now Fed cannot lend to nor take equity positions in individual firms.
- Fed can only extend lending beyond usual discounting if approved by Treasury Secretary and only to classes of financial firms.

Who's to 'Blame' for the Crisis

- **CEOs of large investment banks and other financial institutions.**
- **The Fed, particularly Alan Greenspan, for not monitoring I-bank balance sheets.**
- **The Rating Agencies.**
- **Others: Congress, Fannie and Freddie, other regulatory agencies, subprime lenders, unqualified home buyers.**
- **Why was the subprime paper rated AAA?**

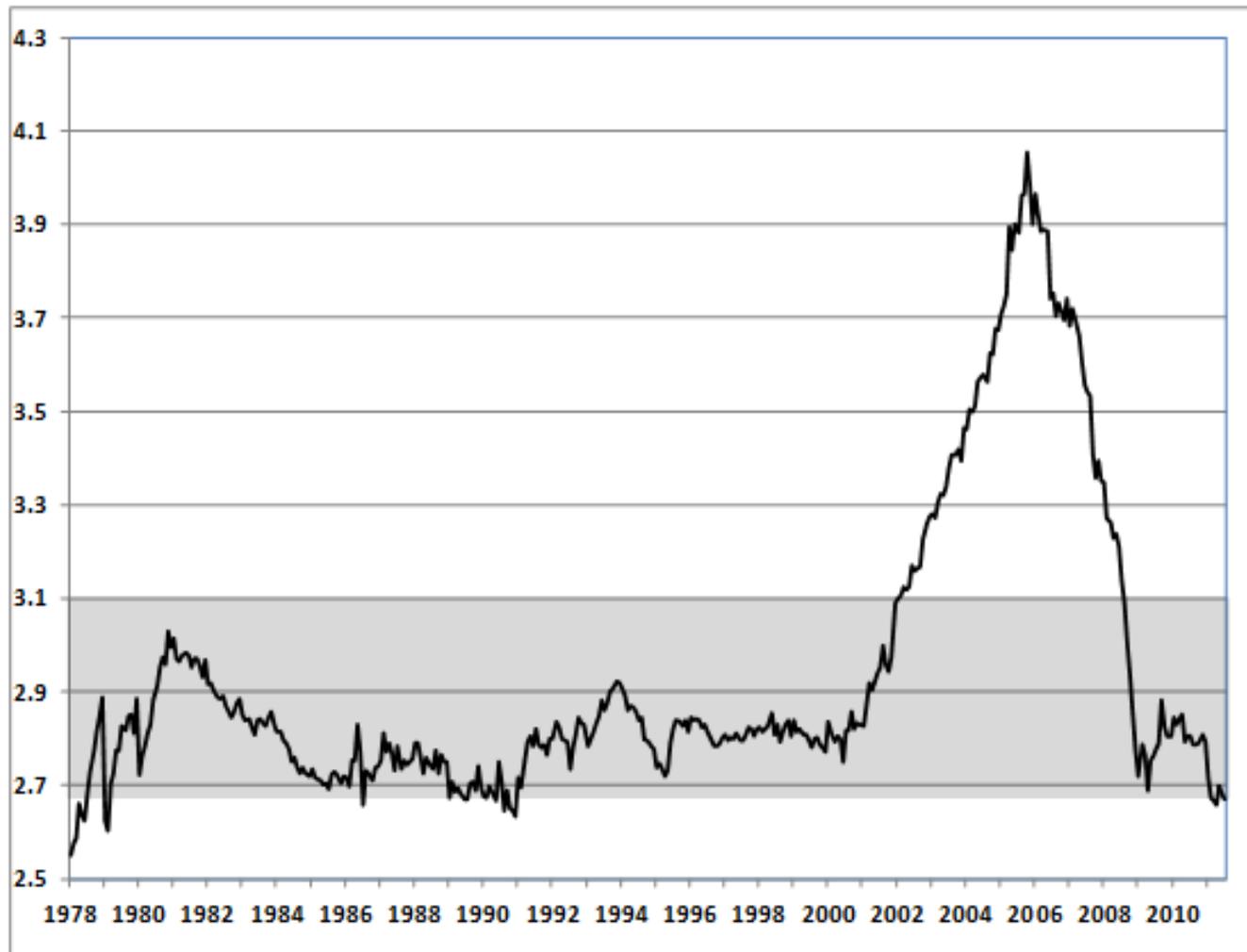
National Home Prices



How could these subprime debts be AAA rated?

- Post Great Depression, there were only 3 years when nominal home prices declined on a national basis.
- Two of these declines were $<1\%$, and the worst, in 1990, was 2.8% .
- Based on these data, the probability that national home prices would decline more than 20% were infinitesimal.

Ratio of Home Price to Income



Should Bear Stearns/Lehman Have Been Saved?

- Had the Fed not saved Bear Stearns, the dominoes would have fallen much sooner and the Fed would be in the same position.
- Conversely had the Fed saved Lehman, within days (if not hours), it would have to save AIG, and then Citi, then Merrill Lynch, then Bank of America, etc. Politically this would have been impossible to do.
- Bottom Line: The Fed “threaded the needle” by showing the world how damaging the default would be to justify backing up the financial industry.

Legacy of Fed Action

- It does appear that stabilization of the money supply and the backup of financial institutions reduced the impact of the crisis on the economy.
- Nevertheless, the final chapter on whether Quantitative Easing has not been effective or not has not been written. As Paul Samuelson has frequently said:

We have but one sample of history