

A CENTURY OF THE FEDERAL RESERVE: SUCCESS OR FAILURE?

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00:50

WHY WAS THE FEDERAL RESERVE ESTABLISHED?



Daily Show, 18 Sept. 2007

"Many people are free-market capitalists, and they always talk about free-market capitalism, and that is our economic theory. So why do we have a Fed? Is the free market – wouldn't the market take care of interest rates and all that?"

01:04

WHY WAS THE FEDERAL RESERVE ESTABLISHED?



Daily Show, 18 Sept. 2007

"You're raising a very fundamental question. ... You didn't need a central bank when we were on the gold standard, which was back in the nineteenth century. And all of the automatic things occurred because people would buy and sell gold, and the market would do what the Fed does now."

Note: Because the US was on the gold std. in 1913 when the Fed Reserve Act was passed.

03:00

PANICS OF THE PRE-FED ERA

Milder in 1884, 1890

More severe in 1873, 1893, and 1907

- widespread suspensions, runs
- "currency famine"

Run- and panic-proneness of US banks **not natural**, but due to policies that weakened US banks

- No such problems in Canada



Panic of 1907, NYC

03:40

POLICIES THAT WEAKENED NATIONAL BANKS

- restrictions on branching (contrast Canada)
 - poorly diversified banks → failure-prone → run-prone
- collateral restrictions on note-issue (contrast Canada)
 - seasonal demands led to reserve drains
 - banks couldn't issue more notes to swap for deposits even in a currency famine



06:20

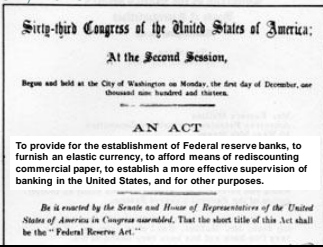
REFORM DISCUSSED BUT *NOT* ADOPTED

- Deregulation a la Canada: ABA's 1894 "Baltimore Plan"
 - end bond-collateral restriction on note-issue
 - branch banking to provide speedier drain for excess notes
 - opposed by small banks



07:30

INSTEAD OF DEREGULATION: THE FEDERAL RESERVE ACT, 1913



08:40

FEDERAL RESERVE ACT "NATIONALIZED" 3 KEY CLEARINGHOUSE ROLES

- bankers' banks
 - for interbank payments: check clearing and settlement
- lender of last resort
 - seasonal and emergency elasticity to currency, reserves
- supervision of member banks



10:50

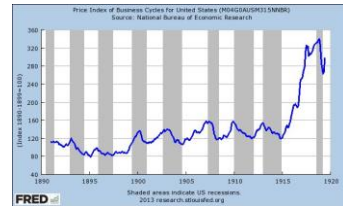
THE FED ASSUMED TWO ADDITIONAL KEY ROLES

- Conducting an active monetary policy (during WWI)
 - FR Act assumed that gold standard will determine money supply
- Monopoly of paper currency issue (during the 1930s)
 - National Banks continued to issue notes until then



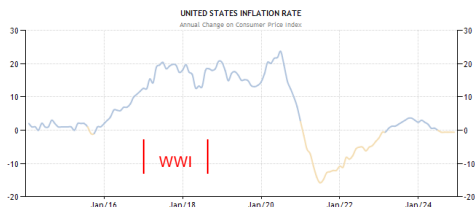
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PRE-FED PERIOD VS. FED DURING WWI: PRICE INDEX FOR 10 INDUSTRIAL AND AGRICULTURAL COMMODITIES



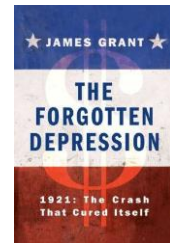
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THE FED' 1ST DECADE, 1914-24: 20+ % INFLATION, THEN SHARP (PARTIAL) CORRECTION

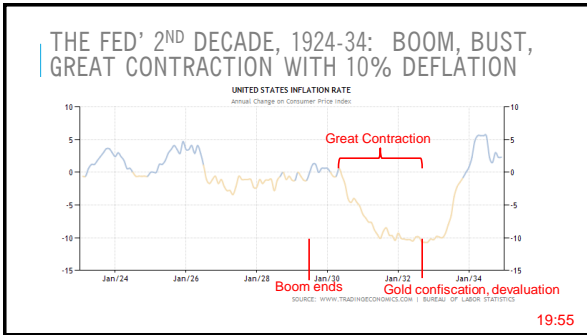


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(RECOMMENDED)



14:40



WHY DID THE FED FAIL SO BADLY TO PREVENT THE GREAT CONTRACTION?

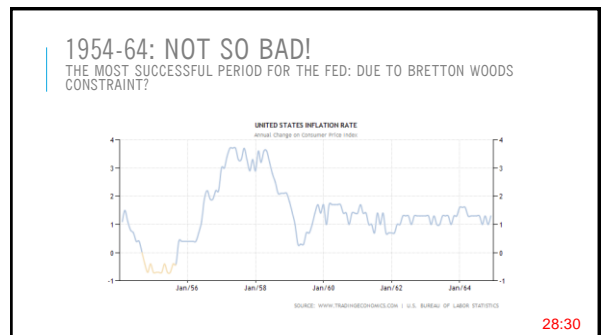
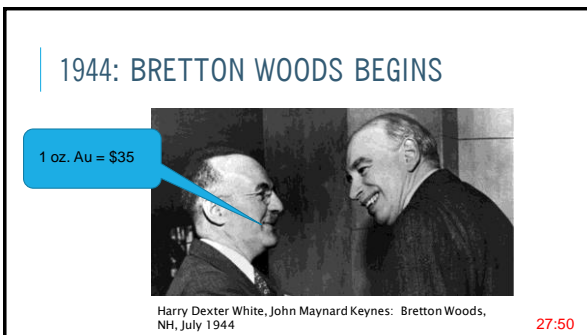
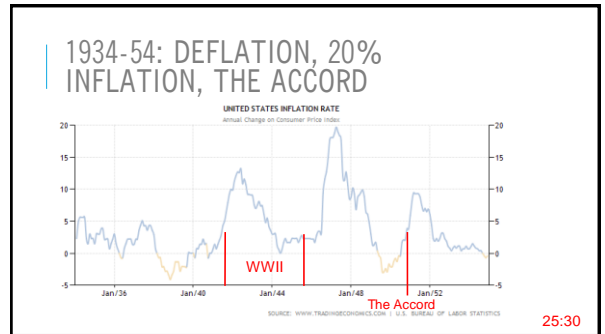
Bordo and Wheelock (2010): The Federal Reserve Act

- failed to spell out the Fed's duty in a panic
- created a system that depended on the competence of authorities currently in charge, rather than on a set of rules
- failed to reform the crisis-prone U.S. banking system to allow a more stable branch banking system, such as Canada's

Friedman and Schwartz (1963):

The Fed took over the roles of the private clearinghouses, then did less than they had done in 1907 to stem panics

23:00



What **INFLATION** means

TODAY
Your dollar buys...

WITH INFLATION
Your dollar buys **LESS**

28:50

1971: BRETTON WOODS ENDS

Pres. Richard Nixon, 8 August 1971

29:20

1964-84: THE PEACETIME GREAT INFLATION
THE SECOND-GREATEST FAILURE OF THE FED

UNITED STATES INFLATION RATE
Annual change in consumer price index

SOURCE: WWW.TRADINGECONOMICS.COM | U.S. BUREAU OF LABOR STATISTICS

BW ends Volcker appt.

30:40

PLAYING THE PHILLIPS CURVE, 1964-69

Inflation Rate (percent)

Unemployment Rate (percent)

31:45

AFTER 1969:
WHERE DID THE PHILLIPS CURVE GO?

Inflation Rate (percent)

Unemployment Rate (percent)

32:00

AFTER 1969:
WHERE DID THE PHILLIPS CURVE GO?

Inflation Rate (percent)

Unemployment Rate (percent)

34:35

1984-2004: THE GREAT MODERATION



35:15

THE TAYLOR RULE



$$R_t = 1 + 2.5\pi_t - 0.5y_t$$

where

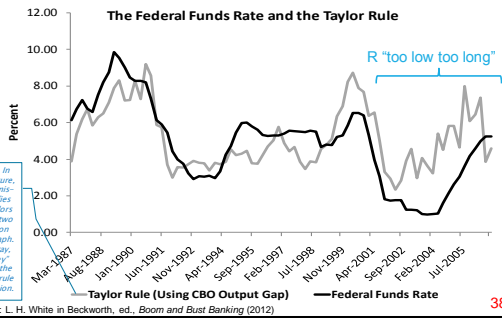
- R_t is current Federal Funds Rate target
- π_t is current inflation rate
- y_t is current "output gap" (estimated potential real GDP minus actual real GDP, in %)

A *description* of Fed policy 1987-2002

A *norm* for policy: Great Moderation while the Fed followed it

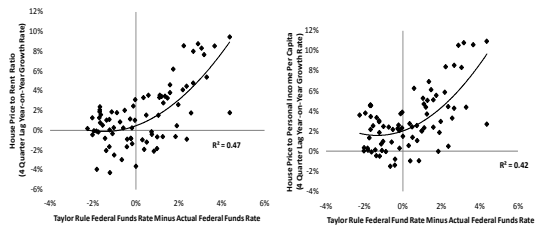
- Housing bubble when the Fed held R below Taylor Rule target (next slides)

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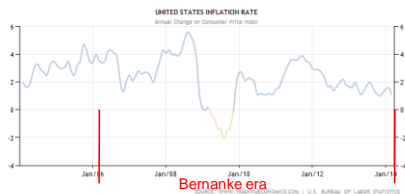
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Taylor Rule Deviations vs. Housing Boom Indicators



38:40

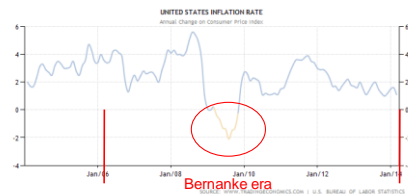
2004-14: HOUSING BOOM, GREAT RECESSION



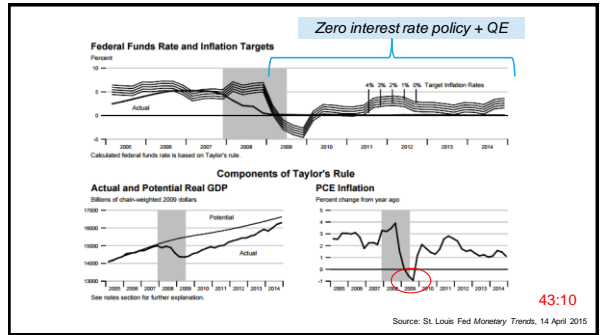
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2004-14: HOUSING BOOM, GREAT RECESSION

2009 A YEAR OF DEFLATION



40:05



DANGERS OF INTEREST RATES TOO LOW FOR TOO LONG

Failure to clear out dead wood → "Zombie" finance, slow growth

- Zombie banks stay open at ultralow interest rates
- Zombie banks finance Zombie business firms that "basically drag [other firms] into the pit. Potential growth decreases. There are all kinds of evidence of this in Japan." --William R. White, 21 July 2014

New asset-price/credit bubble, setting stage for next crisis

- Stock markets at record high levels
- W. R. White: "For the G-20, the total debt the non-financial private sector climbed about 30% since the crisis."

Lax fiscal discipline

- At ultralow rates, spendthrift governments can pile up debt painlessly
- When rates return to normal, danger of Greek-style debt trap

46:25

INTEREST ON EXCESS RESERVES + QE

BoG press release, 6 Oct. 2008: "The payment of interest on excess reserves will permit the Federal Reserve to expand its balance sheet as necessary"

- Between the lines: without corresponding expansion in M2 or the price level
- Not a coincidence that IOER and QE1 began together

If it didn't raise the M2 path, because sterilized by IOER, what was the point of QE?

- **Credit allocation** -- to raise relative MBS prices
- **Disguised fiscal policy**: outside the debt ceiling limit, without Congressional vote

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FED'S STABILIZATION TRACK RECORD IN SUM

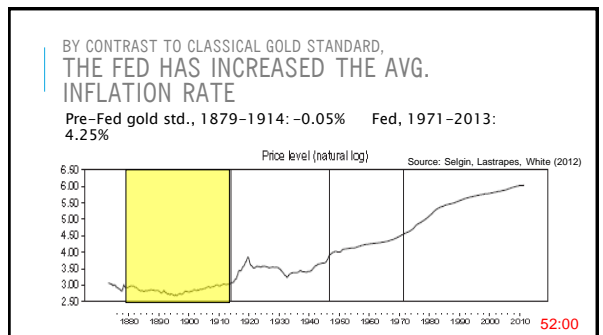
Success requires the Fed to stabilize aggregate spending, i.e. to vary M in response to money hoarding faster than market prices adjust

Limited ability to forecast hoarding has made changes in M growth in practice

- poorly timed
- the wrong size
- E.g. expansion too little, too late to stop 2009 deflation

Yellen Fed may tighten too little, too late to stop next upswing in inflation

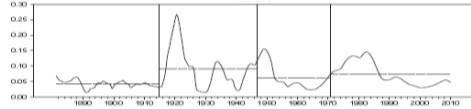
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THE FED HAS INCREASED PRICE LEVEL UNCERTAINTY

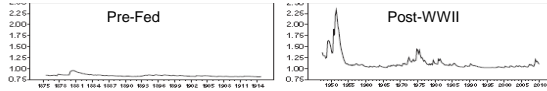
Source: Selgin, Lastrapes, White (2012)

Price level uncertainty: 6-year rolling std. deviation of the quarterly price level



Conditional variance of price-level forecast errors, 30-year horizon

53:20



THE FED HAS NOT REDUCED OUTPUT VOLATILITY

even though US output has become more diversified, with more fiscal "automatic stabilizers," and smaller measured supply shocks

In response to aggregate demand shocks, Fed has tended to *enlarge* deviations of output by inappropriate monetary policy

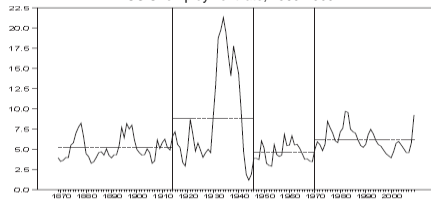
Output volatility (% std. dev. from trend), Romer Quarterly GDP ests.

| 1869-1914 | 1915-2009 | 1915-1946 | 1947-2009 |
|-----------|-----------|-----------|-----------|
| 2.7 | 5.7 | 9.2 | 2.6 |

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THE FED HAS NOT REDUCED UNEMPLOYMENT

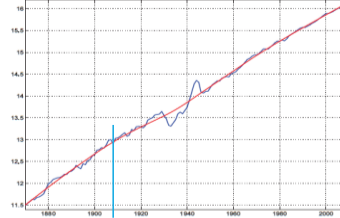
US Unemployment rate, 1869-2009



55:00

THE FED HAS NOT RAISED REAL GROWTH

U.S. REAL GDP, 1870-2009, LOG SCALE



Source: Robert E. Lucas, Jr. (2011)

55:20

HOW MIGHT WE GET BETTER RESULTS?

Bind the Fed with a weighted dual mandate

- i.e. make it stick to a specified Taylor Rule

Bind the Fed with a single mandate

- Target the path of a price level exclusively

- Better: Target the path of nominal GDP

- Hayek (1931): stabilize "the money stream"

- Productivity norm: when surge in output reduces inflation, don't offset with M injections, and vice-versa

End the Fed with a gold standard plus free banking

- If not politically feasible, at least a benchmark for Fed accountability