

# Exit strategies for monetary policy

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No way out?



# Roadmap

- Q.E., Q.E.D.
  - Understand the entrance to understand the exit
  - Appreciate the departure from the standard mode that policy markers usually worked with
  - Enforce a symmetry in the argument
- Why talk of the exit?
  - Benefits and costs of explaining the endgame
- Case studies
  - Exits and wrong turns
- Tools and transmission
- End of the beginning or the beginning of the end?
  - Is it time to talk or walk?

# **1. The channels of quantitative easing**

# QE holds that the *size and composition* of a central bank's balance sheet influences financial markets and the economy over and beyond the level of the policy rate

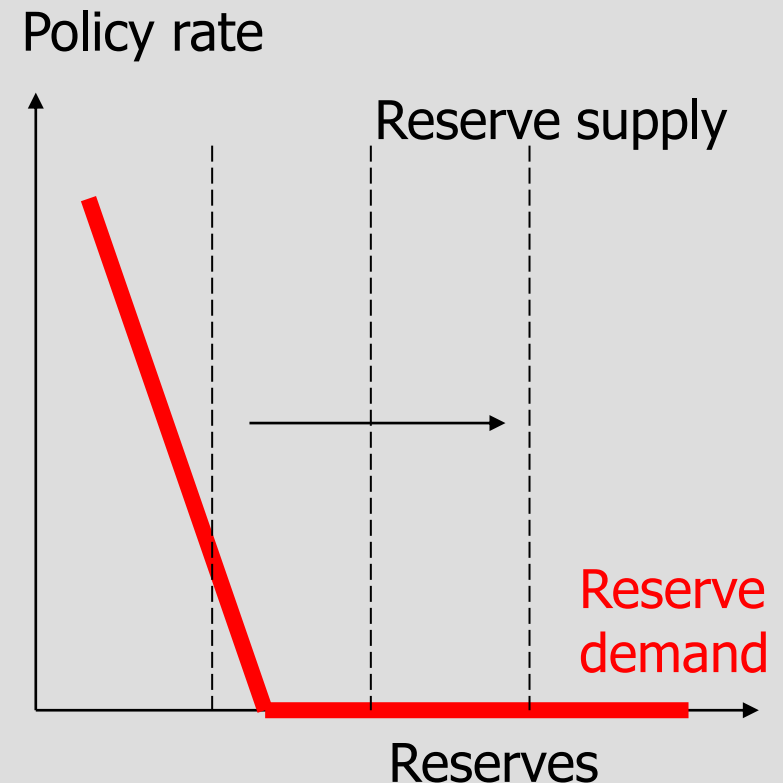
- Policy does not necessarily run out of ammunition at the zero bound
  - So there is no need to keep your policy-rate “powder” dry
- QE is not just about the level of reserves
- QE can be undertaken at a nonzero policy interest rate
  - Which is relevant for the unwinding of policy stimulus

# QE potentially works through both sides of a central bank's balance sheet

- Large provision of reserves
  - Induces the central bank to make use of idle balances (*the money multiplier*)
  - Convinces market participants that the policy interest rate will be low for a long time (*the policy duration effect*)
- The accumulation of assets
  - Influences spreads in markets (*asset substitution*)
  - Generates additional income for the central bank so as to encourage government action (*creating fiscal space*)

# The logic of QE is to massively oversupply reserves

- Oversupplying reserves
  - May have some direct benefit
  - Lends confidence that rates will be low for long
  - Allows purchase of assets in volume
  - May generate revenue for fiscal authorities



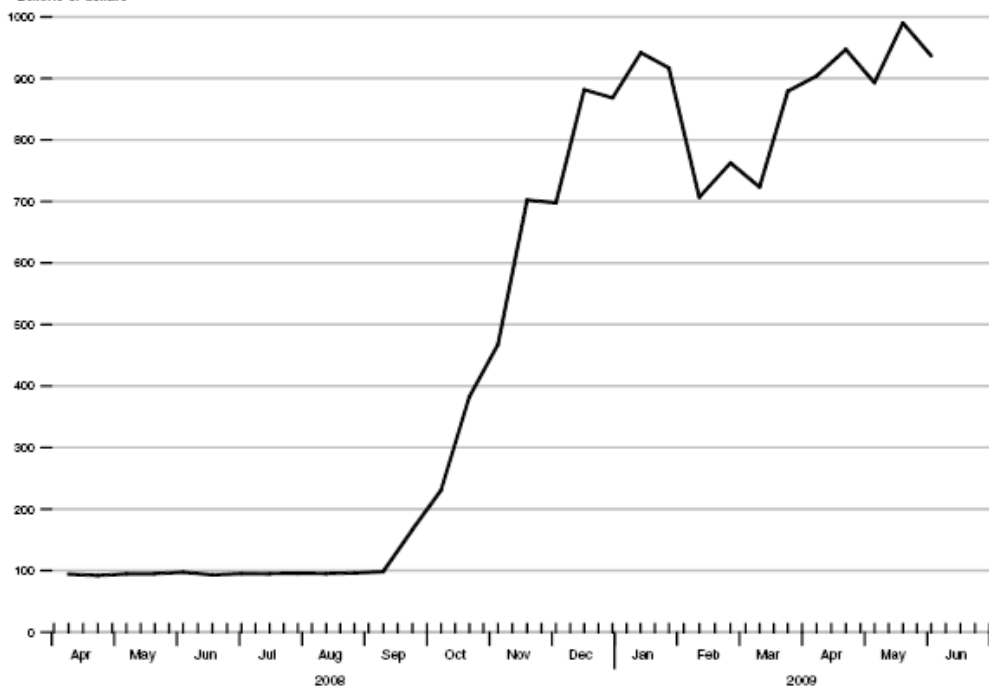
# An aside: Rebranding QE

- The Fed started QE in October 2008, before embracing it for macroeconomic reasons
- No one wants to be compared to the Japanese
- And it's not just the Fed, every major central bank has its own name for QE

Adjusted Reserves

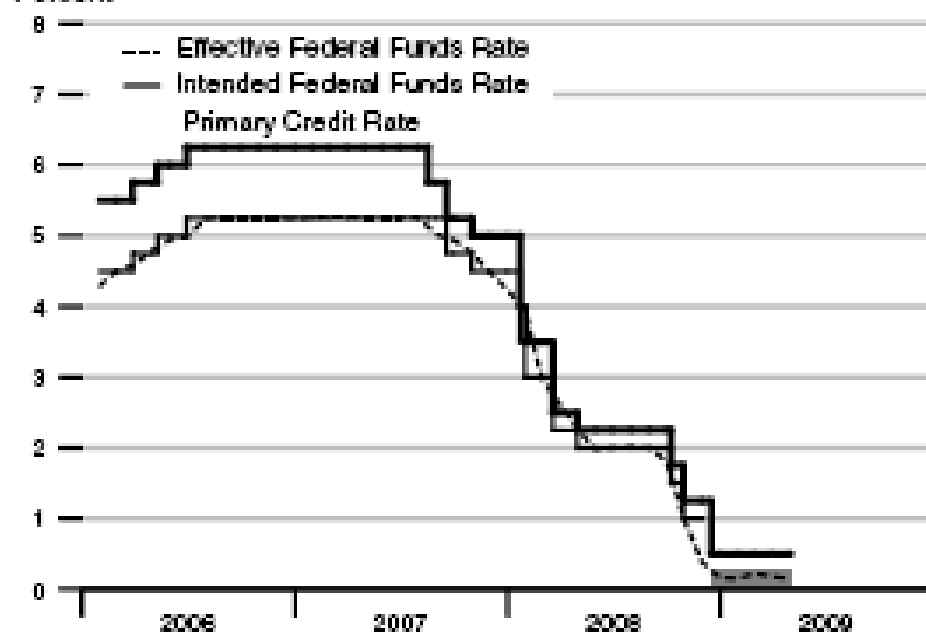
Seasonally Adjusted

Billions of dollars



Reserve Market Rates

Percent



# Another aside: This is not just a crisis in global financial markets and economies

- This is a crisis in economics and finance
- The macro models used to evaluate policy
  - Not across entities to describe the representative agent
  - Assume arbitrage across markets
  - Reduce monetary policy making to the control of the short-term interest rate
- As a consequence, policymakers
  - Do not have a good way of quantifying what they've already done
  - Will not have a good way to judge when they are done
  - May not agree among themselves
  - May have trouble communicating their actions

## **2. Why talk of the exit?**

# Intuition about the advantages of temporary stimulus comes from fiscal policy

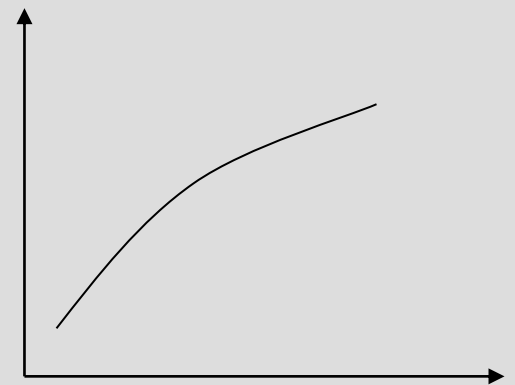
- In the analysis of the Reagan deficits in the 1980s
  - Capital markets price long-lived assets (equity/long-term rates/foreign exchange)
  - Those prices influence current spending decisions
  - Concerns about longer-term prospects can lead to *expectational crowding out*
- The largest Keynesian multiplier for government spending comes when
  - Current resource use is slack
  - Ratio of temporary to permanent change in government spending is high
- Fiscal virtue is more than its own reward
  - It makes temporary policy more effective

# In some analyses of unconventional monetary policy,

- Longer-run rectitude is counter-productive
- The goal is to generate inflation expectations so as to lower real interest rates
- The more the central bank is viewed as irresponsible,
  - The more it can lower real rates
- Indeed, conventional thinking might hinder unconventional policy
  - Need for a Rooseveltian moment

**The real long-term interest rate ( $R^L$ ) depends on the term structure of inflation expectations:**

$$R^L = \text{Risk Free Nominal Rate} \\ + \text{Risk Premium} \\ - \pi^{\text{Near term}} - \pi^{\text{Longer term}}$$



# This arithmetic reveals ironic bedfellows

- Both the critics of unconventional policy and those calling for “constructive irresponsibility”
  - Talk as if the central bank can only shift the term structure of inflation expectations in a parallel fashion
- For the former (AM), that implies
  - Too big a long-run cost
  - Investor concerns about volatility will offset policy effectiveness
- For the latter (PK), it makes it unlikely that policy will be aggressive enough

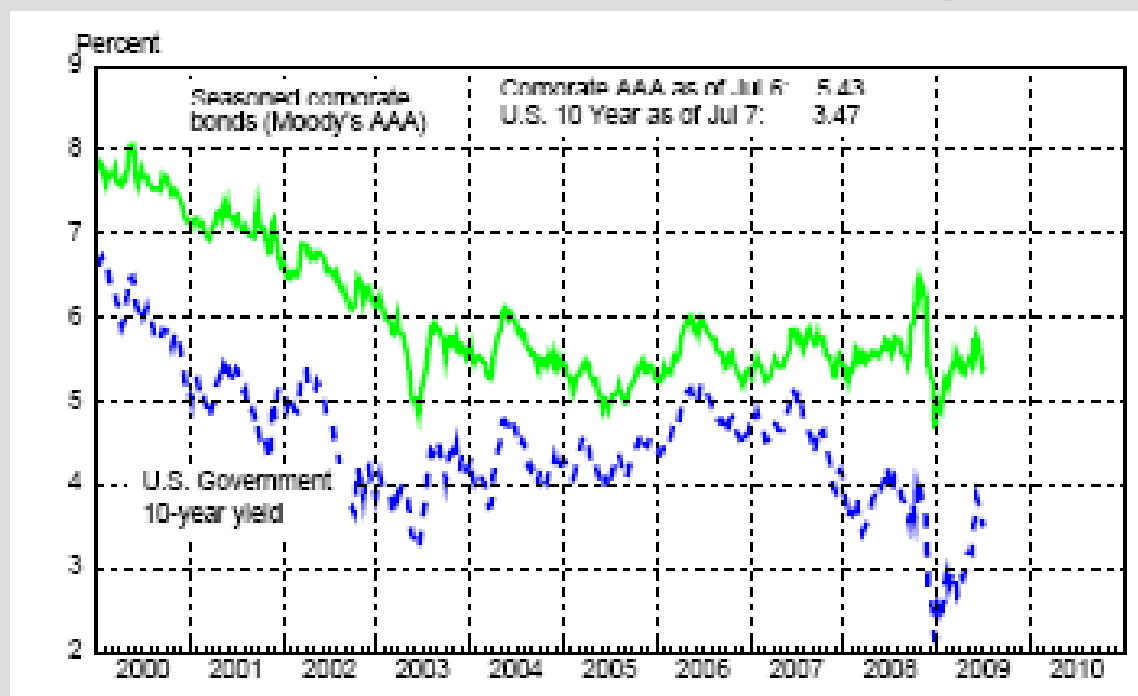
# The aim of unconventional policy within a longer-run framework

- Is to invert (or prevent from steepening) the term structure of inflation expectations
  - Be stimulative in the short-to-medium run
  - Anchor the long-end by articulating a credible exit strategy
- This
  - Raises  $\pi^{\text{Near term}}$  from what it would be otherwise
  - Fixes  $\pi^{\text{Longer term}}$
  - Prevents the risk premium from rising
- Hence, virtue can be rewarding in monetary policy too

# The communications challenge is considerable

- In talking about what policy will do, but not quite yet
  - The “A-Students” may understand the concerns about expectational crowding out
  - But the “C-Students” may not

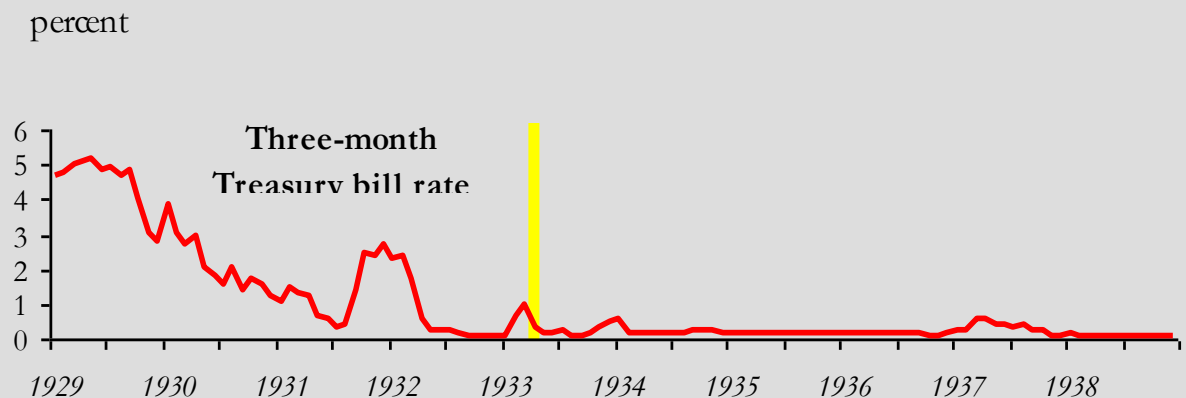
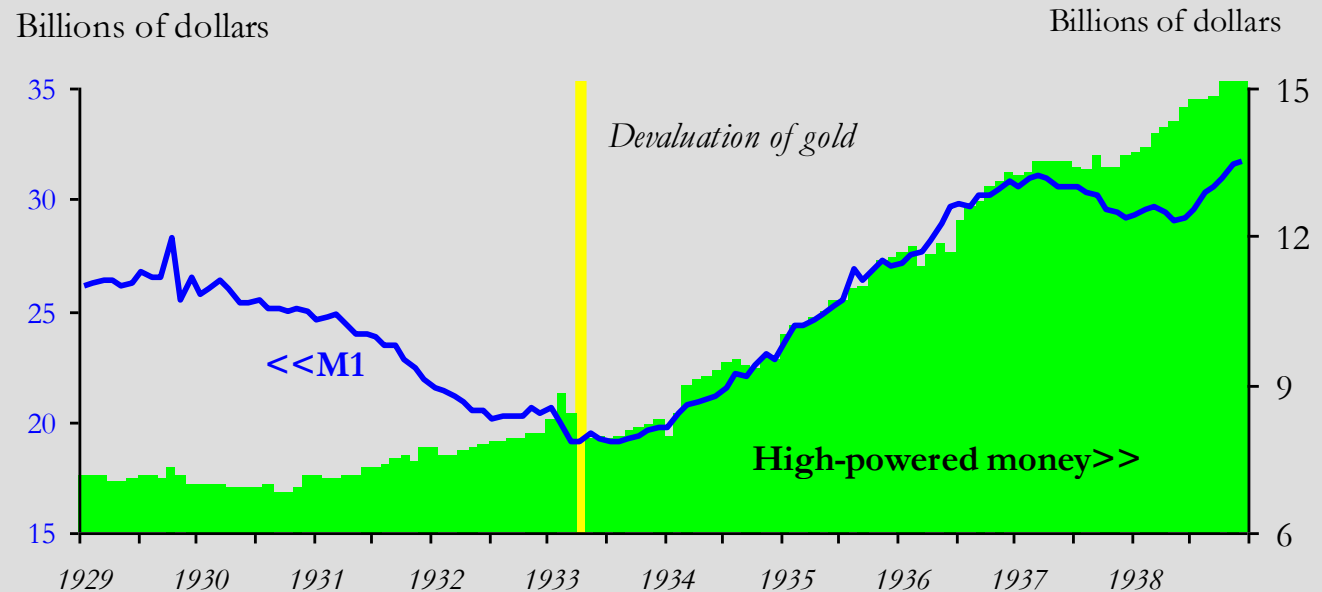
*The Summer of 2003 is a case in point*



# **3. Exits and wrong turns**

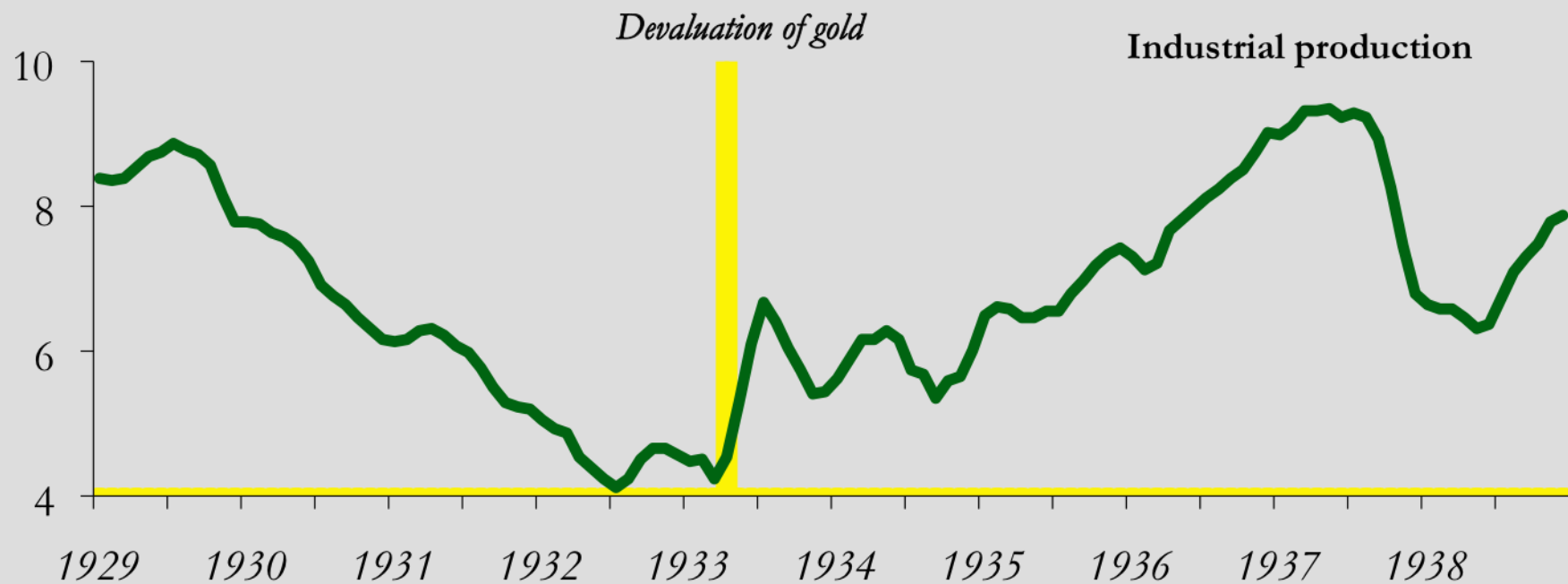
# I. Federal Reserve policy in the 1930s

- Unconventional policy can work
  - In a Rooseveltian moment in 1933
- But a premature exit is costly
  - As in 1937 (C.Romer's *Economist*)



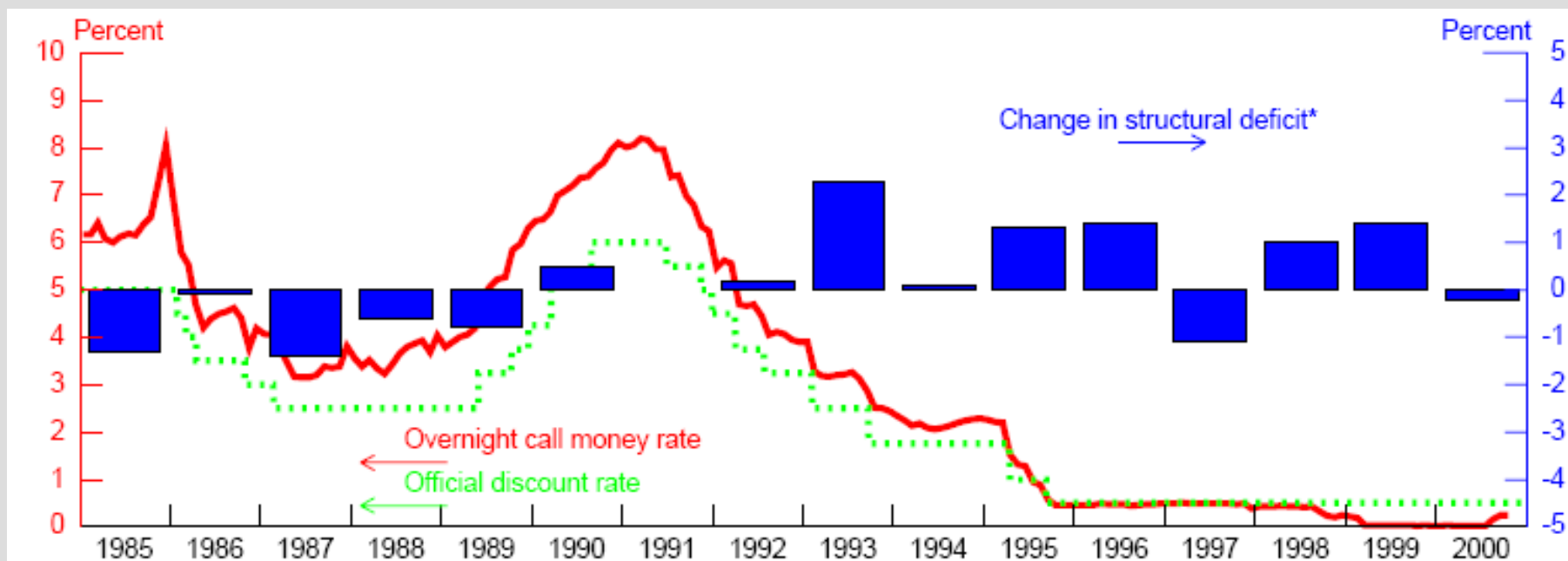
# Indeed, very costly

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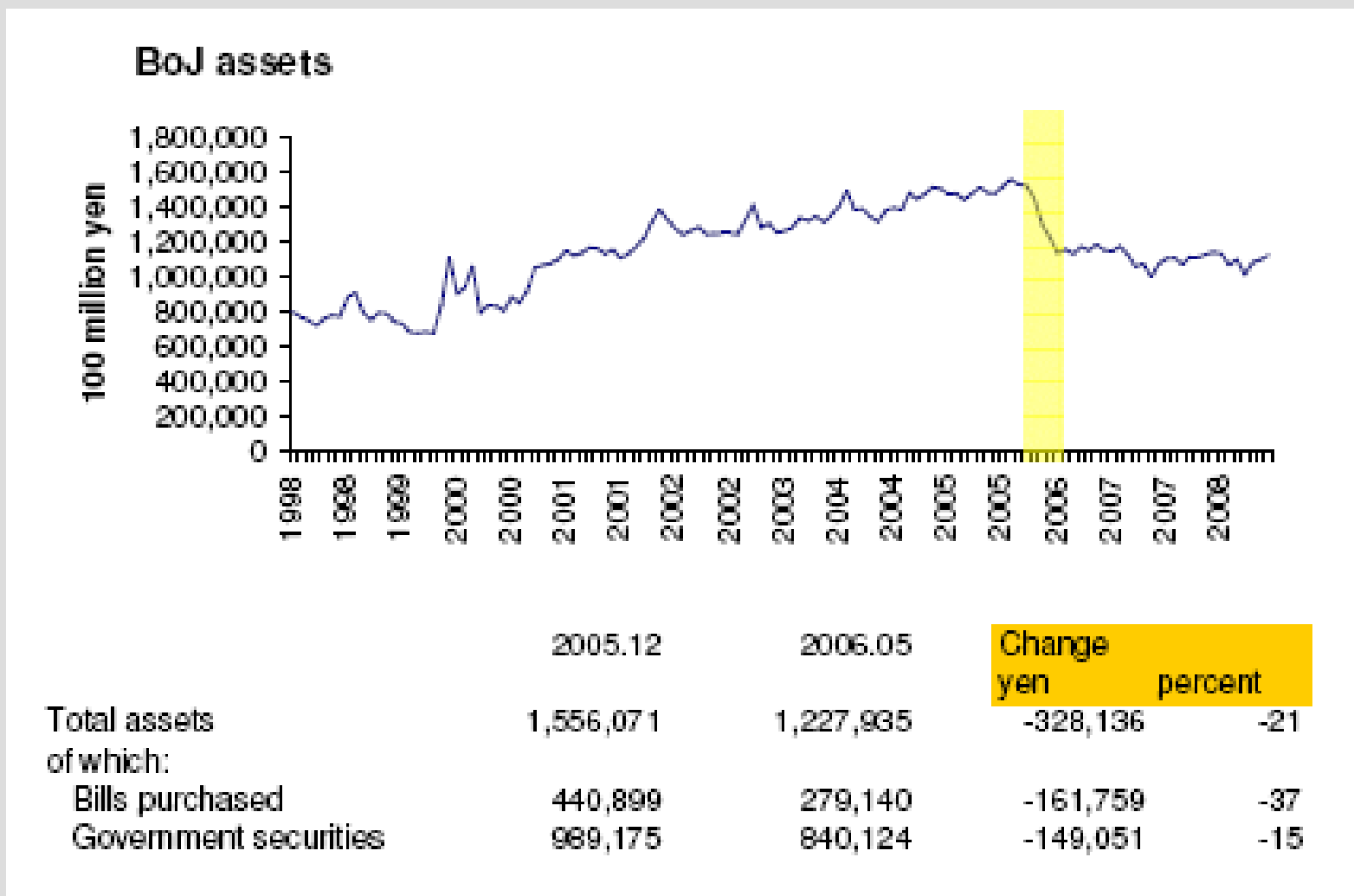


## II. Japanese officials in the 1990s

- Made several false exits in the fiscal policy stance
- Characterized low interest rates as “unusual” and “abnormal”
  - Emphasizing the exit rather than the stay



# III. In the 2000s, the BoJ was able to unwind its balance sheet



# Four lessons from this experience

- Unconventional monetary policy can work
- Talking about the exit is a challenge
- Timing the exit is even harder
- Central banks have tools at their disposal to unwind their balance sheet

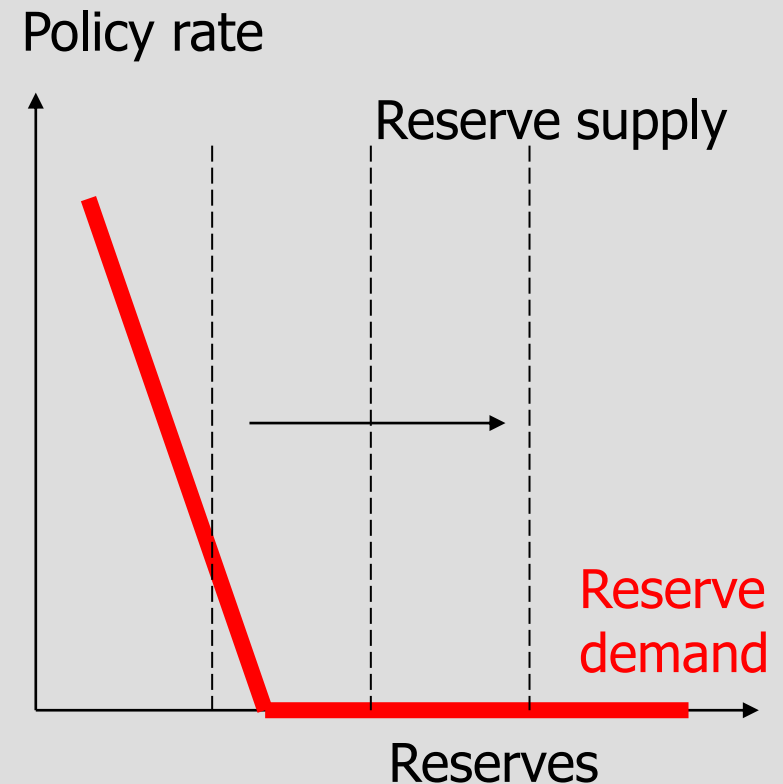
## **4. The tools and transmission of policy**

# To return to a positive policy rate, a central bank has to ...

- Shrink reserves
  - Selling assets outright
  - Allowing loan facilities to run off
- Substitute reserves for other liabilities
  - Accumulating Treasury deposits
  - Issuing debt
- Raise the corridor of policy rates

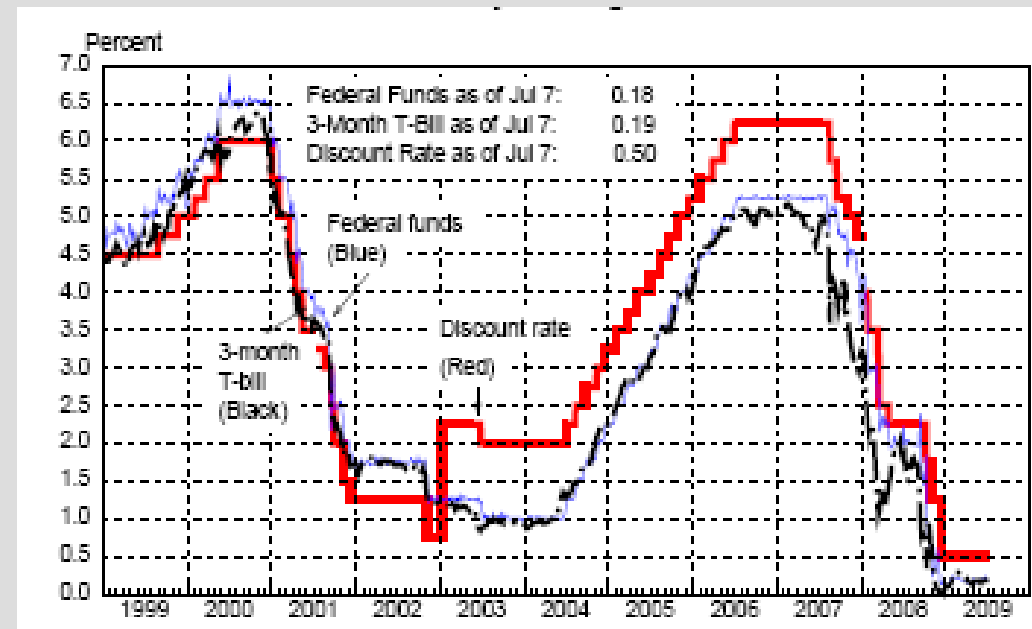
# To repeat, part of the logic of QE

- Is to massively oversupply reserves assets
- Reversing that reserve accommodation
  - Requires large actions
  - May take some time



# In principle,

- The tools that allow the expansion of a central bank's balance sheet are not inherently asymmetric
  - It is about willingness to be symmetrically aggressive, not ability
- However, policy rates everywhere are asymmetric
  - So there must be some constraints, real or imagined



# Why might the Federal Reserve be asymmetric in its aggressiveness to shrink its balance sheet?

- Policy makers might be unwilling to test the resilience of markets
  - Policy rates move asymmetrically and so too probably will the size of the balance sheet
- Some long-lived assets might no longer have markets
  - This mostly holds for the SIVs and the potential purchase of “legacy” assets
- The Treasury has funded part of some of its programs
  - If present at creation do they have to be amenable to the closure?
- Political pressures might be intense

## **5. Talk or walk?**

# There are risks to QE

- But the biggest risk to the legitimacy of a central bank is the failure to use all the tools at its disposal at a time of evident economic threat
- The major specific risks can be addressed by a conditional precommitment to an exit strategy
  - Such as a firmer inflation goal
- Such precommitment strengthens the effectiveness of temporary policies

No way out?

